EXECUTIVE BOARD MEETING

SM/20/149

CONFIDENTIAL

September 16, 2020

To: Members of the Executive Board

From: The Secretary

Subject: **October 2020 Fiscal Monitor—Chapter 1**

Board Action:	Executive Directors' **consideration** (Formal)
Tentative Board Date:	**Wednesday, September 30, 2020**
Publication:	Yes, it is intended that the full set of the October 2020 Fiscal Monitor documents will be released to the public at the time of the Fiscal Monitor press conference, tentatively scheduled for **Wednesday, October 14, 2020.**
Questions:	Ms. Pattillo, FAD (ext. 37319) Mr. Mauro, FAD (ext. 37718) Mr. Medas, FAD (ext. 38288) Mr. Ralyea, FAD (ext. 38055) Mr. Ture, FAD (ext. 36374)
Additional Information:	The paper will be revised for publication in light of the Executive Board discussion. If Executive Directors have additional comments, they should notify Mr. Mauro, Ms. Pattillo, Mr. Medas, Mr. Ralyea and Ms. Ture by **5:30 p.m. on Friday, September 25, 2020**.

CHAPTER 1

FISCAL POLICIES TO ADDRESS THE COVID-19 PANDEMIC

Prepared by the Fiscal Affairs Department
In consultation with the other departments –Approved by Vitor Gaspar, Sept 11, 2020
October 2020 Fiscal Monitor—Chapter 1

BOXES

FIGURES

TABLES

ONLINE ANNEXES

ONLINE DATABASE

EXECUTIVE SUMMARY

Chapter 1: Fiscal Policies to Address the COVID–19 Pandemic

The COVID-19 pandemic and associated lockdowns have prompted unprecedented fiscal actions that amounted to $11.7 trillion or [12] percent of global GDP as of September 11, 2020. Half of the fiscal actions consisted of additional spending or forgone revenue, including temporary tax cuts, and the other half liquidity support, including loans, guarantees, and capital injections by the public sector. This forceful response by governments has saved lives, supported vulnerable people and firms, and mitigated the fallout on economic activity. However, the consequences of the crisis on public finances, combined with the revenue loss from the output contraction, have been massive. In 2020, government deficits are set to surge by an average of [9] percent of GDP, and global public debt is projected to approach [100] percent of GDP, a record high. Under the baseline assumptions of a healthy rebound in economic activity and low, stable interest rates, the global public debt ratio is expected to stabilize in 2021, on average, except in *China* and the *United States*. Yet, more needs to be done to address rising poverty, unemployment, and inequality; and to foster the economic recovery.

Chapter 1 of this edition of the *Fiscal Monitor* reviews the state of public finances across the world in this unprecedented time and examines the scale, scope, and effectiveness of fiscal policy responses to the COVID-19 crisis. It then offers a roadmap for the overall fiscal strategy to promote a strong recovery.

Although the global fiscal response has been unparalleled, the pandemic has laid bare major differences in the ability of countries to finance emergency spending to protect their people. That ability has been determined in part by countries' fiscal space, and by public and private debt levels, heading into the crisis. In many advanced economies and some emerging markets, massive liquidity provision and asset purchases by central banks have facilitated fiscal expansions. However, in many emerging markets and especially in low-income developing countries—almost half of which are at a high risk of debt distress or in debt distress—financing constraints have been binding. Official support to alleviate such constraints has been overwhelmed by financing needs. Based on the projected fall in per capita incomes, 100-110 million people globally would be expected to enter extreme poverty, reversing the decades-long declining trend. Additional social assistance—supporting directly the poor and cushioning the recession—is expected to have a modest impact reflecting limited support and capacity constraints in some countries, containing the increase in poverty to 80-90 million people.

With limited fiscal space, countries need to assess the benefits, costs, and risks of support measures. Early insights suggest public health policies that quickly contained the spread of the disease also allowed for an earlier and safer reopening, restoration of confidence, and economic recovery, reducing overall social and fiscal costs. Targeted cash transfers were vital for poor individuals, who spent them on necessities. Likewise, unemployment benefits supported necessary consumption for people who lost their jobs. Many policies that provided essential support in the short-run have longer-run implications. For example, wage subsidies preserved employment relationships but may slow labor market reallocation when new vacancies emerge. Temporary tax deferrals and cuts have supported liquidity but risk becoming permanent at the expense of government revenues. Equity injections have often been necessary to prevent bankruptcies, particularly in hard-hit strategic firms, but they could delay sectoral reallocation that is crucial for the recovery. Direct or guaranteed loans have so far had low take-up, reflecting some success in restoring confidence, but also administrative constraints and conditionality, as well as the private debt overhang.

Fiscal risks are also unprecedented. They stem from uncertainty about the course of the pandemic, the shape of the recovery, the extent of scarring and the required resource reallocation, the outlook for

commodity prices and global financial conditions, and the contingent liabilities from implicit and explicit guarantees. It is crucial to ensure the full transparency, good governance, and costing of all fiscal measures, especially given their size, exceptional nature, and speed of deployment.

A Roadmap for Fiscal Policies during the Different Phases of the Pandemic

Global efforts to develop and ensure universal access to an affordable and effective vaccine or treatment are the highest priority to contain the human, economic, and fiscal costs of the pandemic. National actions are also vital to address the health crisis, including smart, well-informed, and localized containment policies. High levels of precautionary savings by households and limited private investment in an uncertain environment imply that interest rates will remain low for long in advanced and some emerging market economies. These factors provide the scope and motivation for fiscal policy to remain a crucial and powerful tool to foster the recovery. Other emerging market economies and low-income developing countries facing tighter financing constraints will need to reprioritize expenditures and deliver more with less by enhancing the efficiency, and will need further official financial support and debt relief.

Policymakers need a toolkit of flexible fiscal measures to navigate lockdowns and tentative reopenings, and to facilitate structural transformation to the new post-pandemic economy. In the acute outbreak phase, when lockdowns are pervasive, fiscal policies should be geared to do whatever it takes to save lives and livelihoods. As lockdowns ease and become more selective, governments should ensure that lifelines are not withdrawn too rapidly. Improvements in the ability of social protection systems to reach, target, and deliver benefits to vulnerable people should be preserved. When health risks diminish and a durable recovery is foreseeable, support should shift from protecting employee-firm relationships to helping workers find new jobs, helping viable but still-vulnerable firms reopen, and supporting structural transformation toward the post-pandemic economy.

When the pandemic is under control through effective vaccines or treatments, governments will need to foster the recovery while addressing the legacies of the crisis—including elevated private and public debt levels, high unemployment, and rising inequality and poverty. The scope for stimulus or the appropriate pace of fiscal adjustment is country-specific, depending especially on the depth of a country's recession, how many people are unemployed, and how easy it is to access financing. Countries with fiscal space and major scarring from the crisis should provide temporary stimulus, including through public investment, as discussed in Chapter 2. Measures to support low-income households—including good-quality jobs—will be critical to reducing poverty. Countries with limited fiscal space and less access to financing should protect public investment and transfers to lower-income households while increasing progressive taxation and ensuring highly profitable firms are appropriately taxed, aiming at a growth-friendly and equitable adjustment.

Policies for the new post-pandemic economy should focus on tackling poverty and inequality to ensure social peace and sustainable growth, and on building resilience against future epidemics and other shocks. This includes policies to ensure that all people have access to basic goods (for example, food) and services (for example, health and education). Finally, reducing emissions will remain a core long-term challenge after the pandemic. This will call for policies to increase carbon prices and catalyze investment in low-carbon technologies.

CHAPTER 1

FISCAL POLICIES TO ADDRESS THE COVID-19 PANDEMIC

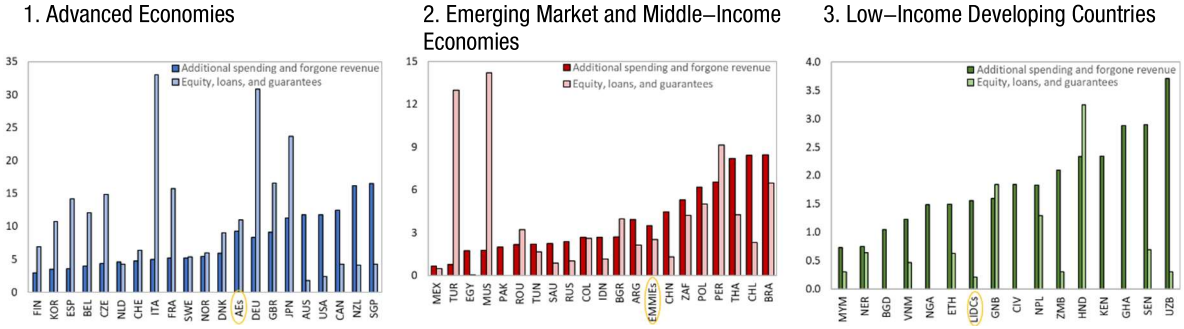
Countries have made ample use of fiscal measures to protect lives and livelihoods against the health and economic fallout from the COVID-19 pandemic and to nurture the nascent reopening of economies in a highly uncertain environment. The drastic fiscal measures taken so far have been necessary, state-dependent, 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 [12] percent of global GDP. Half of these measures 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.

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)

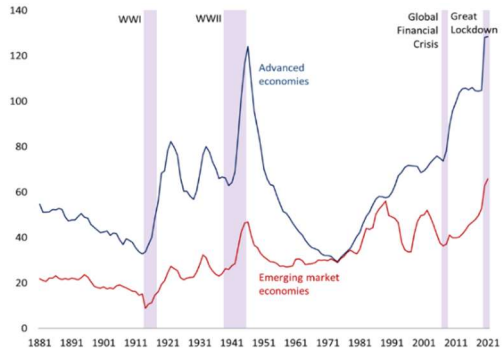


Sources: Database of Country Fiscal Measures in Response to the COVID–19 Pandemic; and IMF staff estimates.
Note: The timeframe for the announced measures is country–specific, but the bulk of the measures announced so far are short–term crisis–response measures to be implemented in 2020–21. Country group 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; EMMIEs = emerging market and middle–income economies; LIDCs = low–income developing countries.

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.

Figure 1.2. Historical Patterns of General Government Debt

(Percent of GDP)

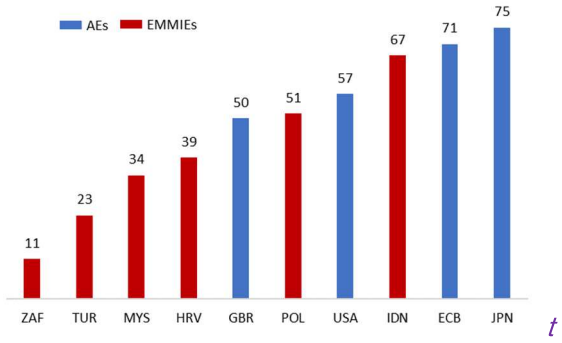


Sources: IMF, Historical Public Debt Database; IMF, World Economic Outlook database; Maddison Database Project; and IMF staff calculations.

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.

Figure 1.3. Central Bank Purchases of Government Debt

(Percent of central government marketable securities or deb



t issued since February 2020)

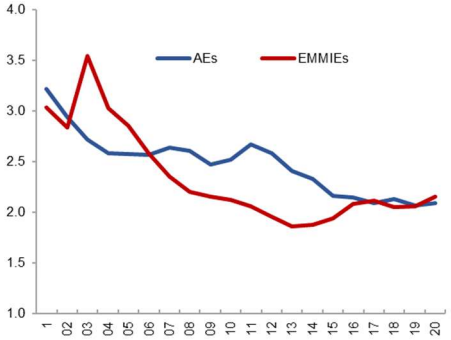
Sources: Country authorities; US Federal Reserve Economic Data; Haver Analytics; and IMF staff calculations.

Note: See the Methodological and Statistical Appendix for a description of the components of each country's ratio. Data labels use International Organization for Standardization country codes. AEs = advanced economies; EMMIEs = emerging market and middle–income economies.

The increase in sovereign debt has added to global debt vulnerabilities that existed before the pandemic. Total private and public debt in the G20 has trended upward over the past two decades and reached almost 250 percent of GDP at the end of 2019, with private debt increasing steadily from 2014 to reach 157 percent of GDP at the end of 2019 (Figure 1.5). 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 1.4). Governments have also taken advantage of the interest rate decline to gradually extend the maturity of government bonds (Figure 1.6).

Figure 1.4. General Government Interest Expenditure–to–GDP Ratio, 2001–20

(Percent of GDP)



Source: IMF World Economic Outlook Database.

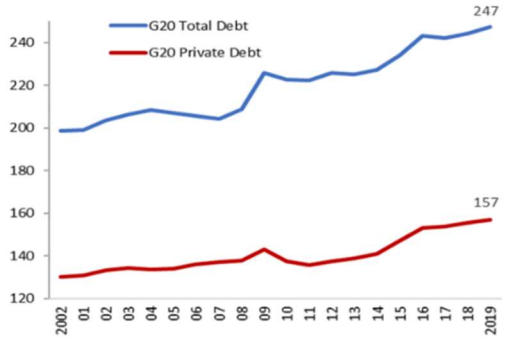
However, with bankruptcies on the rise, some private debt could migrate to the public sector through bailouts (Box 1.1). In addition, 47 percent of low-income countries were deemed to be in debt distress or at high risk of debt distress as of mid-August 2020, a modest increase from 44 percent at the 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 support in the short-run may have long-run 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 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.

Figure 1.5. G20 Total Public and Private Debt, 2002–19

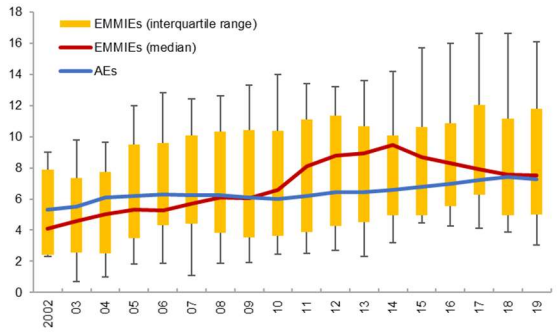
(Percent of GDP)



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

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.

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 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.

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 going forward; and presents a broad roadmap for the overall fiscal strategy to navigate tentative reopenings, economic recovery, and transformation toward a more inclusive and resilient post-pandemic economy.

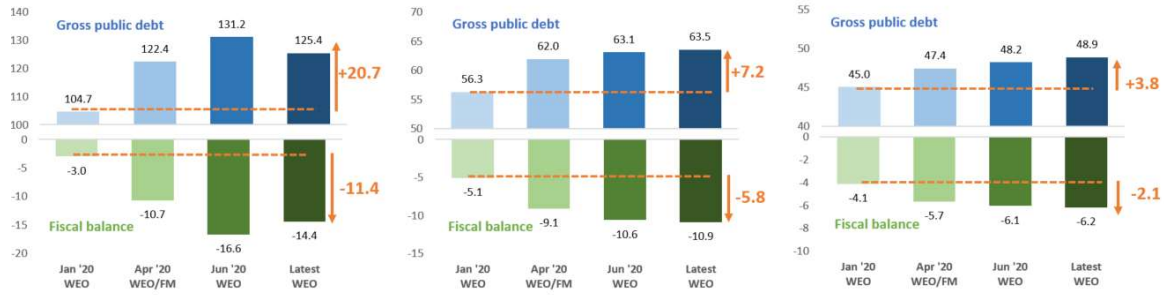
Fiscal Developments and the Outlook: Doing Whatever It Takes

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.

Figure 1.7. Forecasts for General Government Gross Debt and Fiscal Balances, 2020

(Percent of GDP)

1. Advanced Economies
2. Emerging Market and Middle–Income Economies
3. Low–Income Developing Countries



Sources: IMF, World Economic Outlook (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 = IMF, Fiscal Monitor.

Figure 1.8. Change in G20 Deficits, 2020

(Percent of GDP)

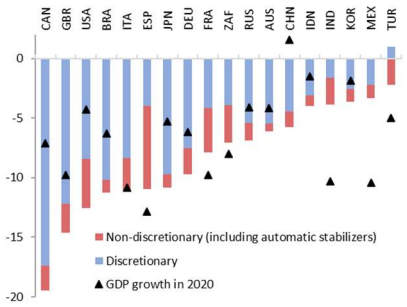
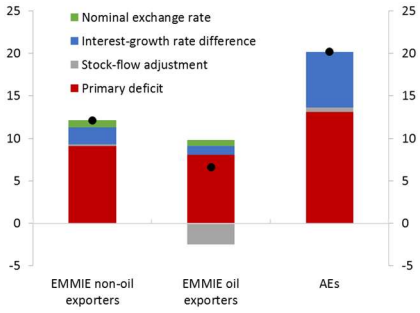


Figure 1.9. Change in Public Debt, 2020

(Percent of GDP)



Source: IMF, World Economic Outlook database; and IMF staff estimates.
Note: Discretionary fiscal support is measured as the change in the cyclically adjusted primary balance (CAPB); nondiscretionary fiscal support is the residual. The allocation between discretionary and non–discretionary measures should be considered indicative because output gap estimates, which are used to derive the CAPB, are subject to a high degree of uncertainty. Argentina and Saudi Arabia are excluded because of data limitations. Spain is a permanent invitee. AEs = advanced economies; EMMIE = emerging market and middle–income economy; G20 = Group of Twenty.

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 9 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.

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 for more than half 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).

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

									Projections					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
World	**-3.8**	**-2.9**	**-2.9**	**-3.3**	**-3.5**	**-3.1**	**-3.1**	**-3.9**	**-12.7**	**-7.7**	**-6.0**	**-5.2**	**-4.9**	**-4.6**
Advanced Economies	**-5.5**	**-3.7**	**-3.1**	**-2.6**	**-2.7**	**-2.4**	**-2.7**	**-3.3**	**-14.4**	**-6.9**	**-4.6**	**-3.7**	**-3.4**	**-3.4**
United States[1]	-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	-10.3	-5.0	-2.8	-2.1	-1.9	-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	0.9	1.0	1.0
Italy	-2.9	-2.9	-3.0	-2.6	-2.4	-2.4	-2.2	-1.6	-13.1	-6.1	-3.9	-2.6	-2.5	-2.5
Spain[2]	-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	-3.3	-2.9	-2.8	-2.8
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	-0.1	-6.8	-4.3	-2.5	-1.5	-1.1	-0.8
Emerging Market and Middle-Income Economies	**-0.9**	**-1.5**	**-2.4**	**-4.4**	**-4.8**	**-4.2**	**-3.8**	**-4.9**	**-10.9**	**-9.4**	**-8.4**	**-7.7**	**-7.2**	**-6.6**
Excluding MENAP Oil Producers	-1.9	-2.3	-2.7	-4.0	-4.3	-4.1	-4.0	-5.1	-10.9	-9.6	-8.6	-7.9	-7.4	-6.8
Asia	-1.6	-1.8	-1.9	-3.3	-3.9	-4.0	-4.5	-6.1	-11.6	-11.3	-10.4	-9.6	-8.8	-8.1
China	-0.3	-0.8	-0.9	-2.8	-3.7	-3.8	-4.7	-6.3	-12.2	-12.2	-11.4	-10.5	-9.6	-8.6
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	-7.1	-4.7	-3.6	-3.4	-3.3	-3.2
Russia	0.4	-1.2	-1.1	-3.4	-3.7	-1.5	2.9	1.9	-5.1	-3.0	-1.3	-1.1	-1.0	-0.6
Latin America	-2.9	-3.2	-5.0	-6.8	-6.2	-5.6	-5.2	-4.1	-11.2	-5.5	-4.2	-4.0	-3.9	-3.7
Brazil	-2.5	-3.0	-6.0	-10.3	-9.0	-7.9	-7.2	-6.0	-17.0	-6.5	-5.7	-5.8	-6.2	-6.1
Mexico	-3.7	-3.7	-4.5	-4.0	-2.8	-1.1	-2.2	-2.3	-6.0	-4.0	-2.4	-2.3	-2.3	-2.3
MENAP	5.6	3.9	-1.5	-8.5	-9.6	-5.8	-2.9	-3.9	-9.7	-7.2	-5.6	-4.9	-4.4	-3.9
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	-14.1	-11.1	-7.8	-5.7	-4.2	-3.0
Low-Income Developing Countries	**-2.0**	**-3.3**	**-3.1**	**-3.7**	**-3.7**	**-3.6**	**-3.4**	**-4.0**	**-6.2**	**-5.1**	**-4.5**	**-4.1**	**-3.9**	**-3.7**
Nigeria	0.3	-2.2	-2.0	-3.2	-4.0	-5.4	-4.3	-5.0	-6.7	-5.0	-5.2	-4.5	-4.6	-4.7
Oil Producers	**2.8**	**1.4**	**-0.4**	**-4.5**	**-5.3**	**-2.9**	**0.0**	**-0.6**	**-10.7**	**-5.9**	**-4.0**	**-2.9**	**-2.4**	**-1.8**
Memorandum														
World Output (percent)	**3.5**	**3.5**	**3.5**	**3.4**	**3.3**	**3.8**	**3.5**	**2.8**	**-4.5**	**5.2**	**4.2**	**3.9**	**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.

[1] 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.

[2] Including financial sector support.

Spending increases and revenue decreases equally drive the deficit expansions in advanced economies. The medians of the projected real increase in spending and real decrease in revenue are both about 4¼ and 3½ 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 pre-pandemic 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.[1] Advanced economy

[1] As of mid-July 2020, 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 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.

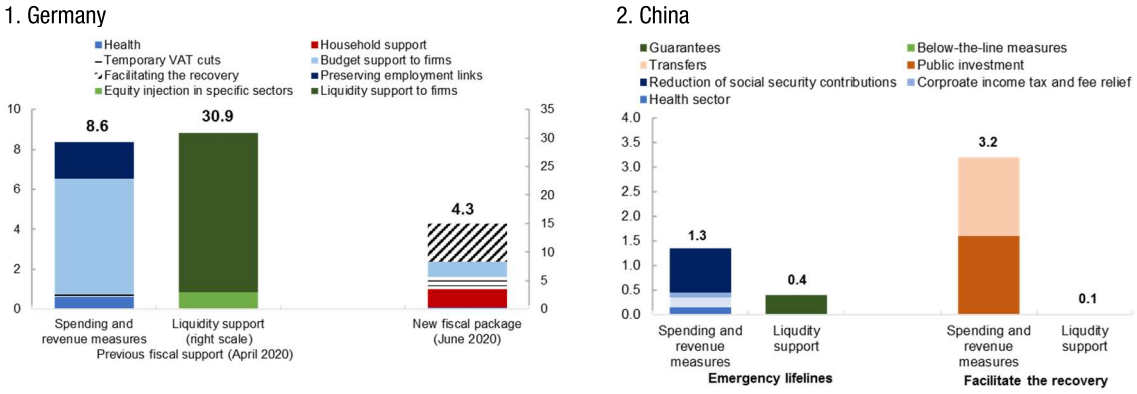
governments have also provided unprecedented off-budget assistance in the form of liquidity support and guarantees to firms that do not have a direct effect on current budget deficits.

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, Bank of Japan, US Federal Reserve).

Many advanced economies announced additional fiscal packages over the summer as the fallout from the pandemic lingered.[2] 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 1.3) 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 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 125 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.

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



Sources: Database for Fiscal Measures in Response to COVID–19 Pandemic; and IMF staff estimates.
Note: The numbers indicate the size of the fiscal support in percent of GDP. VAT = value–added tax.

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

[2] 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.

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 percentage point of 2019 GDP. Average revenues relative to GDP are projected to increase ¾ percentage points of GDP in 2021 though will remain below pre-pandemic levels.

Among non-oil exporters, there is heterogeneity in the expected fiscal developments. Deficit increases are pronounced in *Brazil* (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. Because of support and stimulus measures, *China*'s deficit is projected to expand by 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 6 percentage points of GDP. Oil price declines feed into an expected median fall in real revenues of 6 percentage points of 2019 GDP, while the median of the real change in expenditures is 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 value-added tax 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 (*Chile, 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)*.[3] Some have also tapped extrabudgetary funds or sovereign wealth funds (*Chile, India, Russia*),[4] 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 to more than 63 percent in 2020 from 52 percent in 2019, driven by both fiscal measures and economic contraction. Among large non-oil exporters, *Brazil* and *South Africa* have the largest projected increases in debt ratios, by 12 and 17 percentage points, respectively (Table 1.2). Among oil exporters, debt ratios in

[3] *Chile's* purchase program has yet to be implemented.

[4] *Russia's* National Welfare Fund resources offset a decline in government oil revenues as established in the fiscal rule.

Ecuador and *Oman* are expected to increase by 17 and 18 percentage points, respectively.[5] 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 state-owned companies temporarily reducing electricity tariffs or waiving port fees (*China*).

Table 1.2. General Government Debt, 2012–25

(Percent of GDP)

									Projections					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Gross Debt														
World	**79.6**	**78.3**	**78.6**	**79.6**	**82.4**	**81.1**	**81.4**	**82.9**	**99.1**	**100.8**	**101.9**	**102.7**	**103.1**	**103.3**
Advanced Economies	**106.8**	**105.3**	**104.8**	**104.2**	**106.8**	**104.5**	**104.0**	**105.3**	**125.4**	**125.5**	**125.6**	**125.6**	**125.5**	**125.3**
United States[1]	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	101.6	100.2	98.5	96.9	95.4	94.0
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	73.4	72.3	68.7	65.5	62.5	59.5
Italy	126.5	132.5	135.4	135.3	134.8	134.1	134.8	134.8	162.3	158.4	156.6	154.9	153.8	152.5
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	264.7	264.9	265.5	266.6
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[1]	85.4	86.1	85.6	91.2	91.7	90.5	89.7	88.6	114.6	114.9	114.6	112.8	110.0	106.2
Emerging Market and Middle-Income Economies	**37.0**	**38.2**	**40.3**	**43.3**	**45.6**	**47.3**	**49.3**	**52.3**	**63.5**	**68.0**	**72.0**	**75.1**	**77.6**	**79.5**
Excluding MENAP Oil Producers	39.4	40.7	43.1	45.3	47.2	48.8	50.9	53.8	65.1	69.9	74.0	77.2	79.7	81.6
Asia	39.6	41.3	43.4	44.4	45.7	47.6	49.3	53.4	65.6	72.1	77.9	82.6	86.1	88.7
China	34.4	37.0	40.0	40.7	42.3	44.4	47.0	52.0	64.3	72.2	79.8	85.9	90.5	94.1
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	37.7	38.9	39.3	39.6	40.1	40.6
Russia	11.2	12.3	15.1	15.3	14.8	14.3	13.5	13.9	18.5	19.1	18.8	18.5	18.4	17.9
Latin America	47.1	47.8	50.1	53.9	57.4	62.3	69.7	70.8	82.2	82.1	82.0	81.7	81.4	81.1
Brazil[2]	62.2	60.2	62.3	72.6	78.3	83.7	87.1	89.5	101.8	103.2	104.0	104.4	104.9	105.2
Mexico	42.7	45.9	48.9	52.8	56.7	54.0	53.6	53.7	66.9	67.8	67.2	66.8	66.4	66.0
MENAP	23.3	23.6	23.4	33.2	40.4	40.0	39.9	44.6	53.3	53.8	53.5	53.4	53.6	53.5
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	85.6	87.2	86.8	85.0
Low-Income Developing Countries	**30.6**	**31.8**	**32.0**	**36.2**	**40.0**	**42.5**	**42.9**	**43.3**	**48.9**	**49.7**	**49.1**	**48.4**	**47.7**	**46.8**
Nigeria	17.6	18.3	17.5	20.3	23.4	25.3	27.7	29.1	35.1	35.8	36.6	36.9	37.3	37.8
Oil Producers	**30.9**	**30.9**	**31.4**	**37.6**	**41.4**	**42.3**	**44.1**	**45.5**	**57.5**	**58.0**	**58.1**	**57.7**	**57.3**	**56.5**
Net Debt														
World	**66.0**	**65.1**	**65.4**	**66.9**	**69.5**	**68.2**	**68.7**	**69.5**	**87.5**	**88.3**	**89.0**	**89.1**	**89.1**	**89.4**
Advanced Economies	**76.9**	**76.1**	**75.9**	**75.9**	**77.6**	**76.0**	**76.1**	**76.7**	**96.2**	**96.4**	**97.3**	**97.5**	**97.7**	**98.3**
United States[1]	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	85.5	85.0	83.8	82.6	81.5	80.5
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	54.2	54.3	51.4	48.8	46.3	43.8
Italy	114.6	120.0	122.3	123.1	122.4	122.0	122.9	123.0	149.2	146.2	144.8	143.4	142.5	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	179.9	180.1	180.6	181.7
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[1]	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
Emerging Market and Middle-Income Economies	**22.7**	**22.9**	**24.3**	**28.7**	**34.5**	**35.7**	**36.8**	**38.8**	**49.3**	**52.2**	**53.4**	**54.2**	**54.8**	**54.9**
Asia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Europe	32.0	31.6	29.7	28.7	31.0	30.0	30.5	29.7	39.9	42.8	44.0	44.8	46.1	47.3
Latin America	29.6	29.7	32.3	35.7	41.1	43.3	44.1	45.4	57.7	60.8	62.3	63.3	64.2	64.7
MENAP	-2.5	-3.4	-0.1	15.5	28.9	28.8	31.5	37.8	48.3	50.0	50.7	51.7	51.5	50.6

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.

[1] 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.

[2] 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.

[5] Ecuador restructured its international bonds totaling $17.4 billion (19 percent of GDP) in August 2020. The operation significantly reduces debt service, generating an NPV reduction of around 44 percent at a 10 percent discount rate."

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 (*Ghana*, *Kyrgyz Republic, Republic of the Congo*), 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 nearly one-fifth (driven by *Nigeria, Republic of Congo,* and *Yemen*) compared with a real decline of 7 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.

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

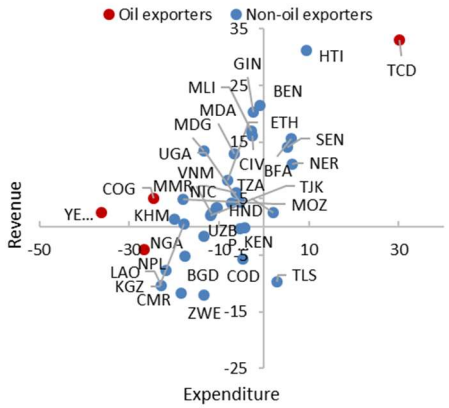
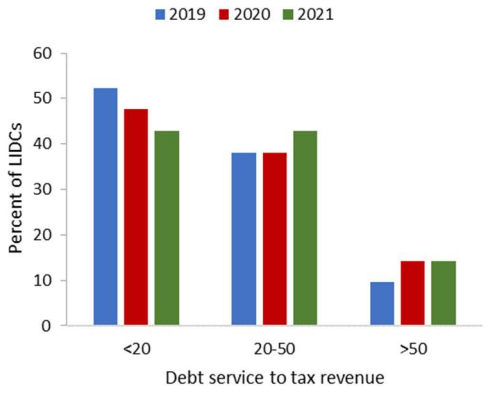


Figure 1.12. Debt Service, 2019–21
(Percent)



Source: IMF, World Economic Outlook database.
Note: Data labels use International Organization for Standardization country codes. LIDCs = low–income developing countries.

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 (*Cote d'Ivoire, Nigeria, Uganda, Vietnam*). In real terms, almost half of low-income developing countries are projected to cut total spending, and two-thirds 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 incorporate more spending and changed its gold mining regulation to raise royalties and taxes. *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 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 (the Debt Service Suspension Initiative of the World Bank and G20), 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 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).[6] Even so, 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 1.2 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), 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, 100-110 million people globally would be expected to enter extreme poverty, 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 80-90 million (Figure 1.14).[7] The impact would be

[6] IDA 19 refers to the World Bank Group's International Development Association 19 replenishment.

[7] The projections for per capita incomes are based on the June 2020 *World Economic Outlook Update*. Given recent developments, 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 in June 2020 that projected a rise in the extreme poverty headcount of 70

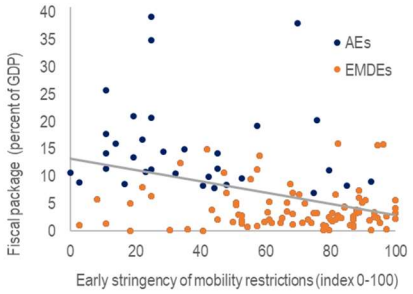
(continued)

concentrated 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.

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

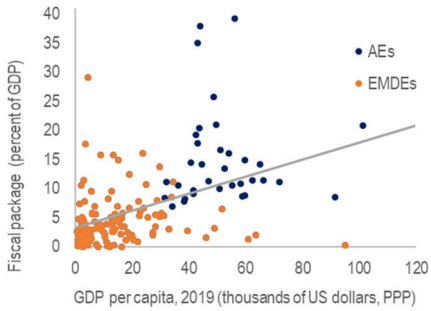
1. Fiscal Support and Stringency of Early Containment

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



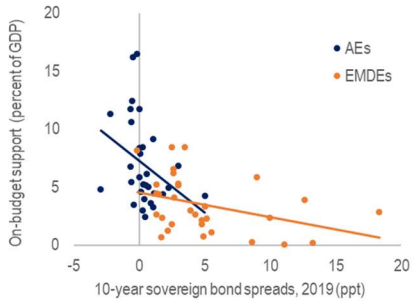
2. Fiscal Support and Initial Income per Capita

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



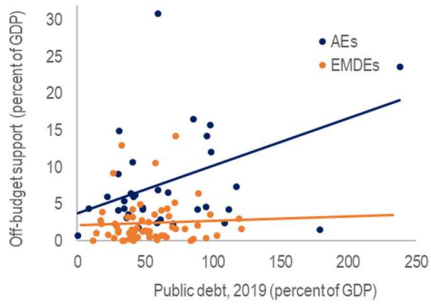
3. Fiscal Support and Initial Sovereign Spreads

…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; 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. Grey trend lines in panels 1 and 2 refer to both AEs and EMDEs; blue and orange trend lines in panels 3 and 4 refer to AEs and EMDEs, respectively. AEs = advanced economies; EMDEs = emerging market and developing economies; PPP = purchasing power parity; ppt = percentage point.

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, forthcoming; 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

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.

higher in emerging market and developing economies with weaker health systems (see Chapter 2 and Online Annex 2.7).

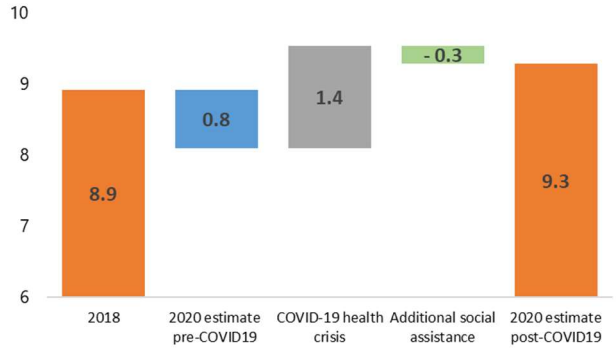
Nonhealth fiscal measures have served varying objectives and faced different trade-offs, as outlined below.

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).

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).

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 ID systems linked to socioeconomic databases and digital payment platforms (Prady 2020; Una and others 2020a, 2020b). Some low-income developing countries with administrative and financial constraints effectively provided in-kind (food) assistance to informal workers 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).

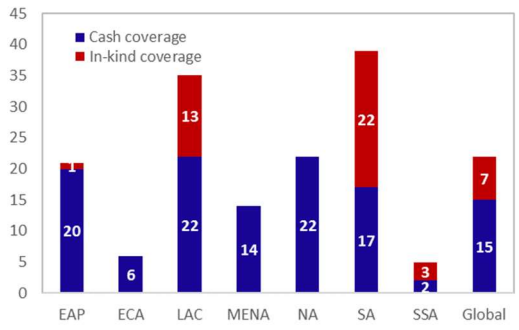
Wage subsidies for furloughed workers or businesses with revenue losses have been particularly effective in preserving employment linkages, but if maintained for too long after reopenings they could delay the required reallocation in labor markets. The take-up of job retention schemes averaged one-quarter of employees in Organization 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 schemes (OECD 2020b). 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*). Around 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). Around 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).[8]

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.

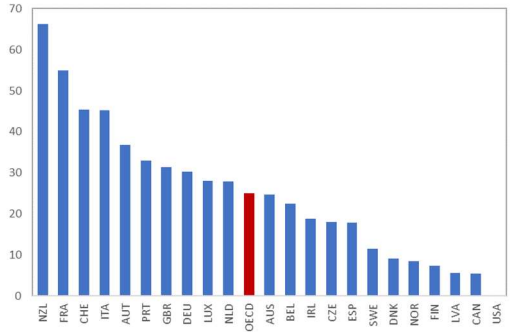


Source: Gentilini and others (2020).
Note: EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; NA = North America; SA = South Asia; SSA = sub–Saharan Africa.

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.



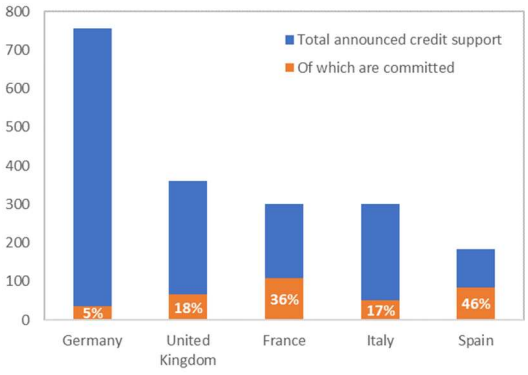
Source: OECD (2020a).
Note: Data refer to the end of May 2020, except for Luxembourg and Switzerland (end of April 2020). Take–up rates are calculated as a percentage of dependent employees in the fourth quarter of 2019. OECD = Organization for Economic Co–operation and Development.

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 (*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 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 Veron 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

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 Veron (2020).
Note: Data are as of end–June 2020.

[8] 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.

employment in small businesses, likely because it was the less-affected businesses primarily receiving these loans (Chetty and others 2020). For 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 1.3). 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 2020d; Djankov and Nasr 2020) that have supported household and firm liquidity, albeit to a lesser extent than debt moratoria and wage subsidies, given that tax burdens are already limited by lower sales and profits (OECD 2020e). 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 moratoria 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 the 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 tradeoffs 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, 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 above, 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)[9] 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.

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 comprised of 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.[10] 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.

[9] 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, informal sector workers), or subsidies for key goods and services such as food, health, transportation, and utilities. See also Online Annex 1.3.

[10] 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.

Table 1.3. Fiscal Strategies during Different Phases of the Pandemic

Fiscal Measures	1. Widespread Lockdowns	2. Gradual Reopening	3. Post-COVID-19 Recovery
Household Income Support			
Cash or in-kind transfers	Yes, they likely have the largest multipliers, particularly for basic necessities and public services.	Transition and better targeted 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.
Employment Measures			
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, re-training)
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.
Public Investment			
	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.
Tax Measures			
Temporary deferral of taxes and social security payments	Yes, to protect cash flows for households/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.
Other Liquidity Support			
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/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.

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,[11] 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, and/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.

From Preserving Existing Employment Links to Encouraging the Move to New Jobs

Governments should gradually shift the type of support provided to workers. Wage subsidies preserve human capital and firm-worker relationships during deep recessions.[12] They need to be complemented by support for the self-employed and workers in the informal sector through social assistance programs, and by enhancing eligibility for other support—for example, waiving the need for job search, training, or other requirements for unemployment benefits, increasing benefit levels, or extending the duration of benefit eligibility (*Australia, Canada, Greece, United States*; see Online Annex 1.3). Some of these measures, such as those for people working in sectors where health risks are high, may need to be kept in place longer.

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 (Baqaee and Farhi 2020; OECD 2020a). 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 undermine the economic recovery and exacerbate

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

[12] Before the pandemic, these subsidies (including those to preserve jobs with reduced working hours) were used primarily in Europe (*France, Germany*). But they have also been adopted by several countries elsewhere in recent months (*Brazil, Cambodia, Egypt, Uruguay*; see Gentilini and others 2020).

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.[13]

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 moratoria (OECD 2020f) 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 markets with government guarantees (*Australia, Portugal*); 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).[14] Given the large deficits and jump in debt levels,

[13] 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.

[14] 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.

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 and debt sustainability objectives over the medium term (Figures 1.18 and 1.19).[15] 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).

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…

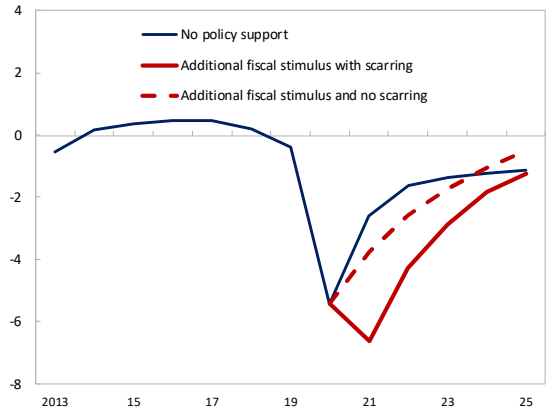
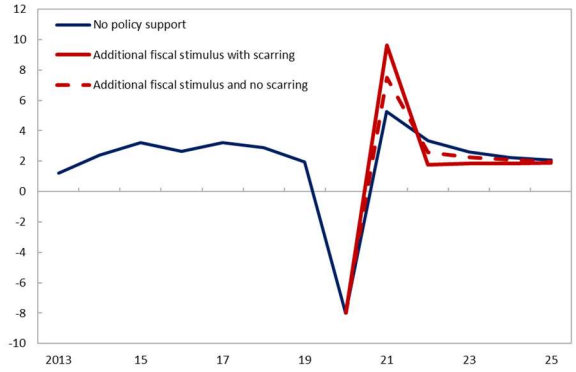


Figure 1.19. Economic Growth
(Percent change in GDP)

…allowing for a stronger economic recovery.



Sources: IMF staff estimates; and Fournier (2019).
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.

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

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 to make 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

[15] Figures 1.17 and 1.18 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.

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.

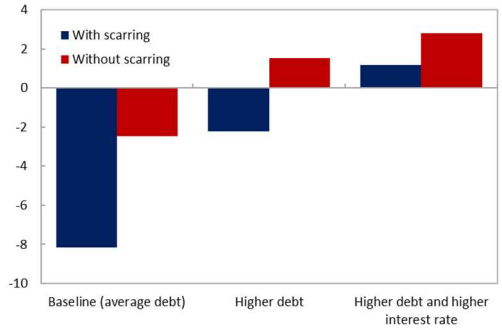
Stimulus Measures Should Be Cost-effective and Targeted to Lower-income Households

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 by high-income households and low private investment given the uncertain outlook. High public debt levels and precautionary savings, however, could reduce multipliers (Ilzetzki, Mendoza, and Vegh 2013; Fotiou, Shen, and Yang 2020).

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)

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

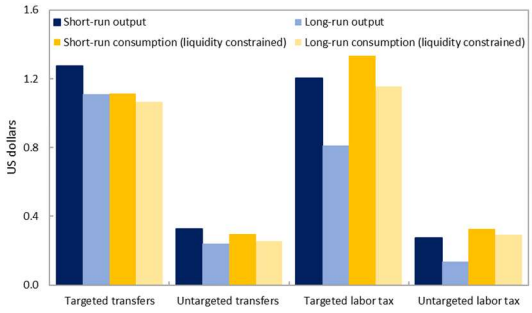


Sources: IMF staff estimates; and Fournier (2019).
Note: The chart shows differences in adjustments for higher debt levels, interest rates, and scarring (hysteresis) relative to baseline (Figure 1.18). The high debt level is at 140 percent of GDP. High interest cost refers to an addition of 1 percent 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.

The choice of fiscal instruments will determine the impact of the 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 of the poorest households, resulting in higher short-run multipliers (Figure 1.21; Online Annex 1.5).[16] Temporary provisions for accelerated depreciation or investment tax credits can reduce the cost of capital and encourage frontloading of 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.

Figure 1.21. Targeted Measures Have a Greater Impact (Fiscal Multipliers) on Output

(Increase in output per $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)–run multipliers refer to cumulative multipliers at the end of one (five) years (see Online Annex 1.5. for details).

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

[16] The multiplier estimates assume an environment of low growth and low interest rates, and one where poorer households are cash-constrained.

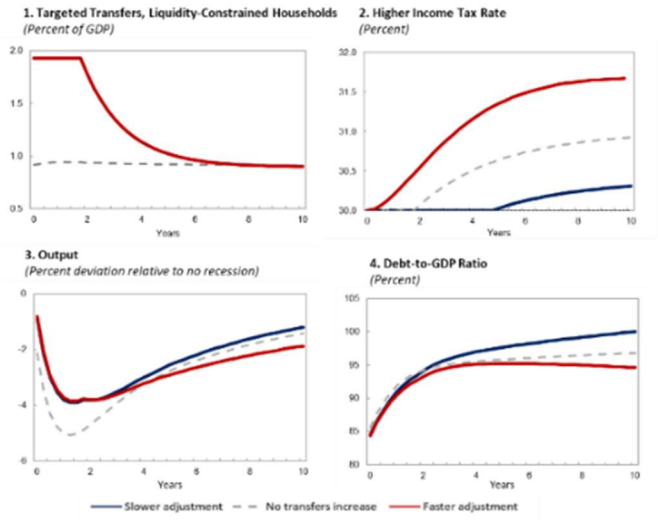
immediately if reducing debt is urgent. Another option is to finance additional public investment with higher indirect taxes (see also Chapter 2).

Unwind Government Interventions in the Corporate Sector

As the recovery gets under way, unwinding the large public interventions in firms and managing the associated fiscal risks becomes a priority.[17] 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.[18]

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). The horizontal axes display years.

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 reduce inequality and promote 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.

[17] Government ownership tends to be associated with weaker firm performance and can distort competition, ultimately undermining economic growth (see the April 2020 *Fiscal Monitor*).

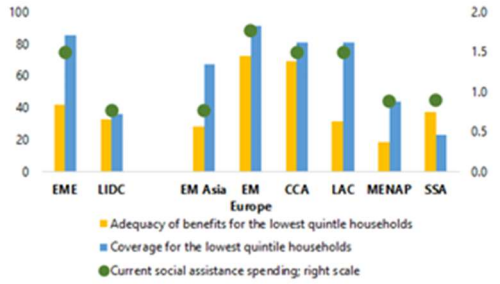
[18] The debt restructuring should be authorized by legislation and the process surrounding the restructuring should be carefully circumscribed in order to ensure appropriate accountability and transparency.

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 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.

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 pre–transfer 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 markets; EME = emerging market economies; LAC = Latin America and the Caribbean; LIDC = low–income developing countries; MENAP = Middle East, North Africa, Afghanistan, and Pakistan; SSA = sub–Saharan Africa.

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, Michaillat, and Saez 2018).

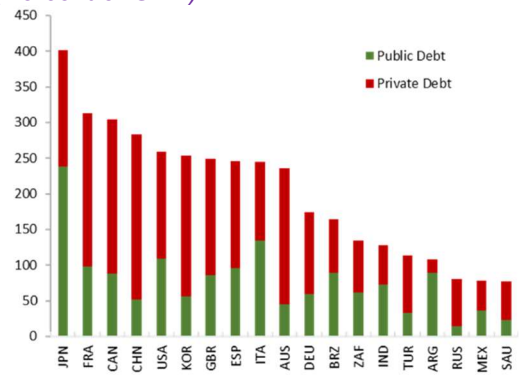
Invest in a green and sustainable future. Reducing emissions and adapting to climate change remain critical and urgent challenges when the pandemic is under control (see the October 2020 *World Economic Outlook*). The recovery from the current health crisis is an opportunity to move away from the pre-crisis 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, inclusive, and greener economy.

Box 1.1. Private Debt and Public Sector Risk

Private sector debt vulnerabilities were elevated before the COVID-19 pandemic. Nonfinancial corporate and household debt has trended upward for two decades, reaching 157 percent of GDP in 2019 and exceeding public debt by a large margin in most G20 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*, *Spain*, 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.

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.

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 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; Jorda, 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 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 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 Mooji 2012).

Box 1.2. 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 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 to date is equivalent to 9.3 percent of GDP (Figure 1.2.1). A large part of this support is aimed at workers and their employers (Figure 1.2.2) through wage subsidies (*Australia, Canada, Japan, United Kingdom*), short-term work schemes (*France, Germany, Spain*), 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*).

Figure 1.2.1. Breakdown of Fiscal Support, by Type

(As of September 11 2020, percent of GDP)

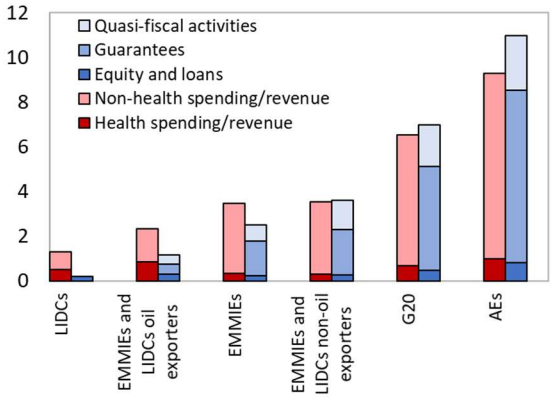
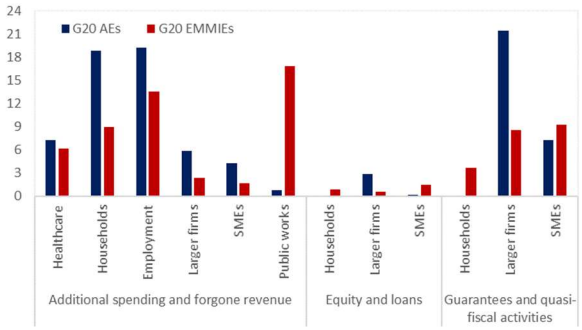


Figure 1.2.2. Distribution of Fiscal Support, by Beneficiary

(As of September 11 2020, percent of total)



Sources: Database of Country Fiscal Measures in Response to the COVID–19 Pandemic; and IMF staff estimates.
Note: Country group averages are weighted by GDP in US dollars adjusted by purchasing power parity. AEs = advanced economies; EMMIEs = emerging market and middle–income economies; G20 = Group of Twenty; LIDCs = low–income developing countries; SMEs = small and medium–sized enterprises.

In *emerging market and middle-income economies*, where the severity of the pandemic and financing conditions have varied widely, total fiscal support to date amounts to 6 percent of GDP, two-thirds 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 1.2.1), prioritizing health spending in some cases (*Iran, Saudi Arabia*). Among emerging markets, budget measures have consisted largely of public works (Figure 1.2.2), 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 advanced economies, exceeding [5] percent of GDP in only a few cases (*Brazil, Peru, Turkey*).

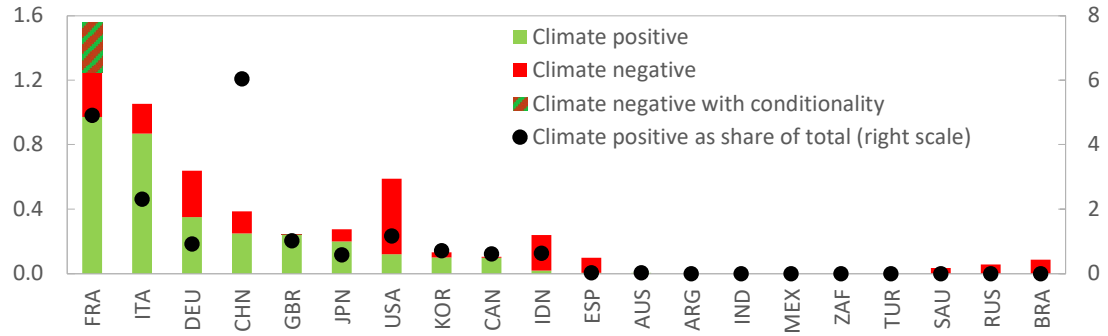
In *low-income developing countries*, where the pandemic has hit later and financing constraints are tighter, total fiscal support announced to date is [1.5] percent of GDP, largely through budgetary measures. Of these, spending on health services has amounted to [0.5] percent of GDP. A large share of 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*).

Box 1.3. 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 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 taken 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 G20 (Figure 1.3.1). *France* and *Italy* 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 for airlines in *Brazil*, *China*, and *France*. To date, only *France* attached significant green conditionality to its bailout.

Figure 1.3.1. 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).

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).

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Online Annex 1.1. How Will the COVID–19 Pandemic Affect Poverty and Inequality?[1]

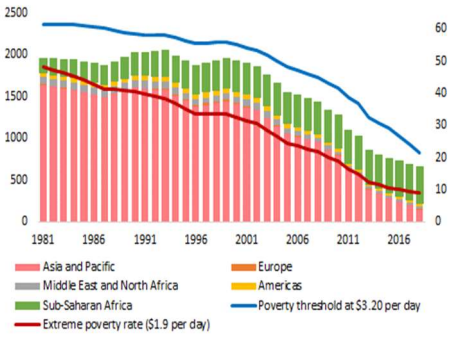
The COVID-19 pandemic could reverse decades-long progress in reducing poverty. Based on projected decline in per capita incomes and potential changes in income distribution, an additional of 100-110 million people globally would be expected to fall into extreme poverty relative to the pre-COVID-19 trend. The pandemic-related social assistance programs—supporting directly the poor and cushioning the growth slowdown—may contain the projected rise in poverty by about one-fifth. These estimates, however, are subject to a large degree of uncertainty depending on pandemic developments, designated poverty thresholds, the growth outlook, and fiscal policy responses. A full decomposition of fiscal policy impact is difficult given fiscal lifelines have cushioned the recession besides directly supporting the poor. At the same time, income inequality within countries, measured by Gini coefficients, is estimated to widen by 0.03 points on average, including in many advanced economies. Tackling rising inequality and poverty is now more urgent, which requires safeguarding essential social spending and building a strong and resilient social protection system against future shocks and pandemics.

The economic contractions across almost all countries have imperiled decades-long progress in reducing poverty. The global population of individuals who live in extreme poverty—defined as less than $1.90 per day—had fallen by two-thirds since 2000 to about 650 million people in 2018 (Online Annex Figure 1.1.1).

Online Annex Figure 1.1.1. Global Poverty Trend, 1981–2018

(Millions of people,left scale; percent, right scale)

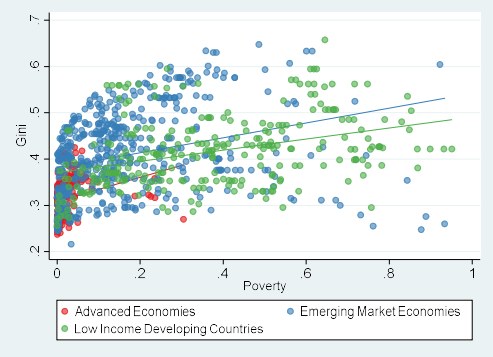
Poverty rates have declined over the last four decades.



Online Annex Figure 1.1.2. The Relationship between Poverty Rate and Income Inequality

(Percent and Gini coefficients)

Poor countries tend to have higher income inequality.



Sources: World Bank PovcalNet database; and IMF staff estimates.

The costs of the crisis are being borne disproportionately by poor and vulnerable individuals, adding to the deep social inequities that have long afflicted many countries. The nature of the pandemic has imposed large strains on labor-intensive, face-to-face services that employ a large share of low-income workers. Across all income groups, countries with higher poverty rates tend to have higher income inequality (Online Annex Figure 1.1.2) and greater poverty hardship—measured by the poverty gap, that is, the mean distance of incomes for poor individuals from the poverty line expressed as a share of the poverty line. This annex estimates the near-term effect of the COVID-19 pandemic on global poverty and income inequality, noting the uncertainty surrounding the estimates.

Estimation of Global Poverty and Income Inequality during COVID-19

The analysis starts with an estimation of the trend relationship between poverty rates and per capita output level (in purchasing power parity terms) and income inequality across 180 countries from 1981 to 2018, using the poverty data from the June 2020 vintage of World Bank PovcalNet database. The estimation uses a panel regression accounting for country fixed effects based on an unbalanced panel.

[1] Prepared by W. Raphael Lam, Delphine Prady, and Baoping Shang.

Estimates show that lower per capita income levels, slower growth, and higher income inequality are associated with higher poverty rates. Results are robust across different poverty thresholds established by the World Bank (for example, extreme poverty for individuals living off of $1.90 per day, and at higher levels of income at $3.20 and $5.50 per day) (Online Annex Table 1.1.1). Additional specifications controlling for time effects point to qualitatively similar results. Our baseline specification does not account for the possible interactions between poverty-growth elasticity and income inequality—for example, the poverty reduction may be less responsive to growth when inequality rises (Ravailion 1997). The rise in poverty rates as per capita income falls is consistent with the literature that incomes of poor households (those in the lowest two quintiles) tend to change with the aggregate growth rates (Dollar, Kleineberg, and Kraay 2013)), as income shares across household deciles are not statistically significant different when growth varies over the medium term.

Online Annex Table 1.1.1. Regression Results on Relationships between Poverty and Per Capita Income

	Dependent variable								
	Poverty Headcount (in millions of people)								
Explanatory variables	Extreme Poverty ($1.90 per day)			Poverty Threshold ($3.20 per day)			Poverty Threshold ($5.50 per day)		
Per capita GDP (PPP; in logarithm terms)	-0.1278 ***	-0.1290 ***	-0.1419 ***	-0.1554 ***	-0.1561 ***	-0.1803 ***	-0.1482 ***	-0.1485 ***	-0.1830 ***
	(0.014)	(0.014)	(0.015)	(0.014)	(0.014)	(0.015)	(0.013)	(0.013)	(0.014)
Per capita GDP growth	-0.0009 **	-0.0008 **	-0.0006	-0.0006	-0.0005	-0.0003	-0.0004	-0.0003	0.0001
	(0.0004)	(0.0004)	(0.0004)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)
Income inequality (Gini coefficient)		0.0149 **	0.0149 ***		0.0093 *	0.0138 **		0.0038 *	0.0079 *
		(0.0055)	(0.0049)		(0.0058)	(0.0052)		(0.0018)	(0.0047)
Constant	1.3093 ***	1.3206 ***	1.4357 ***	1.6839 ***	1.6909 ***	1.9076 ***	1.7718 ***	1.7747 ***	2.0849 ***
	(0.121)	(0.121)	(0.128)	(0.120)	(0.121)	(0.133)	(0.115)	(0.115)	(0.121)
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year effects			Y			Y			Y
Observations	2,264	2,264	2,028	2,264	2,264	2,028	2,264	2,264	2,028
R-squared									
Within	0.37	0.37	0.38	0.44	0.44	0.48	0.32	0.32	0.48
Between	0.68	0.68	0.66	0.79	0.78	0.77	0.84	0.84	0.84
Overall	0.64	0.64	0.63	0.75	0.74	0.75	0.77	0.76	0.80

Sources: World Bank PovcalNet database, IMF World Economic Outlook database; and IMF staff estimates.
Note: ***, **, * denote statistically significant levels at 1 percent, 5 percent, and 10 percent, respectively. Sample size spans across all countries from 1981 to 2018. Numbers in parentheses are standard errors. PPP = purchasing power parity. The table shows various specifications across different poverty thresholds set by the World Bank. Robustness check includes additional control variables on the share of temporary and informal employment, and the coverage and adequacy of social protection systems (not shown in the table). The qualitative results that per capita income and inequality affects poverty remain robust across specifications. The regression results in the second column of the extreme poverty regression is used for projection of global extreme poverty during the pandemic.

The estimated coefficients are then used to project poverty headcount across countries. A baseline scenario of projections on per capita output for 2020–23 is considered along with a projected rise in income inequality. The rise in income inequality is estimated using the pre–COVID-19 income distribution across income deciles of countries and the estimated coefficients of negative growth shocks on household income deciles (see below). The results suggest that the poverty rate is likely to rise during the pandemic for the first time in this century, reversing the decades-long declining trend of extreme poverty (Online Annex Figure 1.1.3). Under the baseline scenario in June 2020 *World Economic Outlook* (WEO) Update, the COVID-19 pandemic could push around 100-110 million people into extreme poverty (at $1.90 per day) during the pandemic, an equivalent of near 1.5 percentage point higher poverty rates relative to pre–COVID-19 trends.[2] The estimates are comparable to those by World Bank in June

[2] In the baseline scenario, global extreme poverty is projected to rise by 108 million people during the pandemic relative to pre-COVID-19 trend based on the decline of per-capita income levels, per-capita growth, and potential rise of income inequality. The estimated range of 100-110 million, underscores the uncertainty surrounding the data in a few countries as well as evolving global developments. Based on the latest global developments as of mid-September, which has slightly improved relative to June, the global poverty estimates are likely to be about 9 million less,

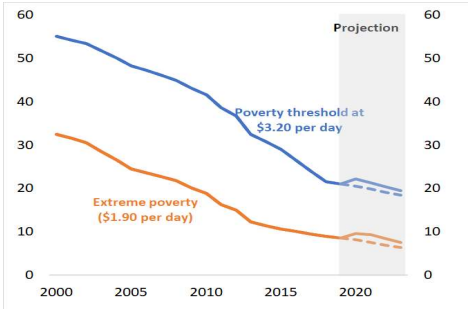
(continued)

2020 that showed a rise of extreme poverty in 2020 of 70 to 100 million people, which show the rise relative to pre–COVID-19 levels and adjusted for 2019 growth revisions, and assuming no change in income distribution (World Bank 2020).[3] The number of people falling into poverty is subject to a wide range—in which the ongoing revision of data in a few countries with large populations could affect the global estimates—and could be higher if the pandemic outbreaks become more severe. Most of the projected rise in poverty headcounts is driven by countries in sub-Saharan Africa and South Asia. The 10 countries with the highest levels of extreme poverty account for more than half of the increase in global poverty headcounts (Online Annex Figure 1.1.4). Over three-quarters of countries are expected to see an increase in poverty, of which one-fifth of countries could see extreme poverty rates rising by more than 2 percentage points (Online Annex Figure 1.1.5).

Even before the health crisis, income was highly concentrated at the top deciles of households, particularly among countries with high poverty rates. In those countries, the bottom half of the population accounts for less than one-fifth of aggregate income and consumption (Online Annex Figure 1.1.6). The pandemic has had a disproportionate effect on low-income households in many countries because they are concentrated in the informal sectors, are more vulnerable to job losses, have lower financial savings, and have less access to healthcare. As a result, the crisis will likely widen income inequality within countries. In some countries, however, the pandemic tends to affect more adversely the urban households (usually in higher-income groups) than those in the rural areas partly because the infection rates are higher in areas with greater population density. This disproportionate impact could reduce income inequality in the near term, particularly after accounting for social benefits.

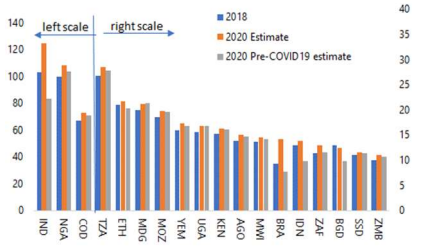
Online Annex Figure 1.1.3. Global Poverty Rates
(Percent)

The declining trend of global poverty rates is likely to reverse as a result of the pandemic.



Online Annex Figure 1.1.4. Rising Levels of Extreme Poverty in Selected Countries
(Millions of people)

The rise in global poverty is driven largely by countries in sub–Saharan Africa and South Asia.



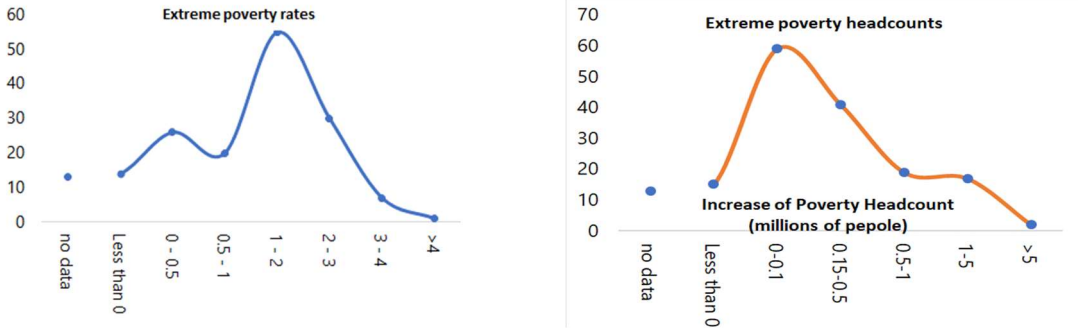
Sources: World Bank PovcalNet database; IMF, October 2020 *World Economic Outlook*; and IMF staff estimates.
Note: The term "extreme poverty" refers to the threshold of $1.90 per day across all countries. Estimates are based on the methodology in Online Annex Table 1.1 of top–down growth projections and poverty data from the World Bank PovcalNet database, which could be different from national authorities' estimates. For example, Uganda's authorities estimate that the precrisis poverty rate was 18.6 percent and could rise to 26 percent based on household income analysis. The solid lines in the left panel refer to actual and projections based on the World Economic Outlook database, while the dotted lines refer to the projections prior to the health crisis.

putting those at the lower end of the range. However, some individual countries would have seen an increase relative to June given the pandemic has turned more severe and growth has been revised downward. Overall, the poverty estimates vary significantly across growth outlook scenarios and alternative poverty thresholds defined by the World Bank (for example, $3.20 per day or $5.50 per day).

[3] The World Bank estimates have a wider range and higher estimates once considering changes in income distribution (World Bank 2020).

Online Annex Figure 1.1.5. Distribution of Potential Rise in Extreme Poverty

(Number of countries)

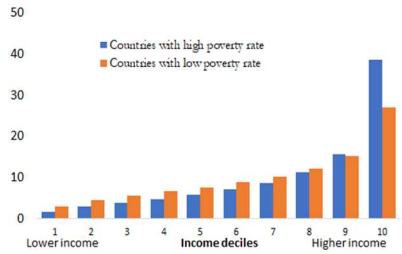


Sources: World Bank PovcalNet database, IMF World Economic Outlook, and IMF staff estimates.

Online Annex Figure 1.1.6. Income Share, by Household Income Deciles

(Percent of total aggerate income)

Income is highly concentrated in high–income households, particularly in poor countries.

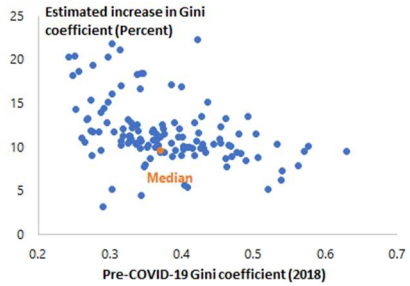


Sources: World Bank PovcalNet database; and IMF staff estimates.
Note: Countries with a high poverty rate refer to those with rates higher than 50 percent of the population, while countries with a low poverty rate have rates less than 10 percent of the poverty rate in 2015. Poverty lines vary according to country income group as in Annex Figure 1.1.3.

Online Annex Figure 1.1.7. Estimated Increase in Income Inequality

(Index)

The pandemic could widen income inequality within countries.



Sources: World Bank PovcalNet database; and IMF staff estimates.
Note: Pre–COVID–19 income inequality is based on 2018 data or the latest year available.

The estimates suggest that median income inequality within countries would rise from 0.38 to 0.41 on the Gini index (Annex Figure 1.1.7). Estimating the impact on income inequality starts with taking the pre-COVID-19 income distribution across countries and then estimating the pandemic impact on the income share of each income decile based on the changes in household income distribution in past recessions across countries. The estimates are subject to limitations in part because governments' social spending in response to the health crisis could mitigate the rise of income inequality. Overall, the magnitude of increases is comparable to those obtained through analysis using household surveys and indices on the ability to tele-work in selected European countries (Palomino, Rodriguez, and Sebastian 2020). Other studies have used selected household surveys (Bottan, Hoffmann, and Vera-Cossio 2020) and previous epidemic episodes (Furceri and others 2020) but applied them to a narrow set of countries.

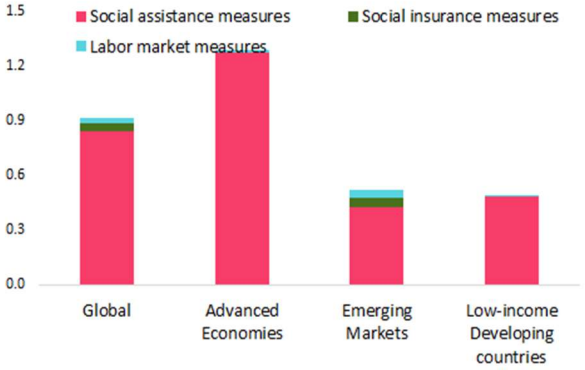
Many countries have appropriately provided emergency lifelines to vulnerable households, which supporting directly to the poor besides cushioning the magnitude of growth slowdown. Globally, over 1.7 billion people have received additional social assistance transfers in some form or another. Transfers for recipients almost doubled on average from precrisis levels, representing one-third of monthly GDP per capita (Gentilini and others 2020a). On average, countries have spent close to an additional 1 percent of GDP on social protection and labor market measures in response to the pandemic, largely on social

assistance programs, although the increase was modest at about 0.4 percent of GDP in low-income developing countries (Online Annex Figure 1.1.8).

Online Annex Figure 1.1.8. Additional Social Protection and Job Measures in Response to the COVID–19 Pandemic

(Percent of GDP)

Countries on average have spent 0.9 percent of GDP on social protection and labor market measures, most of which through social assistance programs.

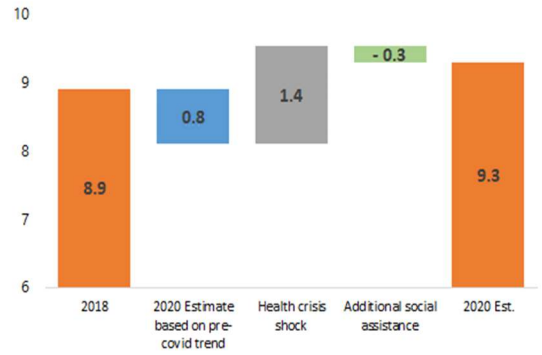


Sources: Gentilini and others (2020b); and IMF staff estimates.
Note: Weighted average by US dollar purchasing power parity GDP across countries with additional measures.

Online Annex Figure 1.1.9. The Impact of COVID–19–Related Social Assistance Measures on Global Extreme Poverty Rates

(Percent)

Social safety net lifelines have mitigated the rise in global extreme poverty.



Sources: World Bank PovcalNet database; IMF, October 2020 *World Economic Outlook*; Gentilini and others (2020b); and IMF staff estimates.

Additional social spending has helped mitigate partly the potential rise in global poverty in the face of the pandemic. Using World Bank ASPIRE data that simulate the sensitivity of spending on social assistance on poverty measures and Gini coefficients, Evans and Matsumoto (2020) show that 1 percentage point of GDP spending on social assistance would reduce the poverty headcount by around 6 percent on average.[4] As countries spend an additional 0.8 percent of GDP on social assistance on average during the pandemic, this would imply an average 5 percent reduction in the poverty headcount.[5] Applying this to the global poverty estimates illustrated above and using country-level data on COVID-19-related social spending in Gentilini and others (2020b), the estimates in this annex suggest that COVID-19-related social assistance programs have mitigated at most one-fifth of the projected rise in global extreme poverty rates. This implies that around 80-90 million people could fall into extreme poverty after accounting for the direct support of social assistance programs (Online Annex Figure 1.1.9) under the baseline.[6,7] If we consider the 100-110 million people range above, the rise in extreme poverty will likely be above 80-90 million people. The estimates, however, are subject to a large degree of

[4] A detailed methodology can be found in Yemtsov and others (2018).

[5] Assumes the impact of social assistance on poverty reduction is the same across people who recently fall into poverty and those previously living in poverty. Some evidence suggests that the people who recently fall into the pandemic would be more difficult to reach or to be eligible for current social assistance program than people already under poverty according to the World Bank. This would imply our estimates could have overestimated the impact of COVID-19 related social assistance spending. On the other hand, most governments rolled out a range of measures, including progressive tax and benefit measures, which are not accounted in this estimate given it only considers social assistance program.

[6] Based on the projected per-capita income and changes in income inequality, the projected rise of global extreme poverty as shown before would be expected to rise by 108 million, or around 100-110 million people as illustrated before. The COVID-19 related social assistance programs would be expected to mitigate by at most one-fifth of the potential rise (the initial projection already reflects impact of social assistance programs on GDP per capita).

[7] Other micro-data studies point to significant contributions of COVID-19 lifelines to mitigating poverty. For example, in the United States, federal aid through cash transfers and pandemic-related unemployment benefits have contained the rise in poverty rates across regions and demographic groups, preventing 12 million people from falling into poverty (Han, Meyer, and Sullivan 2020; Parolin, Curran and Wimer 2020).

uncertainty depending on pandemic developments, designated poverty thresholds, the growth outlook, and fiscal policy responses. A full decomposition of fiscal policy impact is difficult given lifelines have partly cushioned the growth slowdown besides providing direct support to the poor.

Policies to Tackle Rising Poverty and Inequality

Tackling rising inequality and poverty has become more urgent, which requires safeguarding essential social spending and building a strong, resilient social protection system against future shocks and epidemics. Specific steps include the following:

1. *Phase out temporary lifelines cautiously, but safeguard essential social spending.* The pace of phasing out lifelines should depend on how the pandemic develops (reduction of health risks), the strength of the recovery, and the fiscal space. Governments should strike a balance between work incentives and adequate income support to contain poverty and mitigate inequality. Redesigned lifeline measures can become part of stronger social protection systems, which will need to be embedded in governments' medium-term fiscal strategies and require sustainable financing.

2. Countries with fiscal space should expand social protection and labor market programs to improve their adequacy and coverage (Online Annex Figure 1.1.10). In economies where the pandemic and the lockdowns weigh heavily on informal workers, governments should invest in identification and delivery systems that will allow for reaching out to many workers and households currently not covered by social programs. This can be complemented by supporting local community organizations that step up timely delivery of food, medicine, and other essential supplies to households identified as being in need.

3. In countries with limited fiscal space, it will be necessary to generate additional resources to scale up social spending. Measures could include removing inefficient and regressive subsidies and increasing broad-based taxes. In the wake of growing social protests, solidarity on fiscal policies becomes more important for all countries.

4. *Build stronger social protection systems.* The crisis has exposed structural gaps in social protection systems.[8] Stronger systems will strengthen resilience against future shocks. The crisis may provide an opportunity to strengthen these systems by both expanding coverage and increasing benefits (Online Annex Figure 1.1.11). Priorities would be to strengthen the systems mainly along two dimensions: (i) "reachability" to effectively disburse social protection benefits (cash or in-kind) in a timely, secured, and adequate manner to ensure that eligible households receive the benefits to which they are entitled; and (ii) "scalability," so that the social protection systems can be easily expanded (either by increasing generosity or coverage) to respond to adverse shocks and mitigate income losses.

In terms of reachability, strengthening the capacity to reach, target, and deliver timely benefits would require (i) a comprehensive identification system to ensure inclusion and avoid fraud; (ii) integrated socioeconomic data that allow for effective targeting; and (iii) a delivery infrastructure to disburse benefits, particularly for people in more remote and deprived areas (Online Annex Figure 1.1.12). Governments can collect, maintain, and integrate information that enables automatic enrollment of large

[8] Existing gaps in social protection systems have led countries to innovate in different ways to reach vulnerable populations, leveraging existing delivery infrastructure and finding alternatives, such as digital cashless transfers. A new cashless transfer program in Togo called Novissi has allowed subnational governments to make transfers to targeted adult workers in the informal economy, such as taxi drivers, affected by the lockdowns. Beneficiaries are identified through their voter IDs, which have much broader and reliable coverage than personal ID cards. Ecuador doubled the number of cash agents in two weeks. Malaysia expanded free mobile Internet access, while Nigeria identified vulnerable informal workers in urban areas by collaborating with mobile network operators under airtime purchase patterns. Emergency innovations enable various social protection programs to reach vulnerable individuals, and they should be reviewed and strengthened over the medium term.

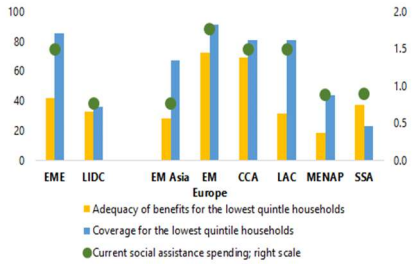
segments of the population that need support when adverse shocks occur, including through greater use of digital solutions to simplify application and raise the take-up of social protection programs (*Namibia, Pakistan, Togo, United States*). Greater use of digital means should be accompanied by safeguards to prevent fraud and ensure data privacy to mitigate risks.

Social protection systems can respond better to adverse shocks if they (1) have built-in triggers that adapt the social programs to adverse shocks and deliver timely benefits to vulnerable groups (for example, free school-meal programs can be transformed into in-house food distribution or cash transfers for vulnerable families when school is closed under lockdowns); (2) include benefits that are automatically conditioned to the shocks (for example, top-up of unemployment benefits in the *United States* or registering ineligible applicants in social programs (*Colombia*); and (3) are aligned with medium-term development needs.

Online Annex Figure 1.1.10. Adequacy and Coverage of Social Protection Programs across Regions

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

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



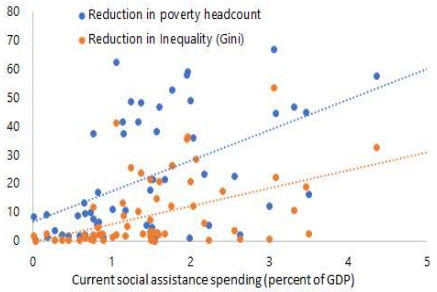
Sources: World Bank, ASPIRE and PovcalNet databases; and IMF staff estimates.

Note: Adequacy of benefits is the total transfers received by beneficiaries as a share of the pre–transfer total income in the lowest income quintile of individuals. Coverage is the share of the lowest quintile individuals who receive social protection benefits. EM = emerging markets; EME = emerging market economies; LIDC = low–income developing countries; LAC = Latin America and the Caribbean; MENAP = Middle East, North Africa, Afghanistan, and Pakistan; SSA = sub–Saharan Africa.

Online Annex Figure 1.1.11. Social Assistance Programs and the Reduction of the Poverty Headcount and Inequality

(Percent)

High social safety net spending has tended to contribute to reducing poverty and inequality across countries.



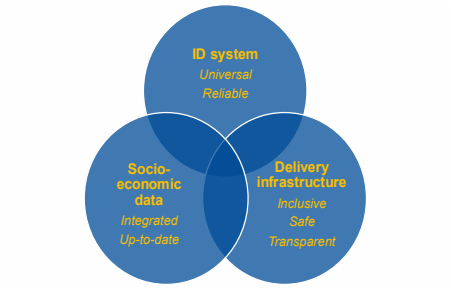
Sources: World Bank, ASPIRE and PovcalNet databases; and IMF staff estimates.

Note: The reductions in poverty headcounts and inequality (Gini) are driven by social assistance and likely other social insurance and labor market programs.

At the same time, social protection systems need to limit exclusion errors to cover eligible low-income individuals, while encouraging productive behavior. This can be done by combining broad programs (such as child allowances or social pensions) and more complex, targeted programs (such as conditional cash transfers) to encourage school attendance and health check-ups—a form of progressive universalism. This can also be done by setting transparent and simple eligibility criteria for those who cannot participate (that is, targeting out). For example, *Namibia* has put in place a transfer for all adult informal workers and the unemployed that explicitly excludes formal workers and recipients of existing social benefits.

Countries should strengthen the systems building on the lifelines extended during the COVID-19 pandemic. In some cases, this would imply refining those programs that were rolled out as "quick fixes," as speed is a priority to save lives and protect people's livelihoods. Priorities are to consolidate those inefficient, fragmented programs with duplication of benefits or high administrative costs that existed before the crisis or were introduced in response to the pandemic. Certain provisions to expand social protection programs can be made more permanent. In other situations, new programs may need to be consolidated with pre-COVID-19 ones in order to align benefit levels and eligibility criteria (*the Philippines, Brazil*) while preserving work incentives.

Online Annex Figure 1.1.12. Main Areas to Improve the Reach of Social Protection Systems



Source: Prepared by IMF staff.

Online Annex 1.2. Smart Strategies to Contain the COVID–19 Pandemic[1]

As countries reopen their economies and ease mobility restrictions, it is important to understand what approaches work best to contain the health and economic impact of COVID-19, not only to limit new waves of infections, but also to better prepare for future pandemics. This annex assesses the effectiveness of various containment measures in limiting the number of fatalities, as well as the expected output and fiscal costs associated with these measures.[2] The findings suggest that stringent containment measures such as mobility restrictions and public health policies implemented early on are associated with better health and expected economic outcomes. Experience from countries that successfully curbed COVID-19 at lower economic costs also suggests that a "smart" containment strategy should involve data-driven, targeted lockdowns and quarantines, underpinned by large-scale testing, contact tracing, and public information campaigns that promote voluntary compliance and trust.

Health Impact of Stringent Containment Measures

Several studies have found that containment measures have been, on average, effective in "flattening the pandemic curve," that is, in slowing the spread of the virus, especially when those measure are implemented early and result in less mobility (Deb and others 2002b). Complementing these studies, this section analyzes the effectiveness of various containment measures in limiting the number of fatalities, accounting not only for the timing of these measures but also for their stringency and duration. Specifically, the annex compares COVID-19 deaths in countries that implemented stringent containment measures during the course of January through May on average versus countries that implemented such measures early on—when the country reached 100 COVID-19 cases. The analysis controls for country specificities, such as median age, population density, and health system preparedness (proxied by hospital beds per 1,000 persons), as well as GDP per capita. Containment measures include internal and international mobility restrictions, such as curfews, bans on travel, public events, or gatherings, and closures of schools, workplaces, and transport, as well as public health policies such as large-scale testing, contact tracing, and public information campaigns.

The evidence in Online Annex Table 1.2.1 suggests that stringent containment measures implemented early on are associated with significantly lower fatalities. Since many containment measures are often implemented at the same time, it is difficult to disentangle their effects. Nevertheless, assessing different containment measures individually shows that most are associated with lower COVID-19 death rates (Online Annex Table 1.2.2). When controlling for the overall stringency of these measures, however, signs reverse for those measures that are highly correlated, illustrating the challenge in identifying the relative effectiveness of different measures. Notably, in the case of international travel controls, where the timing was often different from domestic measures, as well as cancellation of public events, the evidence seems to be strongly in favor of these measures reducing fatalities

Country success stories in containing the virus have largely stemmed from acting early (including by monitoring international travel), implementing large-scale testing, and contact tracing. Notably, governments with experience in containing SARS coronavirus outbreaks (*Hong Kong SAR, Singapore, Taiwan Province of China*, and *Vietnam*) acted fast and "smart" and were able to successfully contain COVID-19, with a lower death toll and lower expected output and fiscal costs (see next section). An early and smart containment strategy, based mainly on mass testing, contract tracing, and public information campaigns allowed these governments to successfully curb the spread of the virus. In contrast with others, successful governments (1) quickly imposed international travel restrictions, closed schools, and

[1] Prepared by Alexandra Fotiou and Andresa Lagerborg, based on Fotiou and Lagerborg (forthcoming-a).

[2] See Chapter 2 of the October 2020 World Economic Outlook for a discussion on the economic consequences of containment measures.

cancelled public events; (2) proactively implemented stronger health policies such as testing, contact tracing, and public information campaigns; and (3) only later implemented stay-at-home orders, closures of workplaces and transport, and restrictions on gatherings and internal travel. Because of past pandemic experience, public information campaigning seems to have been enough for people to act cautiously.[3] *Nepal* and *Korea* are also success stories, adopting response plans similar to the rest of the Asian region.[4] Interestingly, *Korea* was one of the countries highly affected by MERS outbreaks in 2015. A set of smaller countries, including *Cyprus, Georgia, Greece, Malta*, and the *Slovak Republic*, were also effective in containing the virus by acting fast. Learning from other countries' experiences, and given their concerns with limited healthcare capacity, these countries imposed international travel restrictions and bans on public event early on.

The lack of experience from other epidemics is associated with less preparedness not only by governments, but also by citizens. In countries with no experience, governments had to force people to stay at home and restrict their mobility, imposing stricter stay-at-home orders and bans on gatherings . Evidence from the Ebola experience shows that supporting the health system in a smart way can make a difference. The impact of the Ebola outbreak was profound in both its human toll and severe socioeconomic effects that included job and education losses. Health systems were severely compromised by overwhelming demand, healthcare worker deaths, resource diversion, and closure of health facilities. These, together with the fear of getting infected, lowered trust in health systems, with large reductions in health care utilization. Since the Ebola experience, studies have suggested that the best strategy to successfully control an outbreak involves early, aggressive, and supportive healthcare, including contact tracing, preventive initiatives, active surveillance, effective isolation and quarantine procedures, and timely response to patients (Kalra and others 2014; Wojda and others 2015). These measures, combined with public health education, point-of-care diagnostics, a vaccine, and coordinated efforts from the international community, made a big difference in the fight against Ebola.

Economic Impact of Stringent Containment Measures

Stringent containment measures can have potentially large macroeconomic costs.[5] This section assesses the expected output and fiscal costs of containment measures. The analysis is based on the revision of GDP and primary balance projections for 2020 between the vintages of the IMF's World Economic Outlook database in October 2019 and July 2020.[6] The regressions suggest that countries that have more successfully contained COVID-19 (specifically, certain countries in Asia) may also experience lower output losses and milder deteriorations in fiscal balances on average (Online Annex Tables 1.2.3 and 1.2.4). On the other hand, advanced economies and countries with larger fiscal stimulus packages also saw larger downward revisions in GDP growth and fiscal balances.[7]

[3] Chen and others (forthcoming) provide supportive evidence on how the voluntary decision to social distance and take precautions matters compared with de jure non-pharmaceutical interventions.

[4] A country is classified as successful if the number of deaths per 1 million population is below 20, and if the number of tests per 1 million population is above 10,000.

[5] See Deb and others (2020a), Coibion, Gorodnichenko, and Weber (2020), and Gourinchas (2020).

[6] See Fotiou and Lagerborg (forthcoming-a) for more details regarding the analysis, for robustness checks when looking into January 2020 versus July 2020 projections , and for effects on the debt-to-GDP ratio.

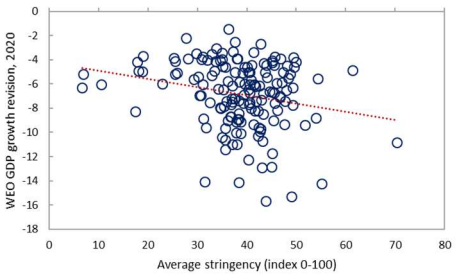
[7] No relation is observed between stronger COVID-19 containment measures, on average, and the size of fiscal packages (Fotiou and Lagerborg, forthoming-b). The evidence suggests, however, that countries that acted swiftly in putting in place strong COVID-19 containment measures ultimately deployed smaller fiscal packages.

Countries with stricter containment measures, on average, saw larger downward revisions to growth and primary balance projections for 2020 between October 2019 and July 2020.[8] However, countries that put stringent containment measures in place earlier (rather than later and for longer) saw smaller downward revisions (Online Annex Figure 1.2.1). This applies mainly to mobility restrictions (such as workplace closures and stay-at-home orders), while stronger public health policies are associated with better expected outcomes for GDP growth and fiscal balances regardless of these policies being implemented earlier or later (Online Annex Figure 1.2.2). Large downward revisions to GDP growth in 2020 will be only partially offset by a stronger expected rebound in 2021 for countries with stricter average containment measures. In the medium term, the implications of costly containment measures are expected to be long-lasting particularly in the case of public debt (Online Annex Figure 1.2.3, panel 1).

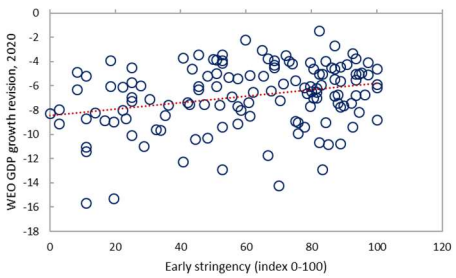
Online Annex Figure 1.2.1. Stringency of Containment Measures and World Economic Outlook Database Revisions to GDP Growth and the Primary Balance, 2020

(Percentage points)

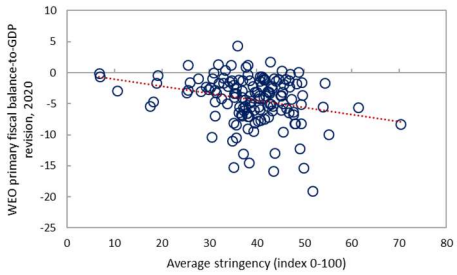
1. GDP Growth Revision versus Average Stringency



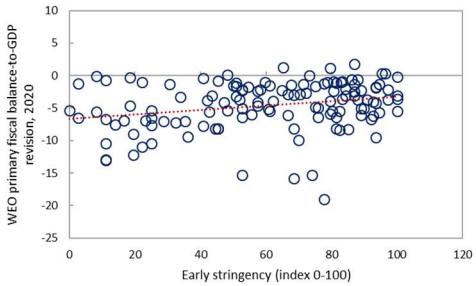
2. GDP Growth Revision versus Early Stringency



3. Primary Balance Revision versus Average Stringency



4. Primary Balance Revision versus Early Stringency



Source: Fotiou and Lagerborg (forthcoming–a).
Note: WEO = IMF, World Economic Outlook database.

Online Annex Figure 1.2.4 shows that the governments that successfully contained the virus, but without past SARS experience, had a larger downward revision of GDP growth and primary balances (*Cyprus, Georgia, Greece, Malta, New Zealand*) than governments in the Asian region with past SARS experience (*Hong Kong SAR, Korea, Nepal, Singapore, Taiwan Province of China, Vietnam*).[9] The former were governments that acted early but implemented stricter stay-at-home orders and on average announced larger fiscal stimulus packages. Governments with less experience in containing epidemics, which usually were less prepared to implement effective testing policies and contact tracing, in many cases resorted to stronger mobility restrictions over a longer period as a way to save lives. These measures have come with

[8] This is in line with evidence on Sweden's containment strategy from Bricco, Misch, and Solovyeva (forthcoming), who find that a less-stringent strategy can soften economic effects temporarily but have unclear medium-term effects.

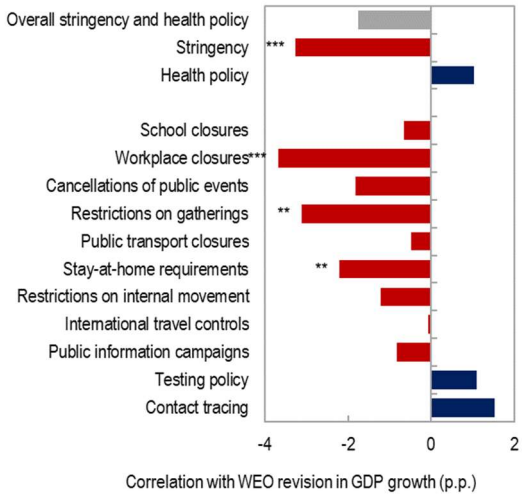
[9] Large revisions of the non-SARS sample could also correspond to other drivers, such as a sudden stop in tourism, which is a key economic sector for Cyprus and Greece, for example.

substantial economic and fiscal costs. Debt-to-GDP ratios for these countries were drastically revised in July 2020 compared with October 2019.[10] Large revisions correspond to the high costs of virus containment measures and fiscal stimulus for economic revival after strict lockdown measures are eased.

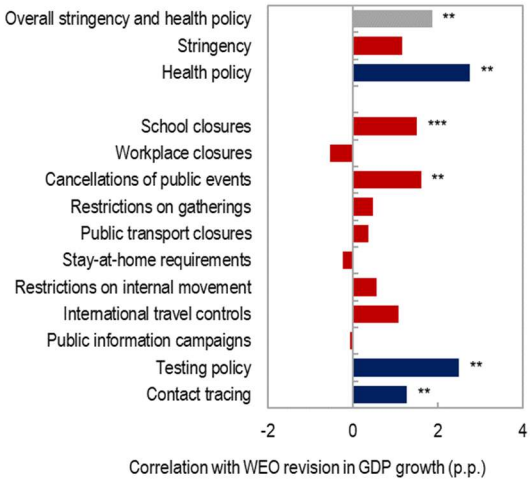
Online Annex Figure 1.2.2. Stringency of Individual Containment Measures and World Economic Outlook Database Revisions to GDP Growth, 2020

(Percentage points)

1. Correlation of Average Containment Measures with GDP Growth Revisions



2. Correlation of Early Containment Measures with GDP Growth Revisions



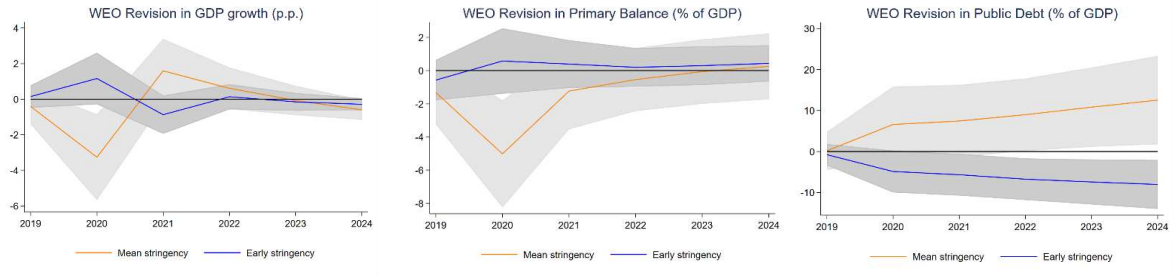
Sources: Fotiou and Lagerborg (forthcoming–a); OxCGRT Database; IMF staff calculations; and IMF World Economic Outlook (WEO) database.
Note: The correlations refer to estimated coefficients when regressing World Economic Outlook database projection revisions on individual containment measures normalized on a [0,1] scale, one at a time, controlling for GDP per capita (purchasing power parity in US dollars). Health policy corresponds to the principal component of tracing, testing, and public information campaigns. These panels are produced from a standard ordinary least squares analysis in which the regression includes a constant variable. The constant is negative and significant, implying on average a downward revision of GDP growth for all countries. In the panels, a negative correlation means that the expected average downward revision is larger compared with the October 2019 World Economic Outlook database forecasts. If the correlation is instead positive, it means that the downward revision is smaller. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

[10] Results are robust to considering projection revisions between January and July 2020.

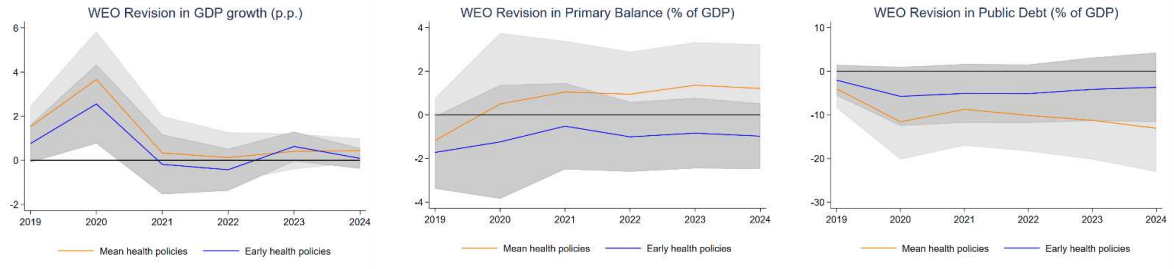
Online Annex Figure 1.2.3. Stringency of Containment Measures and World Economic Outlook Database Revisions to Medium–Term Forecasts, 2020–24

(Percentage points)

1. Effect of Average and Early Mobility Restrictions on GDP Growth, Primary Balance, and Public Debt Forecasts



2. Effect of Average and Early Public Health Policies on GDP Growth, Primary Balance, and Public Debt Forecasts



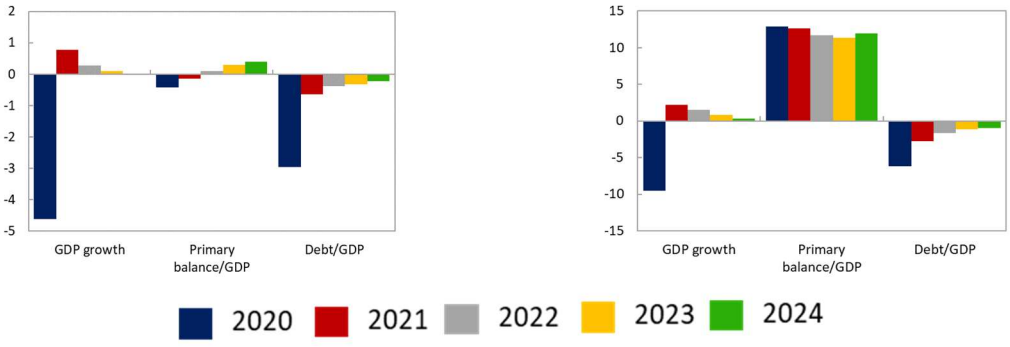
Source: Fotiou and Lagerborg (forthcoming–a).
Note: p.p. = percentage point; WEO = IMF, World Economic Outlook database.

Online Annex Figure 1.2.4. Average World Economic Outlook Database Forecast Revisions for Different Country Groups, 2020–24

(Percentage points)

1. SARS-Experienced Countries: Average Forecast Revision, July 2020 – October 2019

2. Other Successful Countries: Average Forecast Revision, July 2020 – October 2019



Source: Fotiou and Lagerborg (forthcoming–a).

Online Annex Table 1.2.1. Effect of Containment Measures on Death Rates: Average versus Early Stringency

	(1) Deaths/Population	(2) Deaths/Population	(3) Deaths/Population	(4) Deaths/Population
Stringency (average)		-0.991		
		(1.11)		
Stringency and health policies (average)	-0.993			
	(1.069)			
Stringency (at 100 cases)				-1.205***
				(0.416)
Stringency and health policies (at 100 cases)			-1.268**	
			(0.49)	
Median age	7.612***	7.582***	6.603***	6.572***
	(1.838)	(1.843)	(1.925)	(1.897)
Hospital beds / 1,000 population	-13.574**	-13.798**	-12.221**	-12.425**
	(5.468)	(5.452)	(5.599)	(5.539)
GDP per capita (USD PPP)	0.001	0.001	0	0
	(0.001)	(0.001)	(0.001)	(0.001)
Constant	-127.796**	-125.640**	-54.552	-52.056
	(52.382)	(53.318)	(62.647)	(59.459)
Observations	135	136	123	124
R-squared	0.234	0.231	0.267	0.274

Sources: Fotiou and Lagerborg (forthcoming–a); and IMF staff estimates.
Note: Standard errors in parentheses. USD PPP = purchasing power parity in US dollars. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Online Annex Table 1.2.2. Effect of Individual Containment Measures (One at a Time) on Death Rates: Average versus Early Stringency

	Average Response		Early Response		
	Deaths/Pop. (1)	Deaths/Pop. (2)	Deaths/Pop. (3)	Deaths/Pop. (4)	Stringency Correlation
Containment measures:					
School closures	-29.096	-20.519	-27.892***	-17.43	0.67
Workplace closures	26.051	76.028**	-15.282*	8.788	0.71
Cancellations of public events	-18.069	-19.96	-54.756***	-46.806**	0.69
Restrictions on gatherings	12.612	35.289	-7.34	12.169	0.66
Public transport closures	-39.421	-38.819	-17.088	13.701	0.63
Stay-at-home requirements	5.176	38.623	-8.877	26.633*	0.72
Restrictions on internal movement	6.975	43.553	-8.579	37.718**	0.62
International travel controls	-46.014***	-56.767***	-31.482***	-27.360**	0.40
Public information campaigns	-14.863	-0.888	-39.475*	-18.043	0.55
Testing policy	-26.57	-23.436	-10.699	-1.952	0.38
Contact tracing	-26.493	-23.813	12.484	15.956	0.28
Controls:					
Overall stringency	No	Yes	No	Yes	
Median age	Yes	Yes	Yes	Yes	
Hospital beds / 1,000 population	Yes	Yes	Yes	Yes	
GDP per capita (USD PPP)	Yes	Yes	Yes	Yes	
Constant	Yes	Yes	Yes	Yes	

Sources: Fotiou and Lagerborg (forthcoming–a); and IMF staff estimates.
Note: Standard errors in parentheses. USD PPP = purchasing power parity in US dollars. *** p < 0.01, ** p < 0.05, * p < 0.10.

Online Annex Table 1.2.3. Effect of COVID–19 Containment Measures on World Economic Outlook Database Revisions to GDP Growth, 2020

	(1) GDP Growth	(2) GDP Growth	(3) GDP Growth	(4) GDP Growth	(5) GDP Growth	(6) GDP Growth	(7) GDP Growth	(8) GDP Growth
Stringency (average)	-0.067**	-0.104***	-0.089***	-0.088***				
	(0.03)	(0.026)	(0.025)	(0.026)				
Health policies (average)	0.059	0.578***	0.321*	0.350*				
	(0.188)	(0.174)	(0.185)	(0.186)				
Stringency (at 100 cases)					0.026***	-0.009	-0.007	-0.008
					(0.008)	(0.009)	(0.008)	(0.008)
Early health policies					0.186	0.501***	0.343**	0.368**
					(0.186)	(0.165)	(0.163)	(0.16)
GDP per capita (USD PPP)		-0.007	-0.005	-0.007		-0.007	-0.008	-0.01
		(0.012)	(0.012)	(0.012)		(0.012)	(0.011)	(0.011)
Advanced economy = 1		-3.581***	-3.709***	-2.842***		-3.575***	-3.770***	-2.797***
		(0.607)	(0.59)	(0.696)		(0.596)	(0.571)	(0.648)
SARS experience = 1			3.195**	3.643***			3.258***	3.228***
			(1.237)	(1.363)			(1.099)	(1.215)
SARS-mimicking Asia			3.993**	3.757**			3.852**	3.650**
			(1.635)	(1.624)			(1.484)	(1.449)
COVID-19 fiscal measures				-0.084**				-0.101***
				(0.037)				(0.034)
Constant	-4.232***	-1.884*	-2.579**	-2.362**	-8.335***	-5.160***	-5.370***	-4.963***
	(1.16)	(1.032)	(1.023)	(1.043)	(0.544)	(0.701)	(0.671)	(0.668)
Observations	153	152	152	149	134	133	133	131
R-squared	0.04	0.331	0.379	0.405	0.091	0.363	0.43	0.468

Sources: Fotiou and Lagerborg (forthcoming–a); and IMF staff estimates.
Note: Standard errors in parentheses. Negative coefficients imply a stronger downward revision compared with the October 2019 World Economic Outlook database projections. USD PPP = purchasing power parity in US dollars. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Online Annex Table 1.2.4. Effect of COVID–19 Containment Measures on World Economic Outlook Database Revisions to Primary–Balance–to–GDP Ratio, 2020

	(1) Primary Balance	(2) Primary Balance	(3) Primary Balance	(4) Primary Balance	(5) Primary Balance	(6) Primary Balance	(7) Primary Balance	(8) Primary Balance
Stringency (average)	-0.07	-0.093**	-0.088**	-0.082**				
	(0.043)	(0.039)	(0.039)	(0.038)				
Health policies (average)	-0.456	0.119	-0.036	0.021				
	(0.28)	(0.266)	(0.28)	(0.275)				
Stringency (at 100 cases)					0.042***	0.004	0.004	0.004
					(0.012)	(0.014)	(0.014)	(0.013)
Early health policies					-0.457*	-0.123	-0.201	-0.187
					(0.273)	(0.259)	(0.265)	(0.263)
GDP per capita (USD PPP)		-0.065***	-0.060***	-0.063***		-0.064***	-0.062***	-0.063***
		(0.018)	(0.018)	(0.018)		(0.019)	(0.019)	(0.019)
Advanced economy = 1		-1.649*	-1.784**	-0.869		-1.399	-1.558*	-0.657
		(0.881)	(0.881)	(1.023)		(0.925)	(0.927)	(1.067)
SARS experience = 1			1.831	1.623			1.165	1.1
			(2.423)	(2.372)			(2.4)	(2.383)
SARS-mimicking Asia			4.094*	3.799			3.85	3.663
			(2.429)	(2.38)			(2.398)	(2.384)
COVID-19 fiscal measures				-0.085				-0.093*
				(0.054)				(0.056)
Constant	-1.575	0.949	0.629	0.653	-7.090***	-3.033***	-3.130***	-2.766**
	(1.698)	(1.567)	(1.571)	(1.537)	(0.798)	(1.089)	(1.091)	(1.105)
Observations	147	147	147	146	129	129	129	129
R-squared	0.078	0.279	0.295	0.31	0.091	0.245	0.262	0.279

Sources: Fotiou and Lagerborg (forthcoming–a); and IMF staff estimates.
Note: Standard errors in parentheses. Negative coefficients imply a stronger downward revision compared with the October 2019 World Economic Outlook database projections. USD PPP = purchasing power parity in US dollars. *** p < 0.01, ** p < 0.05, * p < 0.10.

Online Annex 1.3. From Lockdown to Recovery: Spending Measures to Support Livelihoods during the COVID–19 Crisis[1]

Many countries have swiftly introduced a diverse range of measures to support incomes for households and protect jobs as unemployment rises and incomes fall. As economies start to reopen, the design of spending measures needs to be geared more toward facilitating recovery and building resilience against future shocks, including the possibility of renewed infection waves and lockdown restrictions.

General Considerations

- Countries should have clear objectives to inform policy responses. The primary objective during the lockdown phase is to provide lifelines to maintain employment and business links.2 Priorities should focus on a speedy response, while economic incentives such as work disincentives are less of a concern. However, as economies reopen, the design of the measures will need to be refined to ensure appropriate incentives.
- Countries should prioritize measures that are consistent with their medium-term development needs. In countries where existing social protection systems are underdeveloped, the crisis provides an opportunity to strengthen these systems (see Online Annex 1.1).
- Targeting policy responses to specific households and firms involves tradeoffs that need to be carefully managed. Targeted measures can provide better protection for a given spending envelope or help contain fiscal costs. They can contribute to supporting aggregate demand, since the most vulnerable are often those who have a higher propensity to consume. However, targeted measures can inadvertently exclude some who are in need of support, and they require more time to design and implement. Targeting may distort work incentives by increasing the implicit marginal tax rate when benefits are withdrawn as earnings rise.
- Policy measures should be closely aligned with existing infrastructure to accelerate deployment. Governments in advanced economies can take advantage of well-developed tax and benefits systems and governments in emerging market developing economies can take advantage of existing social program structures. Mobile or digital payment systems may provide a broad and timely mechanism for delivering the support in some countries.

Fiscal Support during the Lockdown

The unprecedented fiscal policy responses to the pandemic have mostly been on the expenditure side. Country experiences have provided various lessons (Shang, Evans, and An 2020):

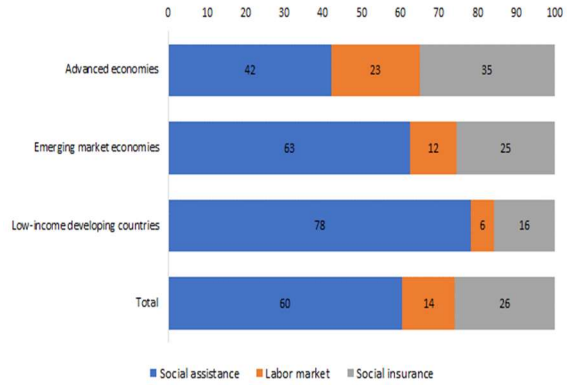
- Countries have relied on a broad range of measures. The designs vary across countries, reflecting the severity of the pandemic, the availability of fiscal space, and the level of administrative capacity. Variations include the following: (1) the overall spending responses are much larger in advanced economies; (2) liquidity support accounts for a relatively larger share in advanced economies; and (3) advanced economies and emerging and developing Europe rely more on social insurance and labor market measures, while sub-Saharan Africa relies more on social assistance measures (Online Annex Figure 1.3.1).

---

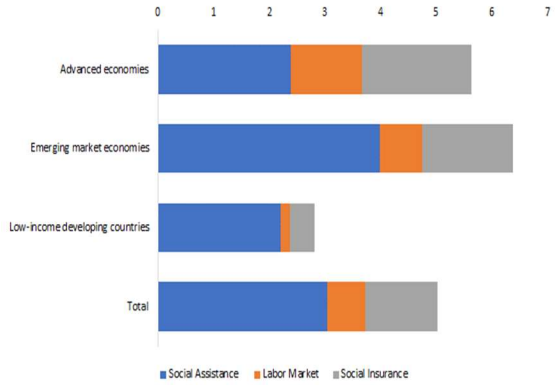
[1] Prepared by Baoping Shang, Brooks Evan, Delphine Prady, and Zhiyong An.

[2] As defined in Chapter 1, the three phases of the pandemic are broadly classified into (1) the Great Lockdown; (2) partial and gradual reopening; and (3) pandemic under full control with effective vaccines and treatment.

Annex Figure 1.3.1. Spending Measures to Support Workers and Households
(Number of measures as a percent share of total)



Online Annex Figure 1.3.2. Average Number of Measures to Support Workers and Households
(Number of measures)



Sources: Gentilini and others (2020b); and IMF staff estimates.

- Short-time work programs or job retention schemes are often used to protect jobs during recessions.[3] They are common in Europe and are being used in other emerging market economies during the COVID-19 crisis (*Brazil, Egypt, Uruguay*). These programs covered from one-fourth to one-third of private sector employees in several European countries as of mid-2020. Evidence points to large positive effects of such programs on reducing layoffs of permanent workers, and the programs can be cost-effective. For example, one-fifth of jobs are saved for every worker on short-term work, while the cost per saved job is only 7 percent of the average labor cost, which outweighs the fiscal cost when workers lose their jobs (25 percent of the average labor cost).[4]

- Providing support to people in the informal sector has been a challenge, as these workers are not covered by unemployment benefits and they are difficult to reach. Some governments have taken innovative approaches and channeled support to informal sector firms by working with existing institutions that serve these groups, such as micro-credit institutions and informal sector organizations. However, in many emerging market developing economies, given the large informal sector and limited fiscal space, these workers can be more effectively covered by social assistance programs.

- Capacity constraints have made it difficult to rapidly expand existing social assistance programs in some countries. In such cases, countries often resort to alternative (less effective) ways of targeting, including cash transfers targeted at specific regions or population groups (that is, the elderly, families with children, or informal sector workers, as in *India* and *Bolivia*), or subsidies for key goods and services such as food, health, transportation, and utilities (*Jordan*). Some countries identify beneficiaries by using databases maintained by various government entities and private organizations or by distributing benefits through local governments and community organizations (*Rwanda, Nepal, Egypt, Peru*). Universal (or near-universal) transfer programs have only been used as one-offs because of the difficulties of ensuring adequate support for the most vulnerable within a reasonable fiscal cost (*Japan, Singapore, Korea, Malaysia, Bolivia*) (Prady 2020).

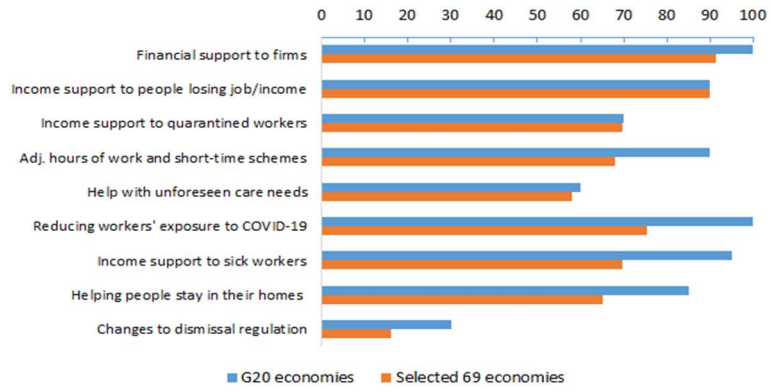
[3] These initiatives compensate for the reduced working hours while maintaining employment links: employees receive a wage subsidy from the government proportional to their lost working hours. This allows firms hoarding labor to keep specific firm human capital and avoid costly separation and then rehiring and training as recovery takes place. For workers, it avoids search and layoffs.

[4] See Cahuc, Kramarz, and Nevouss (2018), Guipponi and Landais (2018), and Kopp and Siegenthaler (2019).

- Rapid expansion of existing and new programs may have resulted in duplication of benefits and high administrative costs. Many countries have utilized multiple cash transfer and in-kind benefit programs for income support (Online Annex Figure 1.3.2) and support for workers (Online Annex Figure 1.3.3). For example, in *Indonesia*, in addition to expanding the existing social assistance program, the food assistance program, and the pre-work card program, central and local governments have also introduced two new cash transfer programs, electricity fee reductions, public works, and a number of programs targeted at the local levels. Ensuring that eligibility rules are clearly communicated and aligned with programs that were functioning well before the COVID-19 crisis would reduce administrative costs and help enhance effectiveness.[5]

Online Annex Figure 1.3.3. Country Fiscal Measures in Selected Areas

(Percent of total)



Sources: OECD (2020); and IMF, Fiscal Monitor database of Fiscal Policy Measures in Response to COVID–19.

Note: Results are based on a sample of 69 countries, including all Organization for Economic Co-operation and Development economies, G20 economies, and selected economies in the Fiscal Monitor database.

Improving Economic Incentives as Economies Reopen

As activity resumes, the focus switches to redesigning measures to better support the return to work. Measures such as waiving the need for job search, training, and other requirements for unemployment benefits (*Austria, Canada, United States*), increasing benefit levels (*Australia, Belgium, United States*), and extending the duration of benefit eligibility (*Greece, Japan, United States*) can be changed to promote greater job search efforts. For example, at the outbreak of the pandemic in the *United States*, many unemployed were eligible for benefits larger than their lost earnings (Xie 2020),[6] while in *Canada*, the application for unemployment benefits were substantially simplified with a flat benefit of CAD$2,000 per month, resulting in high replacement rates for low-wage earners.

Support measures need to gradually move away from protecting current jobs to protecting workers. For example, keeping short-time work schemes in place for too long could prevent the reallocation of labor from low-productive firms to growing ones as the recovery gains steam, and eventually lead to inefficiency and output losses. Among various options countries can:

- *Transition gradually away from job retention schemes.* This should be coupled with in-work benefits or hiring subsidies to help get people back to work. For, example, the *United Kingdom* unveiled measures

[5] As the COVID-19 crisis unfolded, the government in Brazil first leveraged its conditional cash transfer, Bolsa Familia, to include 1.2 million new families. It also introduced a temporary program called Auxilio Emergencial targeted mainly at informal and own-account workers that provides a three-month transfer more generous than the Bolsa Familia benefit (later extended by two months). Ninety-five percent of Bolsa Familia beneficiaries opted to temporarily enroll in the more generous Auxilio Emergencial.

[6] The US Congressional Budget Office estimates that roughly five of every six recipients would receive benefits that exceeded the weekly amounts they could expect to earn from work during those six months.

to pay employers a bonus per each reinstated furloughed worker and similar incentives to train and hire apprentices.

- Gradually reduce the generosity of unemployment benefits to preserve work incentives if their replacement rates are too high relative to precrisis work incomes (Fang, Nie, and Xie 2020). In the event that the precrisis social protection benefits were inadequate, making some provisions of temporary expansion more permanent would help strengthen the social protection systems and build resilience to future shocks. For example, in Canada, when the government restores capacity to process unemployment benefits, the flat lump-sum unemployment benefits could be replaced by formula-based benefits.

- *Strengthen activation policies for unemployment benefits.* For example, training and job search requirements that were relaxed during the lockdown phase should be reinstated, and the expansion of benefit periods rolled back.

- *Target active labor market policies (for example, training, employment services and public works) to specific groups.* There may be opportunities for public works to be directed towards "green jobs" such as reforestation, soil and water conservation, and flood protection.

Policy Responses to Potential Second Waves

The course of the pandemic is still highly uncertain. Governments will need to prepare for potential renewed waves of infections. Some considerations include the following:

- Policy responses should be targeted at the specific localities where the resurgence occurs helping limit the adverse impact on economic activity and contain fiscal costs.

- Refining measures to restore economic incentives may need to be postponed. Short-time work schemes will again be useful, especially for workers in the sectors most affected. The duration of unemployment benefits can be extended.

- This, however, does not imply that countries should restore the same lifelines used during the initial phase. The design of the fiscal support should draw on lessons learned and adapt to changing circumstances. For example, limited budget resources imply that targeted measures are preferred, and improving the institutional capacity to reach the vulnerable and deliver benefits is even more important. The focus will be on achieving wide coverage, not just increasing benefit levels. A stronger social safety net will help build resilience against future shocks.

Online Annex 1.4. Determining the Size of Fiscal Stimulus for Sustained Recovery

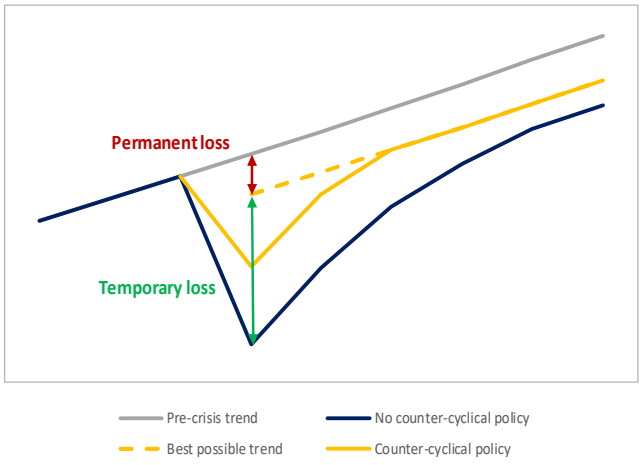
The COVID-19 crisis has generated both a deep downturn and increased debt, intensifying the tension between supporting growth and debt sustainability. A protracted recession has substantial costs. It can damage human capital (as the unemployed lose their skills) and physical capital (as firms scale down their investment plans). This may warrant a debt-financed fiscal stimulus, but elevated debt would increase risks of future fiscal crisis (Moreno-Badia and others 2020), which are associated with output losses (Medas and others 2018; Trebesch and Zabel 2017). This annex thus explores the appropriate balance between stabilization and debt sustainability in determining the fiscal stance. The first section briefly describes the model used, and the next section presents an illustrative example of the optimal fiscal stance for a country in the post-COVID recovery.

A Buffer-Stock Model for the Government

The analysis uses the "Buffer-Stock" model to analyze the tradeoffs governments face when pursuing economic stabilization and ensuring debt sustainability. Specifically, governments maximize utility under a debt constraint (Fournier 2019). For this purpose, governments choose the fiscal stance, defined as a change in the structural primary balance, through discretionary policies. Economic output is affected by exogenous shocks, which can persist for some time. The government can loosen the fiscal stance to boost output at the cost of eroding its fiscal buffers, or tighten it to build buffers at a cost of lower output. Adverse recessionary shocks reduce potential output, reflecting human and physical capital losses (hysteresis effect). The model thus features a permanent negative effect of large negative output gaps on the level of potential output. Countercyclical fiscal policy is constrained by a one-year decision-making delay, as annual budgets are voted on before the year starts, as well as by adverse effects of higher debt such as higher borrowing costs, and greater risks of losing market access. Low debt levels enable the government to borrow without substantially raising borrowing costs or risk of debt distress.

This Buffer-Stock model shows that the choice of fiscal stance would depend on both debt levels and short-term economic fluctuations. The utility maximization framework provides a normative view on the fiscal stance. It recommends a higher fiscal surplus at higher debt levels to preserve sustainability, and a countercyclical fiscal stance to smooth fluctuations. Rising interest rates add to the motive to reduce debt. At low debt levels, hysteresis reinforces the motive to counter negative shocks.

Online Annex Figure 1.4.1. Output Losses during a Crisis: Temporary and Permanent Effects



Sources: Fournier (2019); and IMF staff estimates.

- Importantly, fiscal stimulus should focus on stabilizing the cyclical downturns (shown in green in Online Annex Figure 1.4.1) to mitigate the downturn and the subsequent potential permanent costs from hysteresis (the yellow line above the blue line). However, part of the long-term costs could be induced by a supply shock that cannot be offset (the difference between the gray line and the yellow line). As such, fiscal policies will have to adjust to permanent output losses. In practice, governments may not be able to fully

differentiate the cyclical component in real time—this is especially true in cases of large shocks such as the current pandemic. Policies will need to adjust the size of stimulus to the changing circumstances and may rely more on automatic stabilizers. Many governments have implemented rule-based measures that are directly linked to economic outcomes, such as larger unemployment insurance or support to firms triggered by a significant drop in turnover.

- Highly indebted governments should react less to shocks. The debt buffer (difference between the current debt level and levels at which sustainability is at risk) has an insurance value—it is the "reserve" of debt that the government can issue to smooth shocks. When the buffer is small, the probability of market stress is high. This implies that when debt is high, the optimal countercyclical fiscal stimulus to offset a negative shock is smaller than when debt is low. Beyond these stylized cases, the model can be calibrated with country-specific parameters to tailor fiscal stance recommendations (Fournier and Lieberknecht, 2020; IMF 2020b).

Fiscal Stance Advice for the Post-COVID Recovery

In countries with fiscal space, high unemployment in the wake of the COVID-19 crisis warrants large and sustained fiscal stimulus to avoid long-term scars from the crisis. In many countries, the benefits of a stimulus outweigh the cost of increasing public debt. A baseline analysis is applied to a hypothetical advanced economy, using unweighted average data to calibrate parameters and macroeconomic conditions.[1] Magnitudes are thus illustrative, showing the reasoning and providing directions. The negative output gap is assumed to be about 7 percent of potential GDP in 2020, and the public-debt-to-GDP ratio is close to 80 percent. The interest rate is below the growth rate for a protracted period of time and goes up to marginally above the growth rate in the long run. In the absence of stimulus, the phasing out of emergency lifelines would imply a fiscal tightening of almost 3 percent of GDP.

Model-based analysis shows that governments with fiscal space should take advantage of low interest rates to borrow to finance stimulating the economy. An additional 4 percent of GDP support would not only offset phasing out of emergency measures but also provide a timely boost to sustain the recovery. This fiscal expansion would not necessarily increase the debt-to-GDP ratio in 2021 because of higher projected growth. Given the depth of the health crisis, the fiscal expansion can continue but gradually wind down so that cumulative stimulus over 2021–24 is about 9 percent of GDP. This sustained effort to avoid a protracted recession or a double dip from renewed lockdowns would shift the debt level up, as the boost to growth would eventually fade. The results are highly dependent on the depth of the negative output gap. For example, a 1 percentage point higher negative output gap would suggest that a cumulative stimulus should be larger—on the order of 11 percent instead of 9 percent of GDP.

The sustained stimulus is optimal to avoid long-term costs of hysteresis. In an alternative scenario in which this channel is shut down, the recommended cumulative discretionary fiscal stimulus would be shorter (three years instead of the five years in the baseline) and smaller (less than 3 percent of GDP), resulting in a lower medium-term debt-to-GDP ratio (Online Annex Figure 1.4.2.).

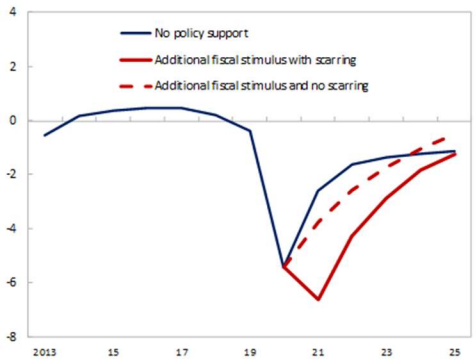
However, countries with high debt and interest rates should take a more cautious fiscal stance to preserve debt sustainability given the risks of debt distress would be higher. In an alternative scenario with debt at about 140 percent instead of 80 percent of GDP and all else being equal, the model suggests that the fiscal stimulus for 2021 should only be 2 percent of GDP and that the country should turn to a fiscal consolidation starting in 2023 (Online Annex Figure 1.4.3). In this high-debt scenario, the priorities would be to reduce the debt-to-GDP ratio by 4.5 percent of GDP by 2025 to prevent a large surge of

[1] The calibration follows Fournier and Lieberknecht (2020).

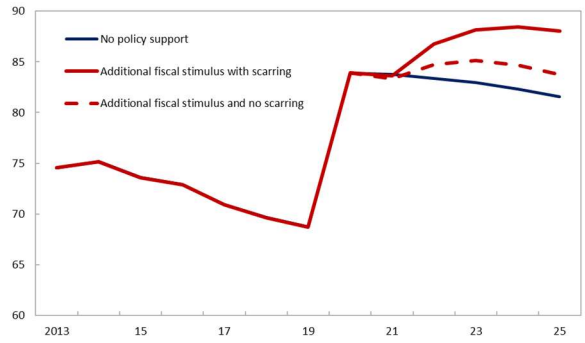
interest payments and reduce the risks of a future fiscal crisis. At this high debt level, with an interest rate level 1 percent above the baseline, a progressive consolidation plan should start sooner, in 2022.

Online Annex Figure 1.4.2. Simulated Fiscal Adjustments across Countries with Different Levels of Debt and Interest Rates

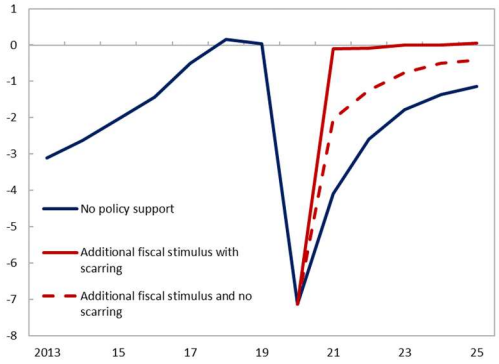
1. Normative Structural Primary Balance
(Percent of potential GDP)



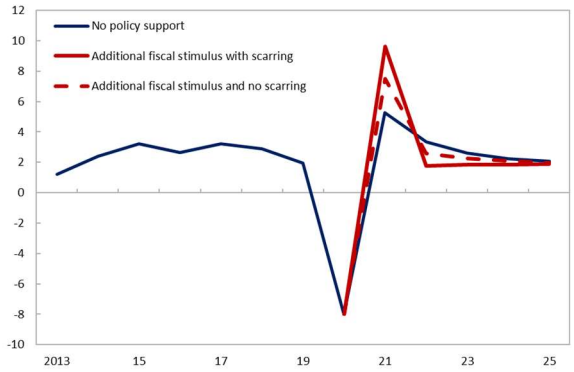
2. General Government Gross Debt
(Percent of GDP)



3. Output Gap
(Percent of GDP)



4. Output Growth
(Percent change)

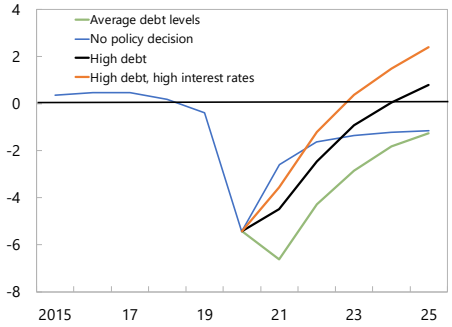


Source: IMF staff estimates.
Note: Panel 1 shows a normative fiscal adjustment path with discretionary stimulus in the first few years for an advanced economy with an average debt level (baseline) at 80 percent of GDP.

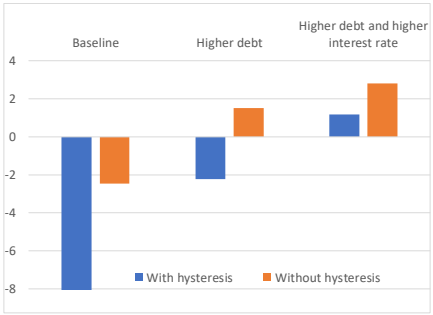
The presence of hysteresis does not always warrant an expansionary fiscal stance, particularly in cases of high, and expensive, debt (Online Annex Figure 1.4.3, panel 2). If the costs from protracted recessions are large—implying lower potential economic growth—it would make it harder to manage elevated debt levels and increase the risk of a fiscal crisis. As a result, the more debt is high and costly, the less governments should stimulate the economy even in the presence of hysteresis. In 2021, hysteresis warrants about 1 additional GDP percentage point of stimulus—compared to a scenario without hysteresis—in a country with debt at about 140 percent of GDP and an interest rate 1 percent above the baseline, against 3 additional GDP percentage points of stimulus to counter hysteresis effects in the baseline with debt at about 80 percent of GDP. For countries already facing prohibitive interest rates and high foreign exchange exposure, the scope of further fiscal stimulus would be more limited. The focus should be on restoring macroeconomic stability (Fournier 2019).

Online Annex Figure 1.4.3. Discretionary Fiscal Support, Hysteresis, and Debt

1. Illustrative Pace of Fiscal Adjustment in the Case of Long–Term Scarring from the Pandemic
(Structural primary balance in percent of potential GDP)



2. Cumulative Change in Structural Primary Balance relative to a No–Policy Change Scenario over 2021–23 (Percent of potential GDP)

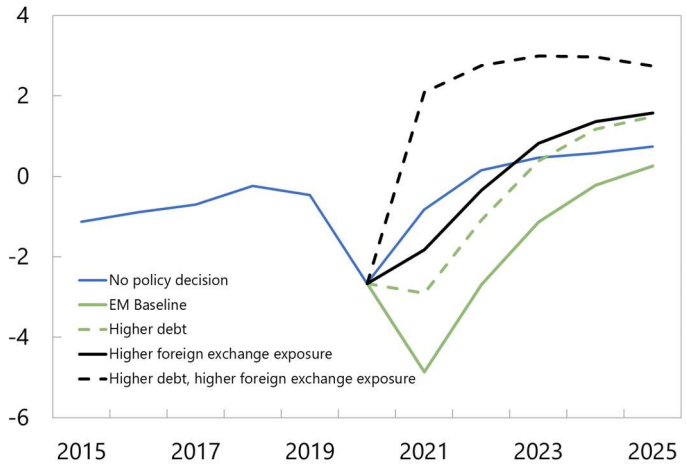


Sources: Fournier (2019); and IMF staff estimates.
Note: Average debt levels are assumed to be 80 percent of GDP (simple average across advanced economies). In the simulations, a high debt level is assumed to be about 140 percent of GDP (75th percentile of the weighted distribution among advanced economies), and high interest rates refers to an addition of 1 percent more than in the baseline.

Countries with a large share of foreign-currency-denominated debt will also be constrained because of possible effects of a currency depreciation. The value of public debt as a share of GDP could change significantly during the crisis. This concern is common for emerging markets, where fiscal pressures can be accompanied by pressures in the balance of payments and large currency depreciations. To reflect this risk, alternative simulations with a calibration reflecting emerging markets assume that the public-debt-to-GDP ratio is affected by a depreciation when the government loses market access, on top of the effect of economic activity on the debt-to-GDP ratio. When the change in value because of currency effects is moderate and debt is close to the emerging market average, then the government should stimulate the economy (Online Figure 1.4.4). If debt is higher or the risk of depreciation is higher, government would have limited scope for additional stimulus. And if high debt is combined with depreciation risk, governments would need to tighten fiscal policy early to reduce risks of a future crisis.

Online Annex Figure 1.4.4. Discretionary Fiscal Support and Foreign–Currency–Denominated Debt

(Illustrative pace of fiscal adjustment, structural primary balance in percent of potential GDP)



Source: IMF staff calculations based on the Buffer–Stock model (Fournier 2019).
Note: The emerging market baseline reflects an average emerging market country with initial debt at 64 percent of GDP. Higher debt refers to public debt at the 75th percentile of emerging markets, 16 percent of GDP above the baseline. Higher foreign exchange exposure is associated with an increase of public debt by 10 percent if a fiscal crisis occurs, against 5 percent in the baseline. EM = emerging market.

Online Annex 1.5. Policy Options to Support the Economic Recovery

This annex discusses the revenue or expenditure measures, or mix of measures, that countries can adopt to help support the recovery from the COVID-19 pandemic in a cost-effective manner. The focus is on measures better directed to support the recovery once the pandemic is under control (phase 3) but some could potentially be applied earlier.[1] In phase 3, fiscal policies should rebalance to facilitate recovery if fiscal space permits. The main objectives of fiscal policy are to facilitate recovery from a deep recession, restore debt sustainability, and protect the most vulnerable groups. With reduced or limited fiscal space, it is important to choose among measures that are cost-effective, that is, ones that have large output multipliers. In addition, policies will need to help protect the most vulnerable groups, since the poor and low-skilled workers have been hit the hardest (Furceri and others 2020; Kikuchi, Kitao, and Mikoshiba 2020). In developing countries with little fiscal space for stimulus, fiscal policy should strive to provide essential public services and support the vulnerable. Both of these measures are crucial to maintaining economic stability (Loayza and Pennings 2020).

Cost-effectiveness of Various Spending and Revenue Measures

To assess the cost-effectiveness of various policy tools, this annex compares multipliers of different spending and tax measures.[2] A model-based simulation is conducted using a revised model based on Traum and Yang (2015) to quantify the multipliers of various spending and revenue measures that are commonly used to facilitate economic recovery.[3] The model features two types of households: those that are liquidity-constrained and consume all the disposable income each period, representing the poorer income group; and the higher-income group, which is comprised of asset holders who have both labor and capital income.[4] As the health and economic crisis has resulted in a drop in the living standard of the poor with little savings and wealth (Bangham and Leslie 2020), the analysis examines the effects of measures (spending and revenue) that target liquidity-constrained households. These are compared to untargeted transfers and tax cuts, which also benefit higher-income households that have accumulated savings. The simulations are mainly focused on those instruments that can be deployed quickly.

The baseline scenario (without additional fiscal measures) largely captures qualitatively the current economic and macroeconomic policy conditions of most economies: a severe recession, and monetary policy constrained at the effective lower bound.[5] For illustrative purposes, the model is calibrated to a hypothetical economy, and the public-debt-to-GDP ratio before the recession is calibrated to be 83 percent of GDP, which is the weighted average of the world economy in 2019. The policy scenarios inject a stimulus measure, one at a time, to the baseline scenario. For illustrative purposes, the size of a

[1] As defined in Chapter 1, the three phases of the pandemic are (1) the outbreak with lockdowns; (2) partial reopening; and (3) a high degree of control of the virus through medical advances.

[2] Multipliers calculated in this simulation are the discounted, cumulative change of output or consumption over a horizon per US dollar change in government spending or tax revenue over the same horizon.

[3] Key revisions relative to the model in Traum and Yang (2015) include (1) modeling fiscal measures to target liquidity-constrained households, (2) allowing for the binding of the effective lower bound in monetary policy, and (3) delaying fiscal adjustment, as governments are less likely to address high-debt issues in the early stage of recovery.

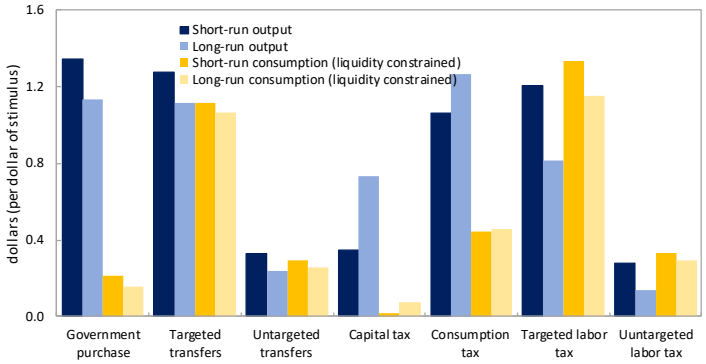
[4] The model calibration closely follows those used in the Chapter 2 of April 2020 Fiscal Monitor for the global economy. Some calibration deviations include a stickier nominal wage, as nominal wage rigidity is likely to prevent a large adjustment in the nominal wage in the recovery stage from the pandemic-led recession. Also, reflecting quick action on interest rate policy in response to the pandemic, the output coefficient in the policy interest rate is revised upward to drive the economy immediately to the effective lower bound during the first quarter when the macroeconomic shock hits.

[5] The model does not feature a health shock. Instead, it relies on a negative demand-side shock that has a negative effect on consumption, private investment, and labor. While the pandemic also disrupts the supply side of the economy during the lockdown phase, the weak demand is likely to dominate the macroeconomic dynamics in the gradual-reopening and recovery phases. The effective lower bound is modeled as the zero lower bound, as in many advanced economies. In emerging market economies and developing countries, the effective lower bound is typically above the zero policy rate.

stimulus is set to be about 1 percentage point of GDP for two years and then to gradually unwind as the economy recovers from a deep recession. To ensure that the public debt increase is limited over time, the simulations assume that the consumption tax rate adjusts slightly upward in two years after a stimulus is implemented, but that the adjustment is insufficient to lower the public-debt-to-GDP ratio.

The simulations show that all the measures can help raise output, but they differ greatly in the size of their multipliers (Online Annex Figure 1.5.1).[6] Government purchases and transfers to liquidity-constrained households stand out to be the most effective measures to boost output in the short run: the two-year cumulative output multipliers are about 1.4 and 1.3, respectively; that is, a cumulative $1 increase in government purchases and targeted transfers will lead to a $1.4 and $1.3 increase, respectively, in output cumulatively over two years.[7] As monetary policy is at the effective lower bound, an increase in government purchases does not have the typical crowding-out effect on private investment and hence the output multipliers can be significantly above 1.[8]

Online Annex Figure 1.5.1. Cumulative Multipliers of Various Fiscal Measures



Source: IMF staff estimates.
Note: Original tax multipliers are negative for expansionary effects. To facilitate comparison, the original tax multipliers are multiplied by –1 as plotted here; thus, a positive number indicates an increase in a variable as a result of the tax stimulus.

Between the two measures that have large multipliers, an increase in targeted transfers has additional benefits because it is effective in raising the income and consumption of liquidity-constrained households (yellow bars, Online Annex Figure 1.5.1). Another instrument suitable to support liquidity-constrained households is a targeted labor income tax cut. In addition to directly boosting the income of liquidity-constrained households, both measures increase labor demand because of higher demand for goods.[9]

In contrast, untargeted transfers and labor income tax cuts have much smaller multipliers of around 0.2 to 0.3, as a large part of additional income is saved, rather than spent, by the higher-income households. This result is consistent with the empirical literature, which generally finds that output multipliers for broad-based transfers are small (Gechert and Rannenberg 2018).[10] In practice, however, targeted

[6] The multipliers are calculated based on the response differences between the baseline scenario (a severe recession without additional fiscal stimulus) and a policy scenario (a recession with one of the fiscal stimulus measures).

[7] This result is consistent with Coenen and others (2012), who find that government purchases and targeted transfers to liquidity-constrained households are most effective in boosting output when monetary policy is expected to remain accommodative for a prolonged period. The average multipliers from several structural models used in other institutions (including the US Federal Reserve, the European Central Bank, and the Organization for Economic Co-operation and Development) in Coenen and others (2012) are also in line with the simulation results here.

[8] Note that the multipliers simulated in the analysis may not be directly applicable to country-specific stimulus measures because they may differ in size, design, and macroeconomic conditions from those assumed in the model and policy specifications.

[9] The labor income tax cut has an additional positive supply-side effect of enhancing work incentives. This effect on labor supply, however, reduces the magnitude of the real wage increase, generating an overall smaller increase in households' income and hence produces a slightly smaller output multiplier than the increase in targeted transfers.

[10] The relatively small output multiplier also holds for broad-based transfers provided in recessions. Shapiro and Slemrod (2003) find that only 22 percent of households report a spending increase from the 2001 US federal income tax rebate in response to the dot-com bubble crisis. Agarwal, Liu, and Souleles (2007) estimate that about 40 percent of this rebate was consumed. Kan, Peng, and Wang (2017) estimate that the 2009 shopping vouchers distributed in Taiwan Province of China in response to the global financial crisis had a marginal propensity to consume of 0.25.

measures unavoidably exclude some of those in need of support, especially when administrative capacity is low, as in many developing countries (IMF 2020a). Thus, their benefits in terms of cost-effectiveness need to be weighed against the possibility of insufficient coverage and delayed distribution of funds.

Among all the measures, a capital income tax cut is the least effective in supporting liquidity-constrained households and has relatively small output multipliers, particularly in the near term. Different from normal times, when cutting capital income tax rates provides strong incentives to invest, the trickle-down effect of a capital income tax cut is particularly weak in a deep recession, especially when it is expected to last a long time. This result is driven by suppressed demand. As demand gradually recovers, the output multipliers can increase over time. Under the consumption tax rate cut, the output multipliers are slightly above 1 in the short run and increase more in the longer run as demand recovers further.[11] Since a consumption tax cut also benefits the liquidity-constrained households, it is reasonably effective in boosting their consumption, helping to alleviate poverty.

The effectiveness of these measures will also depend on the timing, especially if countries decide to adopt them while the pandemic is not fully under control and social distancing restrictions are still in place (or may be tightened because of new infections). The simulations here assume that there are no supply constraints as a consequence of social distancing (including lockdowns). Some measures—such as increasing government purchases and targeted transfers to liquidity-constrained households—may also be appropriate during gradual reopening, although the multipliers are likely to be smaller for the following reasons:

- As many sectors remain closed during the gradual reopening phase, the effectiveness of broad-based measures could be significantly lower. For example, labor income tax cuts will fail to encourage labor supply in those sectors that are affected by social distancing restrictions or where demand remains depressed because of health concerns. Also, before effective vaccines are available and widely accessible, renewed infection waves can result in new restrictions and lockdowns, undermining the stimulus measures.

- Increases in government purchases, given the difficulty in only increasing demand in those sectors that do not have production constraints, can drive up production costs of those sectors with supply constraints. In this circumstance, a higher production cost reduces private demand of the same goods, thus offsetting the effectiveness of government purchases in boosting aggregate demand (Baqaee and Farhi 2020).

- Because of precautionary saving motives in a deep recession with high uncertainty about the recovery and concerns regarding employment, transfers to households in general may have a lower impact during the gradual reopening stage (Auerbach, Gorodnichenko, and Murphy 2020). However, transfers to those in need during the crisis serve an important objective—to save lives—and should be implemented if necessary.

- The power of supply-side stimulus such as a labor income tax cut is unlikely to work well because labor inputs in some sectors can be determined by governments' or firms' considerations based on public health concerns during the gradual reopening stage.

[11] The consumption tax cut has been adopted by several countries, including Germany and the United Kingdom, in response to COVID-19. The sizes of multipliers implied by the simulations here, however, may not be directly applicable to country-specific consumption tax cut measures, as the policy design and country conditions may not be captured by the simulations and model calibration.

Uncertain Fiscal Multipliers

In the current crisis, assessing fiscal multipliers is subject to an unusually high degree of uncertainty. On the one hand, fiscal multipliers are expected to be larger in the recovery from a recession (Auerbach and Gorodnichenko 2012, 2013; Canzoneri and others 2016) and also when monetary policy is accommodative, with advanced economies at the effective lower bound (Christiano, Eichenbaum, and Rebelo 2011; Erceg and Lindé 2014).[12] This is because a demand stimulus under accommodative monetary policy does not drive up the real interest rate as in normal times. On the other hand, high levels of public debt are likely to offset the expansionary effects, possibly because of expectations of fiscal consolidation or rising sovereign risk premia (Ilzetzki, Mendoza, and Végh 2013; Bi, She, and Yang 2016; Fotiou, Shen, and Yang 2020; Huidrom and others, forthcoming).

These factors are further intertwined with unfamiliar and unpredictable trajectories of virus transmission, which could magnify precautionary saving motives in anticipation of a worsening and prolonged health and economic crisis. Historically, strong precautionary saving motives following a pandemic tend to suppress the real interest rate (Jordà, Singh, and Taylor 2020). Although this provides some breathing room for governments with constrained fiscal space, precautionary savings dampen the expansionary effects of fiscal stimulus. During the lockdown phase, the saving rates in the *euro area* and the *United States* soared. Although part of the savings was "forced" because people could not consume as in normal times, some of it was likely a result of precautionary savings, which can persist if unemployment declines slowly, as observed after the global financial crisis (Mody, Ohnsorge, and Sandrei 2012). If, however, effective treatment and vaccines become available quickly, repressed consumption could be unleashed, producing an initial boost to the recovery.

Facilitating Economic Recovery with Limited or No Fiscal Space

After the delivery of unprecedented fiscal firepower in response to the COVID-19 pandemic, global gross public debt is projected to reach similarly unprecedented levels of over 100 percent of GDP in 2020. A challenge for many governments is to find additional resources to support the recovery and avoid a too-abrupt fiscal adjustment as the exceptional lifelines are eliminated. For countries with limited or no fiscal space, an option is to consider a productive stimulus measure that can be jointly implemented with an adjustment measure in order to achieve dual objectives of facilitating the economic recovery in the short run while keeping debt under control over the medium term. For example, to revive the economy, the government of *Spain* proposed using a €10 billion fund to increase the capital of companies in strategic sectors that are considered viable after the pandemic. The measure is combined with a tax reform that will increase taxes on larger companies.

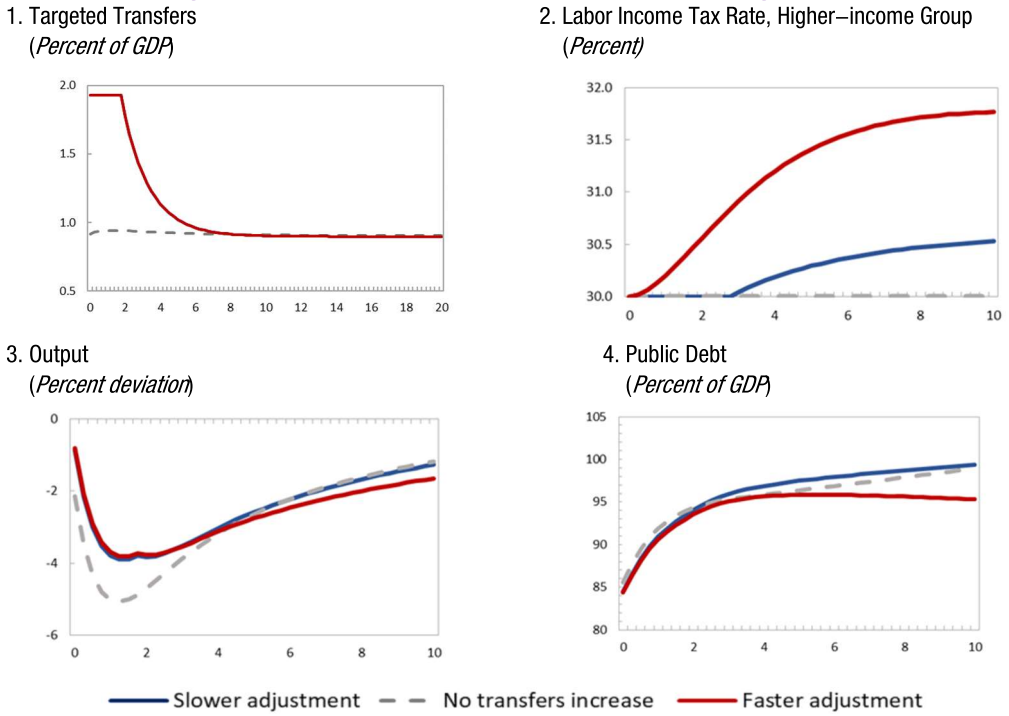
To illustrate the potential benefits of combining instruments, the impact of a targeted transfer increase combined with an increase in progressive labor income taxes is simulated. The targeted transfer increases by about 1 percentage point for the first two years in a deep recession and then declines over time as the economy improves. The fiscal adjustment via the progressive tax increase is imposed on the higher-income group under two adjustment speeds (Online Annex Figure 1.5.2): the slow-adjustment scenario assumes the tax rate is increased five years after the stimulus by a relatively small magnitude; and the fast-adjustment scenario assumes the tax rate is increased immediately by a bigger magnitude. For computing multipliers, a third scenario without a transfer increase is also simulated.[13] In this scenario, the progressive

[12] The empirical evidence that supports higher multipliers in low interest rates or at the effective lower bound includes Miyamoto, Nguyen, and Sergeyev (2018) and Amendola and others (2020). See also Chapter 2 of the April 2020 World Economic Outlook.

[13] This third scenario is similar to the baseline scenario simulated earlier, which has a macroeconomic shock that generates a deep recession and no fiscal stimulus. The baseline simulated earlier, however, has the consumption tax rate as the fiscal adjustment instrument. The scenario here, instead, has the labor income tax rate on the higher-income groups as the fiscal adjustment instrument.

labor income tax rate does not increase within the first 10 years (although an adjustment would eventually be needed to contain debt).

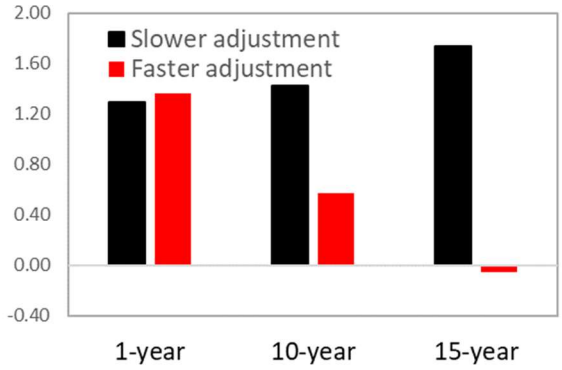
Online Annex Figure 1.5.2. Different Fiscal Adjustment Plans: Targeted Transfers



Source: IMF staff estimates.
Note: Output is in percent deviations from the path without the recession and additional transfer stimulus. The x axes are years.

The two adjustment speeds have similar short-run expansionary effects: the one-year output multipliers are 1.3 to 1.4, respectively (Online Annex Figure 1.5.3). With a fast speed, the labor income tax rate on the higher-income group begins to rise earlier by a larger magnitude (panel 2, Online Annex Figure 1.5.2), which discourages labor supply to a greater degree. Over a longer horizon, the output benefits from higher demand of liquidity-constrained households are largely offset by a fast adjustment speed because of a higher labor income tax rate on the higher-income group, leaving a longer-run cumulative output multiplier at about zero. A fast adjustment speed puts public debt on a downward path in the medium term (red line in panel 4, Online Annex Figure 1.5.2). Meanwhile, fiscal adjustments through a progressive income tax help protect the income of the vulnerable and mitigate after-tax income inequality. The slow adjustment speed, on the other hand, produces a multiplier above 1 in the longer horizon (black bars, Online Annex Figure 1.5.3) because the increase in the labor income tax rate is delayed and relatively small. The public-debt-to-GDP ratio, however, is higher and could require further adjustment in the long run (blue line in panel 4, Online Annex Figure 1.5.2).

Online Annex Figure 1.5.3. Cumulative Output Multipliers for Targeted Transfers under Different Adjustment Speeds
(Percent of GDP)



Source: IMF staff estimates.

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Fiscal Monitor: Database of Country Fiscal Measures in Response to the COVID-19 Pandemic

This database summarizes key fiscal measures governments have announced or taken in selected economies in response to the COVID-19 pandemic as of September 11, 2020, expanding the country coverage from the Annex in April 2020 Fiscal Monitor. The database categorizes different types of fiscal support (for example, above-the-line and below-the line measures, and contingent liabilities) that have different implications for public finances in the near term and beyond. Please refer to Box 1.1 of the April 2020 Fiscal Monitor for details. The database is not meant for classifying the measures for fiscal reporting, nor for comparison across economies as responses vary depending on country-specific circumstances, including the impact of the pandemic and other shocks. It focuses on government discretionary measures that supplement existing automatic stabilizers. These existing stabilizers differ across countries in their breadth and scope. Estimates included here are preliminary as governments are taking additional measures or finalizing the details of individual measures. The information does not represent views of the IMF on the measures listed. Please see IMF Policy Tracker (https://www.imf.org/COVID19policytracker) for information on a broader range of economies and their monetary and financial policies.

			A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
Country /1	Government Level	Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Australia	General Government	LC bn	227	9.6		218	**Additional spending:** At the Commonwealth government level, measures include: • JobKeeper Payment Program provides wage subsidies to eligible employers to keep Australians in jobs and stay in business. • Coronavirus Supplement provides top-ups to those who access to JobSeeker Payment (unemployment payment), Youth Allowance, and other federal government benefits. • Economic Support Payments provided income support to social security, veterans, and other income support recipients and eligible concession card holders. • Boosting Cash Flow for Employers provides cash support to SMEs and not-for-profits. • JobTrainer Skills Package provides retraining opportunities and a wages subsidy to help businesses keep apprentices and trainees. • HomeBuilder program supports jobs and the residential construction market. • Fast-track infrastructure projects to support local job creation. At state and local government levels, measures include: • Discounted utility bills and cash payments to vulnerable households. • Infrastructure projects, partly financed by the Commonwealth government. • A new home care package for senior citizens. **Forgone revenue:** At the Commonwealth government level, measures include raising the asset write-off threshold, accelerated depreciation deductions, and COVID-19 Relief and Recovery Fund which provides waiver of fees and charges to affected industries (e.g., aviation industry), regions, and communities. At state and local government levels, measures include a payroll tax relief for businesses.			LC bn	35	15		LC bn	20			
		USD bn	157	6.6	**Additional spending (AUD 9.6 bn):** • Provision of health care to protect vulnerable groups such as the elderly and those with chronic conditions from the COVID-19 pandemic. • Funding for large-scale purchases of Personal Protective Equipment and other essential equipment. • Boosting Australia's testing capacity and further developing hospital system capacity across the country for the COVID-19 response by funding half of the costs incurred by the states and territories in diagnosing and treating patients with COVID-19. • Ensuring access to essential health services through expanded telehealth and hospital services.	150				USD bn	24	10	• The Government's Structured Finance Support Fund provides up to AUD15 bn to the Australian Office of Financial Management to support continued access to structured finance markets used by smaller lenders, providing both consumer and business credit.	USD bn	14	• The Coronavirus SME Guarantee Scheme provides a loan guarantee arrangement between the government and participating banks to cover the immediate cash flow needs of SMEs.		
		% GDP	11.7	0.5		11.2				% GDP	1.8	0.8		% GDP	1.0			
Canada	Central Government	LC bn	269	20	**Additional spending (CAD 19.8 bn):** Support to the health system including • Immediate Public Health Response (CAD50 mn); • COVID-19 Response Fund (of which, CAD500 mn for Provinces and Territories in 2019-20 and $50 mn from existing resources) (CAD1 bn); • Funding for Personal Protective Equipment and Supplies (of which, $200 mn in 2019-20) (CAD2 bn); • PPE and Related Equipment for Essential Workers (procurement fund and increased procurement support) (CAD511 mn); • Reducing Import Costs to facilitate access to Critical Medical Goods (CAD281 mn); • Health and Social Support for Northern Communities (critical priorities, air carriers, food subsidy enhancement) (CAD115 mn); • COVID-19 Medical Research and Vaccine Development (over two years) (CAD1.1 bn); • Consular Assistance (of which, CAD36 mn in 2019-2020) (CAD100 mn); • Virtual Care and Mental Health Tools for Canadians (CAD241 mn); • Enhancing Public Health Measures in Indigenous Communities (CAD285 mn); • Provincial Safe Restart Agreement (CAD14 bn).	249	**Additional spending (CAD 249.2 bn):** • Canada's Work-Sharing program is enhanced to support employers and their employees who experience a downturn due to COVID-19, doubling the length of time can use Work-Share from 38 to 76 weeks. • Introduced a new Canada Emergency Response Benefit that provides a taxable benefit of CAD2,000 a month until the end of September for workers who must stop working due to COVID-19 and do not have access to paid leave or other income support, with a transition to other benefits for 26 weeks from October. This measure is estimated to cost CAD117 bn. • A one-time special payment by early May 2020 through the Goods and Services Tax credit (GSTC), doubling the annual GSTC payment amounts for the 2019-20 benefit year (CAD5.5 bn). • A subsidy equal to 75 per cent of employee wages until December, retroactive from March 15 (CAD84.4 bn). • Increased the maximum annual Canada Child Benefit (CCB) payment amounts (CAD2 bn). • CAD305 mn for a new distinctions-based Indigenous Community Support Fund, CAD157.5 mn to continue to support people experiencing homelessness during the outbreak, and CAD50 mn to women's shelters and sexual assault centers. • CAD350 mn to support vulnerable Canadians through charities and non-profit organizations that deliver essential services to those in need. • The Canada Emergency Student Benefit (CESB) and the Canada Student Service Grant (CSSG) (CAD9 bn): CESB provides support to students and new graduates who are not eligible for the Canada Emergency Response Benefit; and CSSG helps students gain valuable work experience and skills while they help their communities during the COVID-19 pandemic. • The federal government will waive the one-week waiting period for employment insurance.	85		LC bn	92	5.2		LC bn	87			
		USD bn	200	15		185		63	**Deferred revenue (CAD 85 bn)**: Temporary interest-free tax deferrals for businesses and self employed, amounting to CAD 55 bn in deferred income taxes and CAD 30 bn in deferred GST/HST and customs duties for imports.	USD bn	68	3.9	• Farm Credit Canada will receive support from the government that will allow for an additional CAD 5.2 bn in lending capacity to producers, agribusinesses, and food processors.	USD bn	64	• Established a Business Credit Availability Program (BCAP) to provide support through the Business Development Bank of Canada (BDC) and Export Development Canada (EDC), which work with private sector lenders to coordinate on credit solutions for individual businesses, including in sectors such as oil and gas, air transportation, exportation and tourism. This includes combination of loan guarantees and shared financing arrangements. The BCAP consists of: the Canada Emergency Business Account (for small firms), CAD41.3 bn; the Mid-Market Guarantee and Financing Program, CAD20 bn; the Large Employer Emergency Financing Facility, CAD20 bn; and Support for the Agriculture and Agri-Food Sector, CAD5.2 bn.		
		% GDP	12.5	0.9		11.6		3.9		% GDP	4.3	0.2		% GDP	4.0			

Country /1	Government Level	A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
European Union		LC bn	428	0.1		428	**Additional spending (€427.8 bn):** • The European Commission announced that the size of the Corona Response Investment Initiative will be raised to €37 bn, to support public investment for hospitals, labor markets, and stressed regions. • The Commission proposed to extend the scope of the EU Solidarity Fund by also including a public health crisis within its scope, in view of mobilizing it if needed for the hardest hit EU member states. Up to €0.8 bn is available in 2020. • In the Coronavirus Response Investment Initiative Plus (CRII+), the Commission introduced greater flexibility to allow that all non-utilized support from the European Structural and Investment Funds can be mobilized to the fullest. • On July 21, the European Council agreed on the Next Generation EU recovery fund, which includes €390 bn in grants to EU members to support recovery. The main instrument is the Recovery and Resilience Facility (RRF) that will finance investments and reforms countries submit in fall 2020.			LC bn	765	700	• A new and temporary EU unemployment reinsurance fund (SURE) will provide up to €100 bn in loans on favorable terms to governments, in support of national unemployment and short-time work schemes. Loans will be guaranteed by the EU budget and EU Member States. • The ESM will provide Pandemic Crisis Support to its members to finance crisis-related health spending of up to 2 percent of a requesting member's 2019 GDP. Should all 19 countries draw from the credit line, this would amount to around €240 bn. • On July 21, the European Council approved the Next Generation EU recovery fund. Part of this is EUR 360 bn in loans available from the Recovery and Resilience Facility (RRF) that EU members can apply for to finance parts of their national recovery and resilience plans.	LC bn	65			
		USD bn	479	0.1	**Additional spending (€0.05 bn):** The European Commission redirected funding of €47.5 mn towards research on COVID-19 vaccine development, treatment, and diagnostics.	489				USD bn	875	800		USD bn	74	• The EU Council agreed on a new guarantee fund of €25 bn for the European Investment Bank, which is estimated to provide bank financing of around €200 bn to firms, particularly SMEs, across the EU. The guarantee fund comes on top of an earlier support package of up to €40 bn announced in March, and both packages are likely to be funded by voluntary contributions from Member States.		
		% GDP	3.9	0.0		3.9				% GDP	6.9	6.3		% GDP	0.6			
France	General Government	LC bn	117	14	**Additional spending (€14 bn):** • Support for streamlining and boosting health insurance (paid sick leave) for the sick or their caregivers, higher spending on health supplies; bonuses for health workers (€8 bn). • Additional investment and equipment in the health sector announced in the Plan de Relance for 2021 and beyond (€6 bn).	103	**Additional spending (€88.9 bn):** Subsidies for wages of workers under the reduced-hour scheme; direct financial support for affected microenterprises, liberal professions, and independent workers; direct transfers for low-income families (expired); extension of expiring unemployment and other benefits; additional transfers for self-employed; additional spending in social programs; subsidies to the auto and aerospace sectors. **Foregone revenue (€13.9 bn):** Exoneration of social security contributions for affected firms in tourism sectors; carry back for corporate income taxes; permanent tax cuts (production taxes) announced in the Plan de Relance for 2021 onward.	57	**Accelerated spending (€23 bn):** accelerated refund of tax credits (e.g. CIT and VAT). **Deferred revenue (€33.5 bn):** Postponement of social security contributions and tax payment for companies from Q2 to 2020H2.	LC bn	352	21		LC bn	331			
		USD bn	134	16		118		65		USD bn	402	24	• The authorities announced potential direct equity support in strategic companies (around €21 bn).	USD bn	378	• State guarantees for liquidity bank loans to companies and credit reinsurance schemes (€315 bn); other guarantees (€12.5 bn). • The Plan de Relance includes the creation of a €21 bn fund leveraged by public guarantees (€3 bn), to provide quasi-equity support or equity loans to firms.		
		% GDP	5.2	0.6		4.6		2.5		% GDP	15.7	0.9		% GDP	14.8			
Germany	General Government	LC bn	276	23		253	**Additional spending (€223 bn):** including grants to hard hit small businesses and self-employed, increased access to childcare and basic social security benefits, temporary relief to affected tenants, income support for families, and incentivizing green and digital investment. There is also support to firms and households provided through the "Kurzabeit" program, part of which is considered discretionary because the program parameters have been changed. **Forgone revenue (€30 bn):** a temporary VAT cut and tax cuts for SMEs.		**Deferred revenue**: including options for deferring tax payments and reducing prepayments until the year-end without penalties.	LC bn	1,020	200	• An economic stabilization fund (WSF) of €600 bn is established with three components: (i) €100 bn for government equity investments in significantly affected companies; (ii) €100 bn loan to state development bank KfW for financing affected firms that do not have access to KfW's existing programs;	LC bn	820	(iii) €400 bn to provide additional state guarantees to non-financial corporations to alleviate liquidity bottlenecks and support refinancing. • For the new and expansion of the existing KfW-programs, the guarantee framework of the federal government was increased by €357 bn. • Total guarantees provided by state governments to be increased by €63 bn.		
		USD bn	316	26	**Additional spending (€23 bn):** on hospital capacity, medical equipment, research, and information campaigns.	289				USD bn	1,166	229		USD bn	937			
		% GDP	8.4	0.7		7.7				% GDP	30.9	6.1		% GDP	24.8			
Italy	General Government	LC bn	80	6.5		74		7.0		LC bn	533	3.3		LC bn	530	Budget allocation of €35 bn to guarantee loans, with total guarantees estimated at about €530 bn. • Guarantees cover up to 30% of the value of SME loans subject to moratorium (€70 bn) and between 70% and 90% of the value of loans for all businesses (€200 bn). • SME Guarantee Fund is enhanced from €40 bn to over €100 bn. • Guarantee of €0.5 bn for the state development bank Cassa Deposit e Prestiti to provide liquidity support to banks financing medium to large enterprises. • Co-insurance scheme to guarantee loans to exporters (€200 bn).		
		USD bn	91	7.4	**Additional spending (€6 bn):** including on medical equipment and staff. **Forgone revenue (€0.5 bn):** zero VAT rate on targeted medical equipment.	84	**Additional spending (€71.5 bn):** including broadening the wage supplementation fund to provide income support to laid-off workers and the self-employed, vouchers for the payment of babysitters (€52 bn); grants for SMEs to cover rents, utility bills (€15 bn); education (€1.5 bn). **Forgone revenue (€2 bn)**: tax credits.	8.0	**Deferred revenue:** including postponement of VAT, CIT, and social security contributions for SMEs, as well as property taxes and utility bills in most affected municipalities.	USD bn	610	3.7	• Equity injection to Alitalia (€3.3 bn)	USD bn	606			
		% GDP	5.0	0.4		4.6		0.4		% GDP	33.0	0.2		% GDP	32.8			
Japan	General Government	LC bn	59,500	5,100		54,400	**Additional spending (JPY 54.4 tn):** Key spending measures in the Emergency Economics Package against COVID-19 include: • Cash handout of JPY 100K per person (JPY 12.9 tn); • Lump-sum transfer to affected firms (JPY 2 mn per SME, JPY 1 mn for the self-employed) (JPY 2.3 tn); • Subsidies for financial institutions' lending (JPY 3.8 tn); • Expansion of work subsidies (JPY 0.9 tn); • Incentives to accelerate recovery, including for consumption in service sectors and infrastructure investments (JPY 10.8 tn); • Transfers to local governments for COVID-19 (JPY 1 tn). Additional measures announced May 27 include: • Transfers to local governments (JPY 2 tn); • Expansion of work subsidies (JPY 1.3 tn); • Subsidies for public/private financial institutions' lending (JPY 11.7 tn); • Replenishment of cash transfers for firms (JPY 1.9 tn); • Subsidies to affected firms for rent payment (JPY 2 tn). On May 19th and 26th and August 7th, the Government decided to allocate a part of the COVID-19 reserve fund to the measures amounting (JPY 1.4 tn), including replenishment of the cash transfer to affected firms (JPY 0.9 tn) and the emergency loans to affected households (JPY 0.2 tn). **Forgone revenue:** Reduction of property tax and expansion of the loss carry-back program.	26,000	**Deferred revenue (JPY 26 tn):** Deferral of payment of taxes and social security premiums by affected firms and households for one year.	LC bn	124,700			LC bn	15,700		109,000	
		USD bn	555	47.6	**Additional spending (JPY 5.1 tn):** • Production, procurement, and distribution of critical equipment such as masks and ventilators (JPY 0.8 tn). • Transfers to local governments to be used for their health- and long-term care related measures including cash handouts to medical and long-term care practitioners (JPY 2.4 tn). • Other health-related measures, e.g., vaccine development, etc. (JPY 1.9 tn).	508		242.6		USD bn	1163			USD bn	146	• Guarantees on bonds/borrowing by the Development Bank of Japan and the Japan Finance Corporation (JPY 7.6 tn). • Guarantees on external bonds issued by the Development Bank of Japan and Japan Bank for International Cooperation (JPY 1.1 tn). • Guarantees on bonds/borrowings by other public financial institutions for their equity injection programs. (JPY2.5 tn). • Expanded the guarantee cap on the capital injection scheme into banks (JPY 3 tn). • Expanded the insurance capacity of the Nippon Export and Investment Insurance (JPY1.5 tn).	1,017	• Concessional loans and guarantees to affected firms through the public and private financial institutions. (JPY 92 tn). • Public financial institutions' provision of subordinated loans (quasi-equity) and equities (JPY 2.7 tn). • Public financial institutions' loans to affected hospitals and clinics (JPY 1.3 tn). • Other quasi-fiscal operations using the Development Bank of Japan and other agencies (primarily for infrastructure projects in the post-containment phase) (JPY 13 tn).
		% GDP	11.3	1.0		10.3		4.9		% GDP	23.7			% GDP	3.0		20.7	

			A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
Country /1	Government Level	Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Korea	General Government	LC bn	66,500	5,200		61,300	**Additional Spending (KRW 57.9 tn):** • The government has announced consumption coupons for the poor, emergency family care support, and support for business re-opening (KRW 5.6 tn). • The 1st supplementary budget included support for SMEs, additional consumption coupons, and grants to local governments (KRW 8.8 tn). • The 2nd supplementary budget included cash transfers to bottom 70% of households (KRW 14.3 tn). • The 3rd supplementary budget includes support for companies, employment, and social safety nets; boost to consumption, investment, and local economies; and Korean new deal for digital and green investment (KRW 21.4 tn). • The 4th supplementary budget: KRW 7.8 tn (KRW 3.8 tn for SME support, KRW 0.6 tn for employment relationship, KRW 1.2 tn support for unemployed and low income household, KRW 2.2 tn in daycare support and mobile bills, etc.) **Forgone revenue (KRW 3.4 tn):** • Temporary corporate/income tax cuts for landlords who reduce commercial rents. • VAT reduction for the self-employed (KRW 0.7 tn). • Corporation tax cut for SMEs located in disaster areas (KRW 0.3 tn). • Consumption tax cut for auto purchases (KRW 0.8 tn). • Raising income tax deduction for credit/debit card and cash receipt expenditure (KRW 0.4 tn). • Raising ceiling of deductible entertainment expenses when calculating corporation tax (KRW 0.2 tn). • Social security (healthcare insurance) contribution cut for households (KRW 0.9 tn).	33,000	**Accelerated spending (KRW 3.3 tn)**: Make early purchases and prepayments for cash-strapped businesses (KRW 2.1 tn) and frontload construction investment (KRW 1.2 tn), temporarily relaxing government procurement rules. **Deferred revenue (KRW 29.7 tn)**: Tax deferral covering a broad range of taxes for small businesses and the self-employed in medical, tourism, performance, hospitality, and other affected sectors (VAT and corporation tax--KRW 4.9 tn); social security contribution payment and electricity charge deferral for households (KRW 10 tn); additional tax deferral for small shop owners and freelancers for 3 months (KRW 12.4 tn); transportation, energy, environment tax deferral for oil refinement companies and liquor tax deferral for brewing companies (KRW 2tn); deferral of customs duties (KRW 0.4 tn).	LC bn	204,100			LC bn	34,100		170,000	
		USD bn	56	4.3	**Additional spending:** • First supplementary budget (KRW 2.1 tn): Epidemic prevention and treatment, support for medical institutions and quarantined households. • Third supplementary budget (KRW 2.5 tn): Expanding diagnostic and treatment facilities and smart medical centers; promoting treatment and vaccine development; promoting test-trace-treatment to be a global standard and increasing official development aid of K COVID-19 response kits and tools. • Additional health spending (KRW 600 bn).	51		28		USD bn	170			USD bn	28	• Special guarantee for SMEs and small merchants (KRW 5.5 tn), • guarantee for small businesses (KRW 3 tn). • guarantees for SMEs and middle market enterprises with unfavorable credit history (KRW 7.9 tn). • Korea Credit Guarantee Fund (KODIT) to support corporate bond issuance by primary collateralized obligations (KRW 11.7 tn). • guarantees/loans related to trade financing and overseas projects (KRW 6 tn).	142	Measures include: • Non-guarantee measures mostly for SMEs (KRW 79.6 tn), • Loans for venture capital and SMEs (KRW 2.2 tn). • Financial support for (1) key industries (KRW 40 tn) and (2) other businesses affected (35 tn)
		% GDP	3.5	0.3		3.2		1.7		% GDP	10.7			% GDP	1.8		8.9	
Spain	General Government	LC bn	39	5.3		34	**Additional spending (€26.8 bn):** • Unemployment benefit for workers registered under the Temporary Employment Adjustment Schemes (ERTE), with no requirement for prior minimum contribution or reduction of accumulated entitlement (€17.8 bn); • An allowance for affected self-employed (€4.8 bn); • Increased sick pay for infected or quarantined workers (€1.4 bn); • Introduction of a new means-tested "minimum vital income"; and new rental assistance programs for certain vulnerable renters; • A temporary subsidy for affected household employees and allowance for temporary workers with contracts expiring during the state of emergency but no entitlement to collect unemployment benefits; and additional provision of assistance to dependents; • Transfer to autonomous communities funding meals for children affected by the school closure; and extension of the social benefit for energy provision. • Additional fund to support industrial R&D. **Forgone revenue (€7.1 bn):** • Exemptions of social contributions for affected companies that maintain employment under the ERTE and affected self-employed (€3.2 bn); • Temporary waiver of VAT on purchases of certain medical material (€2 billion); • Flexibility in filing income tax and VAT installment payment for SMEs and self-employed (€1.1 bn); • 6-month suspension of social security contributions and deferral of social security debts for the self-employed and companies in selected industries (€0.7bn); • 50 percent exemption from employer's social security contributions for workers with permanent discontinuous contracts in the tourism sector and related activities.		**Deferred revenue**: deferral of tax payments for small and medium enterprises and self-employed for six months, with the first four months exempt from interest.	LC bn	155	0.1		LC bn	145	• Up to €100 bn government guarantees for firms and self-employed, covering both loans and commercial paper of medium-sized companies that participate in Spain's Alternative Fixed Income Market (MARF) • A new Instituto de Crédito Oficial (ICO) line of guarantees to promote investment activities particularly in the areas of environmental sustainability and digitization (€40 billion); • Additional guarantees of up to €2 bn for exporters through the Spanish Export Insurance Credit Company • A line of guarantees to provide financial assistance on housing expenses for vulnerable households (€1.2 bn) • Additional loan guarantees for SMEs and self-employed through the Compañía Española de Reafianzamiento (€1 bn) • An ICO line of guarantees for the automotive sector (€500 mn) • Expansion of the ICO credit lines for the tourism sector (€200 million) • Guarantees for loan maturity extensions to farmers using the special 2017 drought credit lines.	10	
		USD bn	45	6.1	**Additional spending (€5.3 bn):** • Budget support from the contingency fund to the Ministry of Health (€1.4 bn); advance transfer to the regions for health services (€2.9 bn); other healthcare related spending including research (€1.05 bn). • An emergency management process for the procurement of all goods and services needed by the public sector to implement any measure to address the pandemic.	39				USD bn	177	0.1	• Loans for the industrial sector to promote digital transformation and modernization.	USD bn	166		11	• Additional funding for the Instituto de Crédito Official (ICO) credit lines (€10 bn)
		% GDP	3.6	0.5		3.1				% GDP	14.2	0.0		% GDP	13.3		0.9	

Country /1	Government Level		A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
United Kingdom	Central Government	LC bn	188	32		157	**Additional spending (£140.8 bn):** • Coronavirus Job Retention Scheme to subsidize furloughed employees' wages and firms' social security contributions (initially for 3 months but extended until October); • Income support for the self-employed (initially for 3 months and extended for another 3 months); • Paid sick leave for self-isolating individuals and compensation for small firms for up to 2 weeks; • Direct grants for small firms in the most-affected (retail and hospitality) sectors; • Support for the vulnerable by expanding the Universal Credit and Working Tax Credit schemes; • Rent support by increasing the Local Housing Allowance; • International support, with £150 million made available to the IMF's Catastrophe Containment and Relief Trust; • Government support for charities. • £1,000 bonus to firms per employee brought back from furlough and employed until January 2021. • Cover the cost of 25 hours' work a week at the National Minimum Wage for six months for hired unemployed up to 24 years old. • Provide support to boost work search, skills, and apprenticeships. • Entitle every diner to a 50% discount of up to £10 in August. • Public sector and social housing decarbonization (£1.1bn) Green Homes Grant (£3bn).	4.0		LC bn	341	1.0		LC bn	340	• The Coronavirus Business Interruption Loan Scheme (CBILS) launched with the British Business Bank supports SMEs with access to loans of up to £5 mn and for up to 6 years. The government provides lenders with a guarantee of 80% on each loan, and cover the first 12 months of interest payments and any lender-levied fees. • The Coronavirus Large Business Interruption Loan Scheme (CLBILS) provides a government guarantee of 80 percent to enable banks to make loans of up to 25 percent of companies' turnover, or up to £200 mn to firms with an annual turnover above £45 mn. • Under the new Covid-19 Corporate Financing Facility (CCFF), the Bank of England will buy short term debt from larger companies. The combined size of the CBILS, CLBILS, and CCCF schemes is £330 bn. • The Bounce Back Loan Scheme will help SMEs to borrow between £2K and £50K for up to 6 years, with the government guaranteeing 100 percent of the loan and SMEs not paying any fees or interest in the first 12 months. • Trade credit Insurance for business-to-business transactions will receive up to £10 billion of government guarantees through the Trade Credit Reinsurance scheme.		
		USD bn	241	41	**Additional spending (£31.7 bn):** • Funding for the National Health Service, including to expand the number of hospital beds, medical staff and equipment. **Forgone revenue (£0.1 bn):** • Waiver of VAT and customs duties on critical medical imports, including ventilators, testing kits, and protective gear for the test, trace, contain and enable program.	201		5.1	**Accelerated spending:** • Bring forward public infrastructure spending to FY2020/21. **Deferred revenue**: • Deferral of income tax for the self employed and VAT payments; • Time to Pay arrangements (tax debt restructuring) for businesses and individuals.	USD bn	437	1.3	• The government has put in place a £1 bn program to support firms driving innovation and development through grants and loans. • The government has provided a £30 mn convertible loan to the steel company, Celsa.	USD bn	436			
		% GDP	9.1	1.5		7.6	**Forgone revenue (£15.8 bn):** • Property tax (business rate) holiday for firms in affected sectors for 12 months. • Temporary cut on stamp duty land tax for 10 month. • VAT rate reduction for hospitality, accommodation, and attractions for 6 months.	0.2		% GDP	16.6	0.0		% GDP	16.5			
United States	Central Government	LC bn	2,449	304	**Additional spending ($295 bn)** • Coronavirus Preparedness and Response Supplemental Appropriations Act (March 6, 2020) approved with $6.8 bn for treatments, drugs, and public health measures. • Families First Coronavirus Response Act (March 18, 2020) includes health provisions that increase outlays in Medicare, Medicaid, and other programs with federal matching by an estimated $59 bn. • Coronavirus Aid, Relief, and Economic Security Act (March 27, 2020) approved $138 bn for additional health spending, which includes funding for hospitals ($100 bn), the Center of Disease Control ($4.3 bn), and vaccine development ($27 bn); expansion of Medicare payments and provision of tax advantages for certain medical expense. • Paycheck Protection Program and Health Care Enhancement Act (April 23, 2020) includes $75 bn for hospitals and $25 bn for testing. **Forgone revenue ($9 bn)** • CARES act includes expansion of qualified medical expenses which is estimated to reduce revenue by $9 bn.	2,145	**Additional spending ($1617 bn):** • Coronavirus Preparedness and Response Supplemental Appropriation (March 6, 2020) of $1.2 bn. • Families First Coronavirus Response Act (March 16, 2020) includes 2 weeks paid sick leave, up to 3 months emergency leave for those infected (at 2/3 pay), food assistance, free virus testing; federal transfers to states for Medicaid (increased by 6.2 percent during emergency period); and $1 bn in expanded unemployment insurance. Estimated increase in spending from this Act is $38.8 bn. • Coronavirus Aid, Relief, and Economic Security Act (March 27, 2020) includes $268 bn unemployment insurance and $440 bn in emergency appropriations, and $349 bn forgivable small business loans and other items. Estimated increase in spending from this Act is $1175.7bn. • Paycheck Protection Program and Health Care Enhancement Act (April 23, 2020) includes $62.1 bn for the Small Business Administration's loan programs and other expense, and $321 bn for the Paycheck Protection Program. • The federal government reallocated (August 8, 2020) $44 billion from the Department of Homeland Security's Disaster Relief Fund to provide extra unemployment benefits of $300 per week following the expiration of enhanced unemployment benefits. Of the $44 bn, $18 bn is estimated to be pre-COVID-19 appropriated funds, therefore counted as additional COVID-19 expenditure. **Forgone revenue ($528 bn):** • Coronavirus Aid, Relief, and Economic Security Act (March 27, 2020) includes tax rebates: $1,200 for singles/$2,400 for married filing jointly, and $500 per qualifying child; phaseout rate of 5% for Adjusted Gross Income over $75,000 for single/$112,500 for head of household/$150,000 for married filing jointly. The Act also includes higher limits on losses for corporations and individual taxpayers, employee retention credit for affected employers, and other revenue provisions. The total estimated revenue cost is $434 bn. • Families First Coronavirus Response Act (March 16, 2020) has revenue implications on the budget, estimated to cost around $94 bn.	18		LC bn	510	56		LC bn	454			
		USD bn	2,449	304		2,145		18	**Deferred revenue**: • Coronavirus Aid, Relief, and Economic Security Act (March 27, 2020) includes extension of IRS income tax filing deadline by 90 days and delay of employers' payroll taxes to 2021 and 2022. • The federal government (through Executive Orders by President Trump on August 8, 2020) introduced deferral of employee social security payroll tax ($1.7 bn) and extended the delay payment of federal student loans ($4.3 bn).	USD bn	510	56	• Coronavirus Aid, Relief, and Economic Security Act (March 27, 2020) includes $56 bn in loans for distress businesses (e.g., passenger and cargo air carriers, postal service).	USD bn	454	• Coronavirus Aid, Relief, and Economic Security Act (March 27, 2020) includes $454 bn to backstop section 13(3) Federal Reserve facilities that purchase corporate obligations in primary or secondary market.		
		% GDP	11.8	1.5		10.3		0.1		% GDP	2.5	0.3		% GDP	2.2			

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Country /1	Government Level	Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Argentina	Central Government	LC bn	1058	59	**Additional spending (AR $41.7 bn):** • Budget increase for Health Ministry to improve virus diagnostics, purchase hospital equipment, and build temporary emergency treatment centers. • Budget transfers to specific hospitals. • Four monthly bonuses of AR $5K for healthcare workers (AR $12 bn). • Other (non-costed) support for the health sector includes infrastructure spending and discretionary transfers related to healthcare to provinces. **Forgone revenue (AR $16.9 bn):** • Exemption from import duties and statistical tax for medical supplies (April-August). • Tax aliquots on credits and debits in bank accounts and other operations of 2.5 and 5 percent for health service operations. • 95 percent reduction in the aliquot of employer social security contributions for a period of 90 days for health workers (April-June).	999	**Additional spending (AR $927.1 bn)**: • One-off additional allowances for pensioners, beneficiaries of child, pregnancy, and other social allowances, as well as food stamps. • Emergency family allowance for monotributistas, informal workers, and unemployed. • Assistance to community kitchens (comedores) and retiree centers for food distribution. • Transfers to provincial governments. • Wage subsidies and complementary wages for affected SMEs. • Higher spending on public works/infrastructure, particularly in the health sector. • Unemployment insurance increased by AR $4K to AR $10K. • Financing for infrastructure in industrial parks. **Forgone revenue (AR $71.8 bn)**: • Most affected sectors granted 95% reduction in employers' contributions to the pension system. • Reduction in employers' contributions to Social Security.	10	**Accelerated spending:** • Advance tax reimbursements to exporters of manufactured products. **Deferred revenue**: • Extension of the grace period of repayment of loans granted by the Social Security to retirees and beneficiaries of non-contributory pensions. • Deferrals in employers' contributions to Social Security for 60 days.	LC bn	572			LC bn	572	State guaranteed, subsidized bank lending (estimated at 2 percent of GDP): • Subsidized loans for the construction and repair of houses, SMEs, monotributistas, and self-employed workers (autónomos); • State-guaranteed funds (FOGAR/FONDEP) for credit to SMEs and monotributistas; • Banco Nación and Anses loans, subsidies, and transfers for housing projects; • Financing for SMEs to help implement remote working facilities; • Financing to duty-free manufacturing zones to carry out infrastructure works; • Subsidized loans for provincial governments through FFDP to reform provincial public sector and promote development projects; • Suspension of public service cuts for 180 days due to non-payment of up to 3 consecutive invoices.		
		USD bn	15	0.8		14		0.1		USD bn	8.1			USD bn	8.1			
		% GDP	3.9	0.2		3.7		0.0		% GDP	2.1			% GDP	2.1			
Brazil	General Government	LC bn	585	63		522		202		LC bn	448	70		LC bn			378	Credit lines from public banks to SMEs, micro-firms, and individuals (BNDES: BRL 55.4bn, Caixa: BRL 154bn, Banco do Brasil: BRL100): • BNDES opened a working capital loan line for tourism and service sectors (small and medium-sized firms), renegotiated loan terms benefiting sectors such as oil and gas, airports, ports, energy, transportation, urban mobility, health, industry, commerce, and services; expanded credit lines to micro and small firms; created a BRL 2 bn credit line to expand emergency beds and purchase of medical and hospital equipment, for regions with less infrastructure. • Caixa extended credit lines to small-and medium-sized firms to finance working capital, purchased payroll-backed and vehicle loan portfolios from small and medium-size banks, expanded real estate and agricultural credit, and renegotiated credit to hospitals. • Banco do Brasil announced an increase in its credit lines for businesses (working capital, investments, prepayment of receivables, agribusiness) and to individuals. • Authorization of new withdrawals from mandatory savings accounts for unemployment (FGTS) - BRL 36.2 bn • Temporary cut of small employers contributions to training funds (Sistema S) and deferral of all employers contributions to an extra-budgetary mandatory savings fund (FGTS) - BRL 32.2 bn.
		USD bn	113	12	**Additional spending (BRL 56.7 bn):** Federal Government spending (BRL 46.7 bn) and transfers to Local Governments (BRL 10 bn) to combat the health crisis and cover higher health spending. **Forgone revenue (BRL 6.5 bn):** a temporary (3 month) reduction in taxes on selected imported and domestic goods to combat Covid-19.	101	**Additional spending (BRL 504.6 bn):** • Targeted assistance for the elderly, poor, and unemployed, including include (i) expanding the cash transfer program 'Bolsa Família' to accommodate 1.2 million new beneficiaries; (ii) "Covid-19" cash transfer ("Emergency Aid) for informal workers and low-income households, of BRL600 per month in April-August and BRL 300 per month in September-December; (iii) a subsidized job retention scheme, allowing temporary suspension or reduction of private sector employees working contracts; and (iv) temporary electricity consumption subsidies for poor families. The Federal Government provided extraordinary transfers to subnational governments to compensate for revenue losses and cover larger social assistance and health costs, and granted a stay on debt service payments. Subnational governments were also allowed to renegotiate debts with public banks and multilateral financial institutions. **Forgone revenue (BRL 14.1 bn):** • Elimination of the financial transactions tax for 6 months.	39	**Accelerated spending (BRL 58.7 bn):** Advance payment of 13th pension benefit, wage bonuses to low-income workers, and sickness/disability benefits. **Deferred revenue (BRL 175.3 bn)**: • 4-month deferral of social contributions paid by firms and employers, 3-month deferral of small business taxes, and delayed personal income tax filling. Deferral of taxes paid by the telecommunications sector and of tax debt payment obligations.	USD bn	86	13	• Direct government loans, including credit lines to SMEs to finance payroll costs (BRL 17 bn), support to fund lending to microbusinesses (BRL 27.9 bn), support to a credit guarantee fund to finance SMEs (BRL 20 bn), and credit support to the tourism sector (BRL 5 bn).	USD bn			73	
		% GDP	8.4	0.9		7.5		2.9		% GDP	6.5	1.0		% GDP			5.5	
China	General Government	LC bn	4,578	147		4,431	**Additional spending (RMB 2.9 tn):** • Help local governments finance employment initiatives, meet basic living needs, and protect market entities. • Increase the coverage and benefits of Dibao: extending social assistance programs to cover families affected by the COVID-19 and falling into poverty. • Companies that do not lay off employees or minimize layoffs receive a refund of 2019 insurance premiums. • Two-year extension of NEV (New Emission Vehicle) subsidy on purchases to the end of 2022. • Extend unemployment benefits or "minimum living guarantees" (e.g. social transfers) to migrant workers. • Increasing ceiling on special local government bond issuance, which can be spent on investment projects. **Forgone revenue (RMB 1.5 tn):** • VAT exemptions for goods and services related to epidemic control and for small taxpayers in Hubei; and VAT rate cut from 3% to 1% in other regions until the year end. • Waived VAT on interest payments to financial institutions who extend loans of RMB 1 million or less to SMEs and sole proprietors. Instituted a 0.5 percentage point VAT reduction on secondhand vehicles sold by dealers from May until end-2023. • Corporate income tax relief for businesses in affected sectors through a longer tax loss carryover to 8 years or one-off 100 percent investment expensing deduction. • Social security contributions by employers in Hubei province and SMEs (50 percent for large firms) in the other provinces are waived until the end of December. • Allow companies suffering from serious difficulties to postpone social insurance payments until end-2020.	1,600	**Accelerated spending:** Accelerated issuance of an increase in special local government bonds (RMB 1.6 tn). **Deferred revenue**: Firms are allowed to defer their social security payments by 6 months, and the due date for contributing to the "housing provident fund" is extended to end-June. In late June, the government announced that it will allow companies suffering from serious production or operation difficulties to postpone social insurance payments until the end of 2020. Collection of income tax for small and micro enterprises and self-employed deferred until 2021.	LC bn	1330			LC bn	400		930	• Starting May 21, three policy banks will issue coupons that waive loan interest payments to qualified small/micro firms and individually-owned businesses (no estimate). • The State Council announced SOEs will expand recruitment for college graduates for two consecutive years. Also, Central SOEs should provide more positions for job seekers in counties under the poverty line after surveying employment demand (no estimate). • Road tolls were exempted beginning February 17, and some service fees charged by airports and railways were cut. Road tolls were reinstated on May 6. • Electricity prices were cut by 5%, which were extended to end-2020 except those in high-energy-consuming industries. • Railway logistic fee ws lowered by 50% until end-June. • The port construction fee has been exempted till end-2020, and some other port-related fees were cut. • Exempt rent payments by SMEs in the service sector on state-owned properties for three months. Landlords who offer rent reduction or exemption will receive tax cuts and loans with preferential interest rates.
		USD bn	680	22	**Additional spending (RMB 147 bn):** Expenditure to improve epidemic prevention and control and the national public health emergency management system. **Forgone revenue:** Tariffs were exempted for the import of medicines, medical supplies, and other vehicles used to fight against the outbreak.	658		238		USD bn	198		• Allow China's state-funded infrastructure projects to use up to 15% of investment for a project to pay wages. Previously only 10 percent was earmarked for worker salaries. • The central government transfer payment rate to provinces was increased from 3% to 4% for pensions. • Tax collection retention ratio for local budgets raised to 5% (March 1 to June 30).	USD bn	59	• The national guarantee fund will work with banks providing loan guarantee services, planning to increase re-guarantee business by RMB 400 bn in 2020. Local government-backed guarantee/re-guarantee agencies are required to lower guarantee service costs to below 1 percent for SMEs.	138	
		% GDP	4.5	0.1		4.3		1.6		% GDP	1.3			% GDP	0.4		0.9	

Country /1	Government Level		A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
India	Central Government	LC bn	3,410	360		3,050	**Additional spending (Rs 3049.5 bn):** • On March 26, the central government announced a package that provides insurance coverage for healthcare workers, substantial cash and in-kind (food, cooking gas) transfers, as well as wage and unemployment support to poor households (Rs 1.49 tn). • Between May 13 and 17, additions to this initial package were announced. These focused on extending the government's existing rural employment guarantee scheme (additional Rs 400 bn), extension of food support to migrants (Rs 35 bn) and miscellaneous other measures (about Rs 157.5 bn). • On June 30, authorities extended the provision of food rations to vulnerable households (Rs 900 bn). • On August 20, authorities extended and expanded unemployment benefits for workers who are covered under the Employees State Insurance Corporation (ESIC) scheme.	680	**Deferred revenue (Rs 680 bn)**: • Extension of income tax filing deadline (3 months); reduction of penalty for late payments; date for filing fiscal year 18/19 GST tax liability extended (3 months); other miscellaneous relaxation of tax regulatory/administrative requirements. • Reduction in up-front tax deductions for workers (Rs 500bn).	LC bn	9,931	500		LC bn	8,531	• Full guarantees for a collateral-free lending program (Rs 3 tn). • Liquidity provision and partial credit-guarantee schemes for non-bank financial companies (Rs 750 bn). • Subordinate debt provision for MSME sector (Rs 200 bn). • Credit provisions to be guaranteed by government to farmers on concessional terms (Rs 3 tn) and for street vendors and other miscellaneous measures (Rs 160 bn). • Government to provide a guarantee for credit under a new infrastructure fund for agriculture (Rs 1 tn) and for micro-food enterprises (Rs 100 bn). • Numerous miscellaneous guarantee items (Rs 321 bn).	900	
		USD bn	46	4.9	**Additional spending (Rs 360 bn):** • Additional spending on health infrastructure, including for COVID-19 testing facilities, personal protective equipment, isolation beds, ICU beds, and ventilators.	41		9.3		USD bn	135	6.8	• Equity infusion for micro, small, and medium-sized enterprises (Rs 500 bn)	USD bn	116		12	• Equity infusion for companies in the electricity distribution (DISCOM) sector (Rs 900 bn), carried out by Power Finance Corps and Rural Electrification Corps (both SOEs).
		% GDP	1.8	0.2		1.6		0.4		% GDP	5.2	0.3		% GDP	4.5		0.5	
Indonesia	Central Government	LC bn	424,500	76,000		348,500	**Additional spending (IDR 252.2 tn):** • The first fiscal package of IDR 10.3 tn includes support to the tourism sector (discounts on airplane tickets and jet-fuel) and to low-income households (social assistance and subsidy for home buyers). • The third fiscal package includes IDR 110 tn additional social assistance spending (later expanded to IDR 172 tn): increasing benefits and coverage of existing social safety nets such as food aid and unemployment benefits, and electricity subsidies. • A fourth stimulus package is announced on May 19 as part of a national economic recovery program. **Forgone revenue (IDR 96.3 tn):** • The first fiscal package includes tax cuts for the tourism sector. • The second fiscal package of IDR 33.2 tn includes income tax exemptions to workers in the industrial sectors (with an income ceiling). • The third fiscal package includes various tax reliefs and incentives: exemption and reduction of income taxes (with an income ceiling) and a reduction of the corporate income tax from 25 percent to 22 percent.			LC bn	185,150	35,150		LC bn	150,000			
		USD bn	29	5.2	**Additional spending (IDR 76 tn):** • IDR 1 tn initially allocated to cover various outlays, including personal protective equipment, enhanced surveillance at entry gates to Indonesia, hospital treatment, and hospital infrastructure. • On March 31, 2020, the government announced a third larger fiscal package, including IDR 75 tn to boost testing and treatment capability, including the acquisition of personal protective equipment, test kits, ventilators, and the upgrade of 132 referral hospitals to handle COVID-19 patients.	24	**Accelerated spending**: The second fiscal package includes acceleration in VAT refund from April to September. **Deferred revenue:** The second fiscal package includes delayed payments of income tax for businesses from April to September.			USD bn	13	2.4	• Capital injection to SOEs.	USD bn	10	• Government guarantees for bank lending to micro, small, and medium enterprises (IDR 150 tn), expected to be financed by Bank of Indonesia's purchase of new government recovery bonds.		
		% GDP	2.7	0.5		2.2				% GDP	1.2	0.2		% GDP	0.9			
Mexico	Non-financial Public Sector	LC bn	147	40		107	**Additional spending**: • Loans with optional repayment to be granted by the Ministry of Economy to 1 million SMEs that maintain employees on payroll, self-employed, and domestic workers. Eligibility is assessed using IMSS database (MXN 25 bn). • Loans with optional repayment to be granted by the Ministry of Economy to 1 million family businesses, previously registered in the Welfare Census (MXN 25 bn). • Expansion of Welfare Programs (MXN 50 bn) for infrastructure (MXN 33 bn), security (MXN 7.2 bn), education (MXN 5.8 bn), and other (MXN 4 bn) • Unemployment subsidy for 3 months to workers that hold a mortgage with the Housing Institute (MXN 7.3 bn)	46		LC bn	103	38		LC bn			65	
		USD bn	6.7	1.8	**Additional spending**: The authorities have increased public health spending and are trying to ensure sufficient supply of medical equipment and materials.	4.9		2.1	**Accelerated spending:** • Frontloaded social pension payments for the elderly and disabled people by 4 months (MXN 46.4 bn). • Procurement processes and VAT refunds are to be accelerated.	USD bn	4.7	1.7	• Institute for Social Security and Services (ISSSTE) loans to state workers with low interest rates (MXN 35 bn). • Personal loans granted by the Institute of the National Fund for the Consumption of Workers (Fonacot) (MXN 3 bn).	USD bn			3.0	• Development banks to provide loans, particularly to small- and medium-scale enterprises (SMEs).
		% GDP	0.7	0.2		0.5		0.2		% GDP	0.5	0.2		% GDP			0.3	
Russia	Central Government	LC bn	2,499	232		2,266	**Additional spending (RUB 1.8 tn):** • Sick leave benefits for the quarantined or self-isolating individuals and increases in unemployment and child benefits • Interest rate subsidies for affected companies to finance minimum wages. • Interest rate subsidies for systemically important companies, conditional on employment keeping above 90 percent, to support working capital. • Support for large companies (construction, car-makers, air transportation, light industry). • Credit to affected sectors to protect employment with partial/full asset write-offs if employment is kept above 80%. • Grants for SMEs in affected industries to cover salaries and disinfection/COVID-19 prevention measures. • Support to airlines (RUB 23 bn) (subsidies), airports (RUR 11 billion) (subsidies) and car-K60makers (RUB 25 bn) (state procurement and interest rate subsidies). • Federal transfers to regions. • Construction sector support, including subsidized rates for a new mortgage program (costed at RUB 6 bn).	432		LC bn	1,070	70		LC bn	500		500	
		USD bn	35	3.2	**Additional spending**: • RUB 140 bn – new infection hospitals, additional beds and re-equipment of existing beds, special ambulances and equipment. • RUB 10 bn – bonus fund for medical staff, R&D in diagnostics and prevention. • RUB 50 bn – federal government top-ups to medical staff wages. • Medical staff directly engaged in coronavirus efforts will receive additional federal compensation. **Forgone revenue**: • RUB 32 bn - zero import duties for pharmaceuticals, medical supplies and equipment.	31	**Forgone revenue (RUB 474 bn):** • Social contributions by SMEs on wages in excess of the minimum wage reduced from 30 to 15 percent, permanently. • Taxes and social contributions for Q2 written off (excluding VAT) targeting SMEs, Social NGO, sole proprietors (covers 1.5 mn enterprises). • Refund for the self-employed on 2019 taxes and credit of one minimum salary toward 2020 taxes. • Sole proprietors will get a tax credit of one minimum salary toward their social insurance payments. • For SMEs in the affected sectors: zero rent to the federal government for three months.	6.0	**Deferred revenue**: • Tax deferrals for SMEs and most affected companies on most taxes (excluding VAT, PIT, MET, and social contributions). • Deferrals on social contributions for SMEs in affected sectors for 6 months. • For SMEs in the affected sectors: deferrals on rent payments to all levels of government until the end of the year.	USD bn	15	1.0	• RUB 70 billion for restructuring regional debt to the federal government. • Recapitalization of leasing firms due to potential problems of their clients in the transportation sector.	USD bn	6.9	• The federal government announced guarantees of up to RUB 500 bn on bank lending to firms, including (1) RUB 220 bn in guarantees to VEB to guarantee bank credit to systematically-important enterprises; (2) RUB 160 in supporting domestic aircraft makers by issuing guarantees on domestic leasing companies 2020-21 borrowings for purchasing domestically produced passenger aircrafts and helicopters.	6.9	• The CBR has introduced a new RUB 500 bn facility for SME lending and reduced the interest rate on the existing RUB 175 bn facility. As part of the new RUB 500 bn facility, CBR has introduced a RUB 150 bn credit line to finance 6-month zero-interest loans to SMEs and individual entrepreneurs to cover payroll.
		% GDP	2.4	0.2		2.2	• Tourism firms not to contribute to the tourist reserve fund. • Social contribution and CIT rates for IT firms will be cut permanently: from 14 percent to 7.6 percent for social contributions and from 20 percent to 3 percent for CIT. • Sick leave benefits for the quarantined or self-isolating individuals and increases in unemployment and child benefits • Interest rate subsidies for systemically important and affected companies to finance minimum wages. • Support for large companies (construction, car-makers, air	0.4		% GDP	1.0	0.1		% GDP	0.5		0.5	

Country /1	Government Level		A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Saudi Arabia	General Government	LC bn	58	47	**Additional spending (SAR 47 bn):** Budget reallocation within the Ministry of Health budget or a reallocation from other parts of the budget for emergency spending to fight COVID-19.	10.6	**Additional spending (SAR 10.6 bn):** • Wage benefits to employers who keep their workers to be provided through the unemployment insurance scheme, SANED (SAR 9 bn). This wage benefits have been extended. • Ministry of Energy announced temporary electricity subsidies to commercial, industrial, and agricultural sectors (SAR 0.9 bn). • The Ministry of Finance program to help businesses defer loan payment due this year (SAR 0.67 bn).	48	**Deferred revenue (SAR 48 bn)**: Deferred declaration & payment of taxes for 3 months, waiver of customs duties (30 days to 3 months), waiver of expat fees for 3 months; and waiver of municipal fees on companies for 3 months.	LC bn	22	22	• Off-budget support provided by the National Development Funds (NDF): SAR 22 bn distributed as follows: (i) loan rescheduling/restructuring and different loan programs to SMEs: SAR13 bn. (ii) support to employment programs in the private sector: SAR 5 bn. (iii) social loans to families with low incomes: SAR4 bn.	LC bn				
		USD bn	15	13		2.8		13		USD bn	5.9	5.9		USD bn				
		% GDP	2.3	1.8		0.4		1.9		% GDP	0.9	0.9		% GDP				
South Africa	General Government	LC bn	256	20	**Additional spending:** for medical equipment and staff for health facilities, and policing the lockdown.	236	**Additional spending (R 210 bn):** • Measures to support workers' unemployment insurance benefits (with R 80 bn funding from Unemployment Insurance Fund); create a New Covid-19 Social Relief of distress grant for the unemployed who do not receive grant or UI payment. • Increase transfers to households: grants and food distribution and public work program expansions. • Increase child support and all other grants from May till Oct. • Distribute food parcels and provide transfer to SMEs. • Municipalities to use higher central transfers to fund. emergency water supply, sanitation of public transport and facilities, and food and shelter for the homeless (R 20 bn. • Contribute R 150 mn Rand to a solidarity fund to combat virus spread, track spread, ill care, support for disrupted lives. • Additional allocations by the Department of Industry and Trade, Department of Tourism, and Department of small enterprises to assist SMEs in distress (R 2.7 bn).	44	**Deferred revenue**: • Deferral of 35 percent of PAYE liability for four months for businesses with expected gross income of less than R 100 mn. • Deferral of 35 percent of provisional tax payments for the next six months for businesses and the self-employed with expected gross income of less than R 100 mn. • A 90-day deferral for alcohol and tobacco excise duty due to be paid in May and June • Three-month deferral for filing and payment date of carbon tax.	LC bn	203			LC bn	200		3.0	
		USD bn	15	1.2	**Forgone revenue:** VAT and customs duty exemptions for essential sanitary products during the pandemic (immune boosters, hand sanitizers, patient monitoring devices, etc.).	14		2.6		USD bn	12			USD bn	12	The Treasury will guarantee up to R 200 bn in loans where also the banks are taking part of the risk to help businesses below a certain turnover threshold pay operating expenses including salaries, suppliers etc.	0.2	Programs from the industrial development corporation to support businesses.
		% GDP	5.3	0.4		4.9	**Forgone revenue (R 26 bn):** • Tax subsidy of up to R 550 to employees with an income below R 6,500 per month. • Skills development levy holiday for four months.	0.9		% GDP	4.3			% GDP	4.1		0.1	
Turkey	Non-financial Public Sector	LC bn	34	13.5		20	**Additional spending:** • Raised the minimum pension and cash assistance to families in need. • Increased employment protection by loosening short-term work allowance rules. On July 24, a new bill mandated the state to cover the employee and employer shares of social security contributions for three months after a business exits the short-term work allowance system. • Subsidies to firms for workers placed on unpaid leave and for workers' salaries in firms affected by COVID-19.	67	**Accelerated spending:** Early annual bonus payment to pensioners. **Deferred revenue:** •Tax deferrals for the self-employed, farmers, tailors, grocers, lawyers, financial advisers, architects, engineers, doctors, and dentists. • Tax deferrals for those aged over 65 or those with chronic illnesses. • Postponed payments regarding withholding tax returns and VAT declarations, as well as Social Security Contribution premiums (e.g., for retail/shopping malls, iron-steel, automobiles, logistics-transportation sectors). • Land occupation and revenue sharing payments in leasing of hotels postponed for 6 months. • Accommodation tax deferred. • Retail, shopping malls, iron-steel, automobiles, logistics-transportation, etc. are offered to postpone VAT and Social Security Contribution.	LC bn	584	20		LC bn	458		106	• All public banks: Principal and interest payments by those firms whose cash flows are affected adversely by Covid-19 will be postponed by minimum 3 months and provided with refinancing. • Various state bank lending schemes, including: extending repayment terms on specified credit card loans; low interest credit packages for low income households; April, May and June repayments by tradespeople extended without penalty; new low interest loans for tradespeople; and new credit cards for merchants with longer repayment periods; new lending campaigns directed to firms "maintaining" employees. • On June 1, public deposit banks (Ziraat Bank, Halkbank and Vakıfbank) launched new retail loan campaigns for house purchases and consumer spending.
		USD bn	4.9	2.0	**Additional spending:** including on Covid-19 treatment (TL1.4 bn), new hospitals (TL5 bn), and performance pay for medics (TL6 bn).	3.0	**Forgone revenue:** • Reduced taxes for affected industries (particularly tourism): hotel accommodation tax will be suspended until November; • VAT rate on internal travel reduced from 18% to 1%, • On July 31, VAT rate on several affected services sectors, including business rental services, were reduced temporarily till the end of 2020. The personal income tax on rental income and corporate withholding tax for certain lease payments have also been reduced to 10% from 20% previously till end-2020.	9.6		USD bn	84	2.9	• Turkey Wealth Fund (TWF) has been granted new rights to take equity in firms affected by Covid-19, and was assigned to inject a core capital of 0.4 percent of GDP into three state banks, funded by issuance of Treasury bonds.	USD bn	66	• Treasury guaranteed loans. • Credit guarantee fund (set up in 2016) doubled in size from TL25 to 50 billion as part of the fiscal package.	15	
		% GDP	0.8	0.3		0.5		1.5		% GDP	13.0	0.4		% GDP	10.2		2.4	
Belgium	General Government	LC bn	17	3.3		14	**Additional spending:** • Federal government eased access to temporary unemployment for firms affected by Covid-19, raised the benefit replacement rate, and introduced a daily premium, as well as eased access to replacement income for self-employed. Temporary measures have been extended until end-August or end-December 2020, including covid-related parental leave, and additional measures taken to support hard-hit sectors and vulnerable groups. • Regional governments provided lump-sum compensation for companies and self-employed affected by closures or significantly reduced turnover; further support to specific, affected sectors in addition to the health care sector; support for utility bills for affected households; and a host of smaller support measures. **Forgone revenue**: • Suspension of penalties for delays or non-performance of suppliers to the public sector. • Loss carry backward for CIT and PIT, tax exemption for regional support measures (for firms affected by closures and reduced turnover), social security contribution exemption for self-employed, temporary reduction in VAT in the hospitality sector (e.g., food and non-alcoholic beverages), temporary increase in the investment allowance for SMEs and natural persons, and increase in the CIT allowance for restaurant and reception costs. Suspension of penalties for delays or non-performance of suppliers to the public sector.	16	**Accelerated spending (€2 bn):** • Advance payments to hospitals. **Deferred revenue (€14.1 bn):** • Deferred payment of tax and social security contributions for affected firms, self-employed, and households, without application of interest charges and penalties, estimated at about 10 bn euros, and exemption of advanced VAT payment in December.	LC bn	53	1.1		LC bn	52			
		USD bn	20	3.8	**Additional spending (€3.3 bn):** on medical equipment, tests, administration etc.	16		18		USD bn	59		**Government loans (0.8bn):** • Federal loan to Brussels Airlines (still subject to EC approval) and various (subordinated) loans provided by regional governments for companies and self-employed affected by Covid-19 (facing liquidity problems, etc.); some of which channeled through regional investment vehicles. **Equity injections (0.3bn)**: • Capital increase in Flemish and Brussels regional investment companies that will use the funds to provide capital support to firms in need.	USD bn	59	• The federal government launched a guarantee mechanism for new credit lines, initially with a maximum maturity of 12 months granted by banks to viable non-financial corporations and self employed (up to 50bn). Modified to extend the maturity to 36 months, allocate 10bn of the 50bn to SMEs, replace the loss tranching by uniform loss sharing between government and banks, and ease the viability criterion. It also signed a memorandum of understanding with reinsurers committing to provide reinsurance for short-term (<2 years) trade credit insurance. • Regional governments also provide guarantees for affected companies and self-employed in need of bridge loans.		
		% GDP	4.0	0.7		3.2		3.7		% GDP	11.8			% GDP	11.8			

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Czech Republic	General Government	LC bn	244	58		185	**Additional spending:** • Increased payment for sick-leave: Employees affected during the shutdown due to government measures will receive full wages of which the government will cover 80 percent (up to CZK 39,000/month). Staff in businesses affected receive 60-100% of gross wages with a state contribution of 60% of total labor costs per employee (up to CZK 29,000/month) (CZK 27.2bn). • Care Allowance to parents, who cannot work because they need to care for children up to 13 years, of 80% of eligible income (calculated based on a progressive table) for sick leave (CZK 9bn). • Care Allowance to self-employed persons (CZK 434 per day in March, CZK 500 per day since April), who cannot work because they need to care for children up to 13 years (CZK 3bn) • The state covers half of business property rents in Q2 (CZK 5bn). • Programs in support of the sports, culture, tourism, transport and agriculture sectors (CZK 19.6bn). • Other expenditure (CZK 3bn). **Forgone Revenue:** • Waived social security contributions paid by employers (24.8%) with a maximum of 50 employees for the period between June and August. This support will be provided concurrently with the wage compensation if two conditions are satisfied – minimum employment level of 90% and wages paid in March 2020 are at least 90% (CZK 13.5bn). • Loss carryback measure: Taxpayers who report tax losses in 2020 due to the state of emergency, will be able to reduce their tax bases for the tax years 2019 and 2018 by this loss (maximum CZK 30 million) (CZK 29bn). • Reduced VAT rate to 10% for accommodation, sports and culture services (CZK 1.2bn). • Reduced road tax rate for vehicles above 3.5t (CZK 1bn). • Abolition of the real property transfer tax (CZK 10.6bn). • Lower dividends from Airport Prague (CZK 1.5bn). • Self-employed receive lump sum of CZK 500 per day during Mar 12 and Jun 8 and have access to sick leave (same regime as that for full-time employees) (CZK 20.2bn). • Additional lump-sum assistance grant (CZK 500 per day) to micro businesses during Mar 12 and Jun 8. Eligible businesses are limited liability companies with up to two partners and turnover of at least CZK 180,000 in 2019 (CZK 1.8bn). • Additional lump-sum assistance grant (CZK 350 per day) to contract workers (not employees) (CZK 2.1bn).	37		LC bn	861	1.0		LC bn	860			
		USD bn	11	2.5	**Additional spending:** • Purchases of medical equipment (CZK 12bn). • The government approved higher premium payments on state-covered health insurance–increase by CZK500 per person as of June (CZK 21.1bn). • Debt relief of hospitals (CZK 6.6bn). • Bonus for workers in social services, hospitals, and emergency responders (CZK 16.8bn). • Other health measures: mobile collection teams, transport disinfection, Smart Quarantine establishment (CZK 0.3bn).	8.0		1.6	**Deferred revenue:** • Postponement of (i) advance payments on personal and corporate income taxes (CZK 22bn); (ii) advance payments on social security and health insurance contributions for self-employed by 6 months (CZK 14.6bn) • Deferral of the VAT	USD bn	37	0.0	• The CMZRB provided CZK 1bn through interest-free loans, the rest will be handled through state guarantees on loans of commercial banks (COVID I Programme),rough state guarantees on loans of commercial banks.	USD bn	37	• COVID III Program (Guarantees will cover up to 30% of loan principal. The state will issue 80-90% of the guarantees (total amount of CZK 150bn). Estimates of the amount of guarantees offered will allow SMEs to access loans amounting to CZK500bn. • COVID II Program of state guarantees in total amount of CZK 20bn (loans up to CZK 15 million, state contribution on interest costs up to CZK 1 million, state guarantee up to 80% of loan, 3-year maturity) • COVID Plus Program of state guarantees provided by Export Guarantee and Insurance Corporation in the amount of CZK 330bn. • COVID Prague Program (1.6bn). • Other guarantees (National guarantee, Expansion guarantee) (CZK 7.9bn).		
		% GDP	4.4	1.0		3.3		0.7		% GDP	15.5	0.0		% GDP	15.4			
Denmark	General Government	LC bn	131	0.8		131	**Additional spending (130.6 bn):** • Compensation for the cancellation and postponement of major events due to COVID-19 (DKK 2.4 bn). • Temporary salary compensation between 75% and 90% of workers salaries (DKK 6.2 bn), income compensation for the freelancers and self-employed (DKK 14.1 bn) and for companies' fixed costs (DKK 65.3 bn). • Sickness benefit reimbursement (DKK 1.7 bn), and increased access to unemployment and sickness benefits (DKK 0.3 bn). • Boosting liquidity and facilitating the advancement and completion of various construction projects in the Danish municipalities and regions (DKK 2.5 bn) • Other initiatives (about DKK 2 bn) • Extension of initial fiscal measures until July 8. Thus, providing an additional DKK 30.7 billion in fiscal support. Self-employment compensation scheme - extension to 8/8 (DKK 0.5 bn) • UI benefits expanded eligibility (DKK 0.4 bn) • Extension of cultural aid packages to 8/8 (DKK 0.1 bn) • One-time grants to low-income families (DKK 1.8 bn) • Increase in corporate deductions for R&D (DKK 1.3 bn) • Support for tourism sector (DKK 0.8 bn) • Export package (DKK 0.5 bn)	175	**Accelerated spending:** • Advance payment of tax credits (DKK 1 bn) **Deferred revenue:** • Temporary postponement of payment deadlines for A-taxes (withholding tax) and labor market contributions (DKK 90 billion) The payment deadline for VAT for businesses that pay VAT on a monthly basis is postponed (DKK 35 billion) • Small enterprises' VAT period will be extended from 6 months to 12 months in 2020, while medium-sized enterprises' VAT periods will be extended from 3 months to 6 months for the first half of 2020 (DKK 35 billion) • Temporary postponement of payment deadlines for B-taxes (provisional tax paid by self-employed businessmen) (DKK 5 billion) • Temporary postponement of payment deadlines for payroll tax for certain businesses. (DKK 0.4 billion) •Further extension of payment deadlines for a-tax and VAT (DKK 9 billion)	LC bn	201	59		LC bn	142			
		USD bn	20	0.1	**Additional spending:** Resources to hire social and health workers nationwide. Part of the additional increased spending will finance additional health care needs.	20		27		USD bn	31	9.0	• Increase the Danish Students' Loan Scheme (DKK 1.5 billion). • Interest free loans based on VAT payments and payroll tax payments (DKK 35 billion). • Loans and equity to start-ups and high growth enterprises (less than DKK 3.4 billion) State capital injection into Recapitalization Fund (DKK 10 bn) • State capital injection into Restart Fund (administered by the Growth Fund) (DKK 3 bn)	USD bn	22	• The government will guarantee 70% of the value of new loans to 1) large companies that can demonstrate a fall in turnover over more than 30 percent and 2) SMEs that have seen operating profits fall by more than 30 percent. • Credit guarantee for Scandinavian Airlines (SAS). • Increased access to export credit for SMEs. • Strengthening the Travel Guarantee Fund.		
		% GDP	5.9	0.0		5.9		7.9		% GDP	9.0	2.6	• Plan to recapitalize Scandinavian Airlines (up to DKK 6 bn)	% GDP	6.4			
Finland	General Government	LC bn	7.0	1.5	**Additional spending**: for healthcare and testing, protection and medical equipment, public safety and border controls, and research on rapid diagnostics and vaccines and timely decision-making. • Finland contributes €5 million to international efforts to develop a vaccine. Additional spending is allocated for the development and maintenance of a contact tracing app. • The fourth supplementary budget includes €110 million for coronavirus vaccine and testing and €200 million for transfers to hospital district authorities.	5.5	**Additional spending**: including grants to SMEs through Business Finland and the Employment Centers (€450 million); increased parental allowance (€94 million); additional social assistance and unemployment benefits (€1.547 billion); additional public safety and border controls; measures to support restaurant to employ workers (€40 million), measures to support businesses for imposed restrictions on activities (€83 million), measures to support households and employment (€652 million), additional support for businesses (€520 million), measures to increase public investment (€963 million). **Forgone revenue**: Reduced pension contributions for the period May 1 - 31 December 2020 (€1.05 billion)	4.3	**Deferred revenue**: Deferrals of tax and pension payment obligations for 3 months are estimated to provide an additional €3.5 billion (1.5 percent of GDP) in relief.	LC bn	16	2.4	• SME capital injections of 150 million euros. Share acquisitions in state ownership steering €700 million. • On April 29, the government announced a recapitalization of Finnair of €500 million. Finnair is 56% publicly owned. •SME capital injections of €150 million. Share acquisitions in state ownership steering €700 million. • Increased capitalization of €300 million into national climate fund. Increased capital funding for state-owned enterprises of €770 million.	LC bn	13	• Finland's Export Credit Agency expands its lending and guarantee capacity to SMEs by €10 bn and the government will increase its coverage of the agency's credit and guarantee losses from 50 to 80 percent. • State guarantee for Finnair (€ 0.6 bn) and shipping companies (€ 0.6 bn) • As of the Supplementary Budget on May 8, the following guarantees have been added totaling € 1.7 billion: Guarantees for Employment Fund, EUR 880 million, for SURE, EUR 432 million, for the EIB, EUR 372 million.	1.0	
		USD bn	8.0	1.7		6.3		4.9		USD bn	19	2.8		USD bn	15		1.1	The State Pension Fund will invest in commercial paper (€1 bn).
		% GDP	3.0	0.6		2.3		1.8		% GDP	7.0	1.0		% GDP	5.5		0.4	

Country /1	Government Level		A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
The Netherlands	General Government	LC bn	36	3.7		32	**Additional spending:** • Compensation of up to 90 percent of labor costs for companies expecting a reduction in revenues of 20 percent or more; compensation for affected sectors (for example, hospitality services and travel). • Income support for entrepreneurs and self-employed (administered at municipal and regional level) for a period of three months through expedited procedures. • Support for start-ups and small innovation companies through loans provided by government regional agencies. • Scaling up of the short-time working scheme (unemployment benefit compensation available to companies needing to reduce their staff by at least 20 percent). • Allowances for SMEs affected by the outbreak to help them finance their fixed costs. • On August 28, the government announced the third support package which primarily aims at expanding measures already in place on the expenditure side through June 2021. This new package includes additional expenditure of 12.5 billion (or 1.7 percent of GDP), of which 1.5 billion of public investment. **Forgone revenue:** • Reduction of tourist taxes and taxes in the culture sector. • The interest rate on tax deferrals is reduced from 4% to just above 0%.	27		LC bn	33			LC bn	33			
		USD bn	41	4.2	**Additional spending:** including on purchase, distribution, and sale of medical devices; vaccine research; healthcare costs in the Caribbean Netherlands; training additional healthcare personnel.	36		31	**Deferred revenue**: Tax deferrals for companies that are in financial distress due to the covid-19 crisis. Temporary suspension of penalties for late tax payments. Entrepreneurs can request a deferral of tax payment, without the need to provide evidence. Businesses can calculate provisional tax payments on an expected (reduced) basis.	USD bn	38			USD bn	38	• The loan guarantee program for businesses (especially those affected by the outbreak) is expanded to cover up to 90 percent of total loan for SMEs (with maturity of 1 year or less) and 80 percent for large firms. • A guarantee scheme for supplier credit was also established.		
		% GDP	4.6	0.5		4.1		3.5		% GDP	4.3			% GDP	4.3			
New Zealand	Central Government	LC bn	48	0.8		47	**Additional spending:** including wage subsidies available for all employers significantly affected by COVID-19 (NZ $14.9 bn); income relief payment to support people who have lost their job (NZ$570 million); financial support for workers not paid normally during self-isolation (NZ $126 mn); temporary increase in winter energy payment (NZ $480 mn); permanent increase in benefits (NZ$2.4 bn in the next four years); infrastructure investment (NZ$3 billion); support package for the aviation sector (NZ$ 600 mn); tourism recover package (NZ$400 million); government housing program (NZ$670mn); and school infrastructure upgrade (NZ$ 214 mn). **Forgone revenue**: including the reinstatement of depreciation deductions for commercial and industrial buildings at a 2% diminishing value applying from the 2020-21 tax year (permanent); increasing the threshold for provisional tax from NZ $2.5K to NZ $5K applying from the FY2020-21 tax year (permanent); increasing the threshold for writing off low value assets to NZ $5K for the next tax year, before reverting to NZ$1K in the longer term; time-limited discretion of Inland Revenue to remit use of money interest (the interest on tax debt) if a taxpayer is unable to pay on time due to COVID-19; and tax loss carry-back mechanism for firms to offset a loss in a particular tax year against a profit in a previous year, and receive a refund on the tax paid in the previous profitable year.			LC bn	12	6.1		LC bn	6.3			
		USD bn	31	0.5	**Additional spending**: doubling resources for public health units; expanding intensive care capacity and equipment at hospitals; expanding healthline capacity; and support for primary care.	30				USD bn	7.9	3.9	• NZ $900 mn loan is granted to Air New Zealand, an airline company, of which the government owns 52 percent of shares. • Maximum NZ $100 thousand loan is granted to small businesses that employ 50 or fewer full time equivalent employees.	USD bn	4.0	• A loan guarantee scheme for firms with a turnover of between NZ$250 thousand and NZ$200 million per annum, with the Government carrying 80% of the credit risk. The loans will be limited to NZ$5 million for a maximum of five years and expected to be provided by the banks at competitive, transparent rates.		
		% GDP	16.2	0.3		15.9				% GDP	4.2	2.1		% GDP	2.1			
Norway	Central Government	LC bn	162	n.a.	**Additional spending:** Transfers to municipalities that have large health expenses due to the pandemic. Various other measures to strengthen the health care sector. **Forgone revenue:** The financial situation in the hospital trust is strengthened through increased appropriations and temporary reduced employer tax.	n.a.	**Additional spending**: • Expenditure measures include larger wage subsidies for temporary lay-offs and more generous unemployment benefits; expanded sickness benefits and child care; scheme to compensate heavily affected, but otherwise sustainable, businesses for unavoidable fixed costs, grants for start-ups; subsidies for domestic air routes. **Forgone revenue:** • The reduced VAT rate is temporarily lowered from 12 to 6 percent; suspension of aviation charges; corporate income tax regulations are amended so that companies can re-allocate their current losses towards previous years' taxed profits, thus lowering their tax liabilities. • Temporary cut of employers' social insurance contributions. • Reduced employer tax in May and June.	n.a.		LC bn	180	50		LC bn	130			
		USD bn	17						**Deferred revenue**: from various taxes.	USD bn	19	5.3	• The reinstatement of a government fund that buys bonds issued by Norwegian companies to increase liquidity and access to capital in the Norwegian bond market, with a ceiling of NOK 50 bn.	USD bn	14	• Establish a government guarantee and loan scheme which includes loan guarantees for SMEs (NOK 50 bn) and a scheme for re-insurance of private credit insurance providers (NOK 20 bn).		
		% GDP	5.4							% GDP	6	1.7		% GDP	4.3			
Singapore	Central Government	LC bn	73	0.8		72	**Additional spending:** • Provide support to households, including a cash payout to all Singaporeans, and additional payments for lower-income individuals and the unemployed. • Provide support to businesses and workers, including wage subsidies, support to cover rental costs, an enhancement of financing schemes, and additional support for industries directly affected and the self-employed. • Other measures: e.g. Economic resilience package. **Forgone revenue:** • Corporate income tax rebate and property tax rebates; carry-back provisions for qualifying deductions and faster write-downs for qualifying investments.			LC bn	20	20		LC bn				
		USD bn	53	0.6	**Additional spending**: to contain the outbreak, provided mainly to the Ministry of Health.	52				USD bn	14	14	• S$20 billion in loan capital was set aside to help businesses and individuals facing cash flow challenges with loan obligations and insurance premium payments.	USD bn				
		% GDP	15.6	0.2		15.4				% GDP	4.3	4.3		% GDP				

			A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
Country /1	Government Level	Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Sweden	Central Government	LC bn	255	14.2	**Additional spending:** increased testing and tracing for Covid-19 (SEK 7 bn); funding of extraordinary costs associated with Covid-19 for municipalities and regions (SEK 5 bn) and elderly care boost (SEK 2.2 bn).	241	**Additional spending (SEK 208 bn):** additional expenditures on wage subsidies for short-term leave, temporary payment of sick leave, more funding to the media, cultural and sports sectors and for education and training, rent subsidies to certain sectors, more generous unemployment benefits, expanded active labor market policies, temporary grants to businesses based on their loss of turnover to cover their fixed costs; supplementary housing allowances to families with children, infrastructure investment, extra support to public transport, measures to prevent Covid-19 fraud, general grants to municipalities and regions	315	**Deferred revenues:** Deferral of a maximum of three month worth of payments of companies' social contributions, VAT and payroll taxes for a period of up to 12 months (SEK 27 billion if uptake similar to GFC, and SEK 315 billion if fully used by all firms), deferral of annual VAT for 2019 (SEK 7 billion) and deferral of SME taxes (SEK 13 billion)	LC bn	262	11.7	• SEK 8.3 bn capital injection to the Scandinavian carrier SAS, the state-owned airport operator Swedavia Lernia (state-owned education and matching firm) • SEK 3.4 bn capital injection to ALMI (the Swedish SME and Entrepreneur Agency)	LC bn	250	• Credit guarantees for Swedish airlines (SEK 5 bn). • Expansion of the Swedish Export Credit Agency's credit guarantee framework and the programs under the Swedish Export Credit Corporation (SEK 125 bn). • Central government guarantees for loans to companies (SEK 100 bn) • Guarantees to the EU for loans to member states, SURE, and to the European Investment Bank for a guarantee fund for support to companies (SEK 20 bn).		
		USD bn	28	1.5		26		34		USD bn	28	1.3		USD bn	27			
		% GDP	5.2	0.3		5.0	**Forgone revenue (SEK 33 bn):** temporary reduction in employers' social security contributions.	6.5		% GDP	5.4	0.2		% GDP	5.1			
Switzerland	Central Government	LC bn	32	2.6	**Additional spending**: Includes army pharmacy (CHF2.264 billion), corona tests (CHF289 million), medication (CHF30 million), health protection (CHF13 million).	29	**Additional spending:** Benefits COVID income replacement directly affected (CHF4 bn) and indirectly affected (CHF 1.3 bn); financing for short term work program and the unemployment fund (CHF 20.2 bn), COVID bridging loan losses (CHF 1 bn); support for flight-related operations (CHF 0.6 bn); development aid incl. contribution to IMF (CHF 0.34 bn); loss cushion for public transport and rail freight (CHF 0.7 bn); and other measures.			LC bn	42	1.0	• Supported the Swiss Federal Railways such that it can take up an additional CHF 550 million from the Confederation in the form of customary interest-bearing loans with a term of up to one year. • Financial support to air traffic control company Skyguide, CHF400 million	LC bn	41	• Guarantees for Covid-19 bridge loans (for firms with annual turnover up to CHF500 million) (CHF40 billion) • Guarantees for startups (CHF0.1 billion) • Guarantees for airlines (CHF1.275 billion)		
		USD bn	34	2.8		31				USD bn	45	1.0		USD bn	44			
		% GDP	4.8	0.4		4.4				% GDP	6.4	0.1		% GDP	6.3			
Albania	General Government	LC bn	19	2.5	**Additional spending:** Additional funding for health sector. The Lk2.5 bn does not include additional allocation from the Reserve Fund (another Lk0.5 bn).	17	**Additional spending:** • Unemployment benefits and social assistance layout are doubled. Support of small businesses/self-employed that are forced to close activities due to the pandemic (a minimum wage of Lk26,000 per month), and people in family businesses (with declared but unpaid family members in the payroll, for up to two minimum wages). These measures lasted April to June. • One-off transfer of Lk40,000 to affected people (in tourism, active processing and employees of small businesses not included in the first package, including employees of large businesses that have been laid off due to the pandemic. **Foregone revenue:** • Small businesses (those below an annual turnover threshold of Lk14 million) will not pay profit tax in 2020 (normative act April 23). Estimated amount Lk81 mn.		**Deferred revenue:** • All large companies (except banks, telecommunication, SOE-s and companies in the chain of supply of essential goods) can defer the corporate income tax installments for Q2 and Q3 2020 to Q2 - Q3 2021. • For tourism, active processing and call centers – and small businesses with turnover of Lk14 mn or less – the payment of Q2, Q3 and Q4 of 2020 profit tax is deferred to Q2-Q4 2021.	LC bn	26			LC bn	26	• Lk11 bn sovereign guarantee for large businesses to tap overdraft or credit lines in the banking sector to pay worker salaries. Government guarantees 100% of the principal and directly covers interest costs. Interest rate is capped at 2.85% and maturity is up to 2 years with a 3 months grace period on principal. • LK15 bn additional unfunded sovereign guarantee line (0.9% of GDP) was approved on April 15 to enable loans for working capital and investments. All private companies that have been tax compliant and credit-worthy before the pandemic are eligible. The government guarantees only 60% of the principal with loan maturity is up to 5 years with caps on interest rate (5%), individual loan limit (Lk300 mn), and 6-month grace period on repayment of principal.		
		USD bn	0.2	0.0		0.1				USD bn	0.2			USD bn	0.2			
		% GDP	1.2	0.2		1.1				% GDP	1.7			% GDP	1.7			
Bulgaria	General Government	LC bn	3.1	0.8	**Additional spending**: •Purchase of protection equipment and additional remunerations in the ministries of health, interior and defense (0.5 bn). • Government allocated: BGN 2.4 mn for coronavirus research; BGN 24.6 mn for state standards for school and child healthcare and standards in the social sphere (old people care facilities, facilities for people with disabilities, homeless children care institutions); BGN 17.3 mn for subsidies to hospitals; BGN 126.3 mn for 10% increase in medical and dental care payments; BGN 67 Mn for provision of a net remuneration of BGN 1,000 to the medical specialists involved in the fight against COVID-19 on the first line until the end of 2020 (provided by redirecting funds from European programs)	2.3	**Additional spending** (BGN 2.2 bn): • BGN 1.5 bn transfer to the unemployment fund, to cover both unemployment benefits and the scheme 60/40, under which the state will cover 60 percent of the wages and insurance payments for a three-month period. • Government announced support scheme for all freelancers in the cultural field earning less than 1000 leva, for about 1200 people, at a cost of about 2.7 million leva; distributed BGN 610 as an additional bonus to social workers - employees of the Bureau of Labor and the General Labor Inspectorate. • Government approved; one-off cash transfer of BGN 375 to parents, forced to take unpaid leave to care for their children during the state of emergency (means-tested); BGN 92 Mn for 30% increase in administrations that are on the frontline of the pandemic; BGN 318.3 Mn for pension supplement of BGN 50 for all pensioners for 3 months; BGN 122 Mn for payments for personal assistants; BGN 12 Mn for the minimum amount of the unemployment benefit increased as of October 1, 2020; BGN 4 Mn, from the beginning of October it is envisaged to increase the duration of payment of unemployment benefits by 3 months for persons with minimum benefits; BGN 67 Mn for provision of a net remuneration of BGN 1,000 to the medical specialists involved in the fight against COVID-19 on the first line until the end of 2020; BGN 55 Mn for tour operators who use air carriers with a valid operating license to operate charter flights to the Republic of Bulgaria for tourism purposes will be supported by a state subsidy of 35 euros per seat of the maximum passenger capacity of the aircraft for each flight. and several other measures. **Forgone revenue** (BGN 0.131 bn): • Reduced VAT rate of 9% for restaurant services, books, baby food, wine, beer, tour operators and tourist trips, gyms and sports facilities until end-2021, leading to estimated annual revenue shortfalls amounting to BGN 131 Mn.	0.6	**Deferred revenue**: Deferral of corporate tax payments till June 30.	LC bn	4.6	1.6		LC bn			3.0	1) State-owned Bulgarian Development Bank (BDB): provision of interest-free loans up to BGN 4500 to protect people deprived of work (12 commercial banks expressed interests). Portfolio guarantees by BDB for securing bank loans of up to BGN 300,000. Total amount is projected at BGN 2 bn (estimated contingent liability is BGN1.5 billion). 2) The Fund of Funds: Loans up to BGN 50 thousand for micro enterprises, self-employed, entrepreneurs from vulnerable groups (disabled, young people up to 29 years, unemployed for more than 6 months). Interest rate subsidy for loans to SMEs up to BGN 3.6 Mn (estimated contingent liability is BGN 680 Mn). Equity investment with an average investment of about BGN 800,000 for companies, especially in startups, innovation, and digitalization. 3) JEREMIE (EIF) for loans, where the maximum guarantee / credit amount for SMEs and medium-sized enterprises is up to BGN 3.6 Mn revolving financing (estimated contingent liability is BGN 720 Mn). 4) Urban Development Funds, managed by the Fund of Funds for long-term investment and working capital loans up to BGN 40 mn, targeting municipalities, PPPs and businesses hit by the crisis.
		USD bn	1.8	0.5		1.4		0.4		USD bn	2.7	0.9	• Capital increase in the state-owned bank (BGN 700 Mn) • Financial supports through other state-owned entities and other EU-affiliated institutions, including 1) BGN 344 Mn secured through the Fund of Funds, 2) BGN 160 Mn through JEREMIE (EIF), 3) BGN 418 Mn though the Urban Development Funds.	USD bn			1.8	
		% GDP	2.7	0.7		2.0		0.5		% GDP	4.0	1.4		% GDP			2.6	
Chile	Central Government	LC bn	16,500	1,400	**Additional spending**: Financing of additional healthcare equipment, instruments, laboratories, contracting of emergency personnel and extension of working hours, etc.	15,100	**Additional spending**: Accelerated pay to government's suppliers, cash transfers for the most vulnerable, enhanced unemployment insurance, loan guarantees. **Forgone revenue**: Suspension of monthly provisional payments of corporate income tax for the next 3 months (allow liquidity of up to US $ 2.4 bn); reduction of the Stamp and Seals tax.	4,500	**Accelerated spending:** • Early tax refunds of SMEs. • Accelerated pay of public procurement obligations. **Deferred revenue:** • Tax deferrals (corporate income tax, VAT, property).	LC bn	4,500			LC bn			4500	
		USD bn	21	1.7		19		5.6		USD bn	5.6			USD bn			5.6	Loans to unemployment insurance fund and capitalization of state-owned financial institutions to provide loan guarantees.
		% GDP	8.4	0.7		7.7		2.3		% GDP	2.3			% GDP			2.3	

Country /1	Government Level		A. Above-the line measures								B. Below the line measures			C. Contingent liabilities			
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Colombia	General Government	LC bn	26,836	9,008	**Additional spending:** • Additional resources for health sector budgetary support from central government (around 0.8 percent of GDP). • Additional payment to first line respondent health workers for 450 thousand million pesos, transfer of 243 thousand million pesos to cover hospital payrolls. **Forgone revenue:** a reduction of tariffs for strategic health imports, no VAT on over 100 medical goods.	17,828	**Additional spending:** • Expanded transfers for vulnerable groups including expanded social programs and support to workers in the informal sector. • Support for recently unemployed workers. • Payroll subsidy for three months equivalent to 40 percent of the minimum wage per worker for businesses with a revenue fall above 20 percent and a subsidy worth 50% of June's bonuses for employees earning minimum wage for businesses with a revenue fall above 20 percent **Forgone revenue:** • No road tolls during the quarantine period. • Tariff reduction for soy beans and corn, no VAT for medical supplies and internet connection. • No interest costs on delayed payment of electricity and gas for most strata 1-4 households. Lowered interest rate on tax arrears. • No VAT on new trucks until 2021. • For a duration of six months, public sector workers earning between Col Pesos 10-15 mn will pay additional taxes worth 10% of their salaries, those earning above 15 mn will contribute 15%.	400	**Accelerated spending:** Accelerated CIT and VAT refunds for corporates. **Deferred revenue**: Delayed VAT and CIT payments until December.	LC bn	3,503	3,503	• Equity injection for capitalization of Findeter and Bancoldex (Colombian Development Banks) for the purpose of credit lines. • Equity injection for credit lines for payroll, working capital and loan payments, for SMEs and independent workers and for larger companies in the most affected sectors through the National Guarantee Fund (government capitalization of 0.3 percent of GDP to guarantee around 2.2 percent of GDP of loans). • A new National Emergency Mitigation Fund (FOME) was announced, where the central government partially finances response measures with resources from regional stabilization funds (FAE, FONPET).	LC bn				
		USD bn	7.1	2.4		4.7		0.1		USD bn	0.9	0.9		USD bn				
		% GDP	2.7	0.9		1.8		0.0		% GDP	0.3	0.3		% GDP				
Georgia	General Government	LC bn	2.1	0.5		1.5	**Additional spending:** • Introduced the State Program for Maintaining Prices of Primary Consumption Food Products with subsidies on food supplies from March to May. • Subsidy on utility costs (for electricity and natural gas) for low-level consumers from March to May. • Cash transfers to vulnerable families and to compensate job loss including: provision of 1,200 GEL over the course of 6 months to individuals who lost their jobs or were put on an unpaid leave; one-time assistance of 300 GEL to people who are self-employed or employed in the "informal sector"; as well as support to extremely poor families; children in poor families; invalids and invalid children. • Support to businesses in the form of a credit guarantee scheme for SMEs, microgrants, support to the agriculture sector and construction sector including through the acquisition of houses for refugees. **Forgone revenue:** • Income tax relief to businesses who retain workers. Over the course of 6 months: (1) salaries up to 750 GEL will be fully exempt from income tax; and (2) for salaries up to 1,500 GEL, 750 GEL will be exempt from income tax. • Property tax waiver to the tourism sector.		**Accelerated spending:** Accelerated VAT refunds. **Deferred revenue:** • Suspension of property and income taxes for the tourism sector until November 2020. • Extension of customs clearance term for vehicles imported before April (until September).	LC bn	0.1	0.1		LC bn				
		USD bn	0.6	0.2	**Additional spending:** Support to public clinics, provision of lab tests; treatment of patients; medical supply and equipment acquisition. **Forgone revenue:** VAT waiver on the supply of pharmaceutical goods produced nationally.	0.5				USD bn	0.0	0.0	• Within the frame of the new program "Co-financing Mechanism for Supporting Family-owned, Small and Medium-size Hotel Industries", Enterprise Georgia (the agency of the Ministry of Economic and Sustainable Development of Georgia) will co-finance up to 80 percent of the annual interest rate on loans issued to family-owned, small and medium-sized hotels.	USD bn				
		% GDP	4.1	1.0		3.1				% GDP	0.0	0.0		% GDP				
Kazakhstan	Central Government	LC bn	1,400	n.a.		n.a.	**Additional spending**: Cash payments to the unemployed, self-employed, and to a broader segment of the vulnerable population; cash transfer program to individuals who lost their jobs due to quarantine; distribution of food and household products; measures to support employment under the "Employment Roadmap" initiative (including some large-scale projects to modernize transportation infrastructure); credit subsidies to farmers. **Forgone revenue:** Measures include tax breaks for large trade centers, cinemas, which are closed during to COVID-19; tax exemptions for individual entrepreneurs and SMEs; VAT exemptions on food and socially important goods and services (such as lower utility rate); additional support to hard-hit industries (e.g. VAT exemptions for civil aviation; land tax and VAT exemptions for tourism; land tax exemption for agricultural producers; property tax exemptions for SMEs in vulnerable sectors).	n.a.	**Deferred revenue:** • Postponement of tax reporting from Q2 to Q3.	LC bn	1,900	1,300		LC bn	600			
		USD bn	3.4		**Additional spending**: One-month salary bonus for medical staff, wage increase for health sector employees, and access to medical care to uninsured citizens, among other healthcare expenses.					USD bn	4.6	3.2	• Subsidized lending will be provided under the state program ("Economy of Simple Things", KZT 1 tn), along with policy to help SMEs finance working capital.	USD bn	1.5	• Core enterprises to receive preferential treatment from the state, including loan guarantees and liquidity support, provided that they preserve employment, support domestic suppliers, and meet certain transparency and governance requirements.		• The SME working capital financing (KZT 600 bn) program will be financed by Kazakhstan stability fund, a subsidiary of the National Bank of Kazakhstan.
		% GDP	2.1							% GDP	2.8	1.9		% GDP	0.9			
Mauritius	General Government	LC bn	8.1	1.3		6.8	**Additional spending**: Implementation of a Wage Support Scheme and Self-Employed Assistance Scheme, providing financial support during March to June to employees who become unemployed on a temporary basis, as well as those employed in informal sectors or self-employed. The schemes were extended to July for employees in the tourism sector only. **Forgone revenue:** A range of small tax reductions, such as cutting a 1% levy on the tourism sector to 0.5% and reducing port taxes.					LC bn	144	4.3	• The State Investment Corporation will raise Rs 4 bn (0.7 percent of GDP) to make equity investments in troubled firms, including SMEs. • The Development bank will give Rs 0.2 bn (0.04 percent of GDP) in credit for firms short on cash. • Established COVID-19 Solidarity Fund to fund COVID-19 related projects, with around Rs145 min raised by early May.	LC bn	140			The Parliament amended the law governing the central bank to allow for a range of unconventional financing measures, including 1) one-off exceptional transfer (grant, not advance) from the central bank to the government of the amount R60 bn (12% GDP); 2) setting up an SPV The Mauritius Investment Corporation - with a 2-fold objective: 1. invest in local companies to support the recovery and mitigate contagion of the ongoing economic downturn to the banking sector, thus limiting macro-economic and financial risks; 2. transfer US$2 bill from FX reserves to the SPV to finance different potential investments.
		USD bn	0.2	0.0	**Additional spending**: Increase in general public health spending.	0.2				USD bn	3.7	0.1		USD bn	3.6			
		% GDP	1.8	0.3		1.5				% GDP	32.0	1.0		% GDP	31.0			

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North Macedonia	General Government	LC bn	14	0.4		14	**Spending Measures:** Targeted subsidies on private sector wages and social security contributions (for April, May, and June); a subsidy for those part of the informal economy; cash vouchers for minimum wage earners, the unemployed, recipients of social assistance and young people; partial reimbursement of university tuition fees and IT courses; loans at favorable terms and loan guarantee schemes for MSMEs subsidized by the government; targeted support for the agricultural, textile, and some other sectors.			LC bn	9.9			LC bn			9.9	
		USD bn	0.3	0.0	**Non-Spending Measures:** Abolished the import duty on medical supplies	0.3	**Non-Spending Measures:** Lowering the late interest rate for public taxes and duties from 0.03% to 0.015%.			USD bn	0.2			USD bn			0.2	Several interest free or low interest rate loans to SMEs from the MKD development banks channeled through commercial banks
		% GDP	2.1	0.1		2.0	Lowering the penalty rate, by 50% i.e. to 5% for corporates and to 4% for the households.			% GDP	1.5			% GDP			1.5	
Pakistan	Central Government	LC bn	828	178		650		480		LC bn	n.a.			LC bn	n.a.	Risk sharing facility under the refinance scheme for the payment of wages and salaries to prevent layoffs, whereby the Government of Pakistan bears 60 percent first loss on disbursed portfolio for eligible SMEs	n.a.	
		USD bn	5.2	1.1	**Additional spending**: Increase general public health spending for National Disaster Management Authority (NDMA) to procure healthcare equipment and kits (PKR 75 billion). Budget allocation for an emergency fund to combat Covid-19 (PKR 100 billion). **Forgone revenue:** Tax exemptions on health supplies.	4.1	**Additional spending** (PKR 600 billion): Cash transfers to daily wage workers (PKR 200 billion); cash transfers to low-income families (PKR 150 billion); funding to utility stores (PKR 50 billion); financial support to exporters, SMEs, and agricultural sector (PKR 200 billion). **Forgone revenue**: • Relief on fuel prices (PKR 50 billion); • Special tax regime and no wealth declaration for construction sector projects launched until end 2020 (no cost estimate).	3.0	**Accelerated spending:** • Accelerated tax refunds (PKR 100 billion) and duty drawbacks for exporters. • Accelerated procurement of wheat (PKR 280 billion). **Deferred revenue:** • Deferral of tax filing by 3 months. • Power and gas bill deferral (PKR 100 billion).	USD bn				USD bn				
		% GDP	2.0	0.4		1.6		1.2		% GDP				% GDP				
Peru	General Government	LC bn	45	3.0	**Additional spending**: purchase of medical equipment, cleaning kits for schools, new hiring, enhanced monitoring and information campaigns. **Forgone revenue:** • Elimination of import taxes for medical health supplies.	42	**Additional spending:** • Cash transfers for poor families, independent workers, and other families in need. • Electricity subsidy. • Tablets for students. • Public works and other public investment projects.	14	**Deferred revenue:** • Income tax deferrals for individuals and businesses. • Extension in declaration deadline of tax payments for households and SMEs.	LC bn	63			LC bn	63	• Guarantees to new financial sector loans for working capital, primarily targeted to SMEs. The program is also tied to a liquidity provision program in which the central bank can accept the guaranteed loans for repo operations. It also includes an Enterprise Support Fund program for SMEs and micro enterprises.		
		USD bn	13	0.9		12		3.9		USD bn	18			USD bn	18			
		% GDP	6.6	0.4		6.1		2.0		% GDP	9.2			% GDP	9.2			
Philippines	Central Government	LC bn	422	64	**Additional spending**: Spending on medical buildings, equipment, staff, and medical supplies. **Forgone revenue:** Expedite imports of PPEs and medical goods.	358	**Additional spending (316bn):** Cash aid to low-income households and social protection measures for vulnerable workers. **Forgone revenue** (42 bn): Planned corporate income tax rate reduction from 30 to 20 percent starting in July 2020.			LC bn	194	72.8	• Loans to the agriculture sector under the Survival and Recovery Aid Program. • Equity injection to support loan programs for SMEs.	LC bn	120		1.0	
		USD bn	8.5	1.3		7.2				USD bn	3.9	1.5		USD bn	2.4	• Credit guarantees for small businesses and support to the agriculture sector.	0.0	• Microfinancing special loan package for affected micro entrepreneurs and MSMEs.
		% GDP	2.3	0.4		2.0				% GDP	1.1	0.4		% GDP	0.7		0.0	
Poland	General Government	LC bn	152	8.5		143	**Additional spending** (PLN 128 bn): Wage subsidies for employees of affected businesses up to 40 percent of average wages; care allowance for children owing to school closures; monthly benefit for self-employed individuals; establishing a public infrastructure investment fund. Includes the nonreturnable portion of the Polish Development Fund's provision of liquidity loans and subsidies that is treated as above-the-line expenditure item. **Foregone revenue:** (PLN 15.2 bn or 0.7 percent of GDP) For micro firms up to 9 employees social insurance contributions will be covered by the budget for 3 months. For companies employing from 10 to 49 employees 50 % of social insurance contributions will be paid by the budget.	n.a.	**Deferred revenue**: Postponement of social insurance contributions. Possible deferral, payment in installments of taxes.	LC bn	114	40		LC bn	74			
		USD bn	39	2.2	**Additional spending** (8.5 bn or 0.4 percent of GDP): Allocated to support patient care, co-finance healthcare infrastructure improvements, and telemedicine and digitalization.	37				USD bn	29	10.2	The share of below-the-line activity in the PFR liquidity loans for firms (PLN 100 billion total, of which PLN 40 billion will be recognized below the line).	USD bn	19	• Credit guarantees and micro-loans for entrepreneurs from the Polish Development Fund and BGK state-owned development bank estimated to be 74 bn (3.4 percent of GDP)		
		% GDP	6.7	0.4		6.3				% GDP	5.0	1.8		% GDP	3.3			

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Romania	Central Government	LC bn	23	11.8		11				LC bn	34	1.7		LC bn	32	• Loan guarantees up to 80% of the value of the financing granted to SMEs for working capital and investment. (maximum value of the line of credit for financing the working capital is 5 million lei and for investments 10 million lei).		
		USD bn	5.4	2.8	**Additional spending**: RON3.8 billion for health sector o/w RON0.5 billion for increase in healthcare workers' wages and RON1 billion for sick leaves; RON2.25 billion under the World Bank disaster and risk management facility; and RON0.4 billion additional resources for health budget. Financial support to quarantine centers (0.7 billion RON) Purchase of medical and protective equipment (reallocation of EU Funds) (1.75 billion RON); Increasing the health budget via 2nd budget revision for health programs, sick leaves (2.9 billion RON)	2.6	**Additional spending**: Paying 75 percent of the gross wage to employees of companies facing difficulties (RON4 billion); paying 75 percent of gross wage to affected self-employed and individual enterprises (RON2 billion); covering partially the wages of parents staying home when schools are closed (RON1.5 billion); Reserve Fund (3 billion RON); continue to pay technical unemployment benefits to those returning to work of up to 41% of base wage (for 3 months) (3.3 billion RON; The state finances 75% of the gross salary for professional athletes (160 million RON); employers hiring job-seekers over 50 or below 30 or Romanian citizens returning to the country after losing their jobs abroad, can receive a monthly allowance of 50% of the gross salary conditioned to maintaining the employment relationship for one additional year after the end of the hiring support measure and quarantine days are treated as paid sick leave.		**Deferred revenue**: Deferring by 3 months the payment of property taxes; expediting VAT refunds; temporary suspension of tax controls and enforcement; and deferral of rent and utility payments for affected SMEs.	USD bn	8.0	0.4	• RON1.1 billion loan to buy medical supplies granted to pharmaceutical SOE; and RON0.6 billion loan to low-cost carrier Blue Air and state-owned airline Tarom.	USD bn	7.6	• Loan guarantees up to 90% of the value of the financing for micro-enterprises or small enterprises, for financing of working capital (maximum value RON 500,000 for micro-enterprises and RON 1 million for small businesses. Interest is subsidized for all loans. • State guarantees for leasing of work equipment for SMEs. The guarantee is up to 80% loan for IT equipment, and 60% for other technological equipment. The maximum value of the financing will be 5,000,000 RON. The leasing period will be 72 months. • State guarantee scheme for large companies to be implemented by state-owned Eximbank. The guarantee is up to 80% of loan • State guarantees for factoring (SMEs) • State guarantees for holiday vouchers and trade credit insurance (SMEs)		
		% GDP	2.2	1.1	**Forgone revenue:** Capping the fee on medicine sales; suspending VAT for medical imports.	1.0	**Forgone revenue:** 5 to 10 percent discount for corporate income tax payments.			% GDP	3.2	0.2		% GDP	3.0			
Serbia	General Government	LC bn	308	73		235	**Additional spending:** Wage subsidies (RSD 93bn): (i) Payment of 3 minimum wages for all employees in SMEs and entrepreneurs (about 900,000 employees) (ii) Payment of 50 perfect of minimum wages to large companies for employees who are not working One-off payment to all pensioners (RSD 7bn) New loans to SMEs from the Development Fund (RSD 24bn) Universal cash transfer of EUR 100 to each citizen over 18 years old (about RSD 70bn) Support to 14,000 most vulnerable women in 50 municipalities across Serbia (worth RSD 12bn) in hygiene packages and essential foods	151	Tax and SSC deferments (RSD 121bn or 2.2 percent of GDP), to be repaid in 24 installments starting from 2021: (i) Deferment of labor taxes and SS contributions for all private companies for three months, with no interests to be applied; (ii) Deferment of Q2 CIT payments; and (iii) Grants and donations exempt from paying VAT. Deferment of labor taxes and social security contributions for all private companies extended for an additional month (RSD 30 billion).	LC bn	77			LC bn	57		20		
		USD bn	2.9	0.7	· 10 percent wage increase for public healthcare sector (RSD 13bn) · Increased healthcare spending (about RSD 26bn though recently reported to be higher- as much as RSD 60bn)	2.2		1.4		USD bn	0.7			USD bn	0.5	• A state guarantee scheme for bank loans to SMEs has been approved (exposure of RSD 56.5bn)	0.2	EUR 200mn (0.4 percent of GDP) subsidized loans (1 percent interest rate) to SMEs from the Development Fund
		% GDP	5.6	1.3		4.3		2.8		% GDP	1.4			% GDP	1.0		0.4	
Thailand	Non-financial Public Sector	LC bn	1,277	n.a.		n.a.	**Additional spending:** • Paid training and community activities to improve skills of the recent graduates looking for jobs; assistance to workers, farmers, and entrepreneurs affected by Covid-19 (includes THB 5,000 per person per month for 3 months, for 14 million qualifying workers not enrolled in the social security system and 10 million farmers). • Stimulus package to the tourism sector amounting to THB 22.4 billion including subsidies for 5 million domestic trips between July and October, 2020 (40 percent of certain accommodation, event and food costs). • Transfers to elderly, children up to 6-years-old, and holders of state-welfare cards that had previously not received assistance linked to the impact of Covid-19. This program covers about 6.8 million people with approximate cost of THB 20 billion.			LC bn	665	90		LC bn	325		250		
		USD bn	42		**Additional spending**: Preventive and remedial measures; extra-hazard compensation for healthcare workers; exempted import duties for products related to combatting Covid-19 until September 2020.		**Forgone revenue:** • 41 billion baht in discounts and refunds of water and electricity bills; reduced social security fund contributions for both employers and workers; rental fees levied on leases for residential or agricultural purpose waived for one year; SMEs that keep their employees can claim a tax deduction for 3 times wage expenses paid from April to July 2020; SMEs with soft loans from Government Saving Bank can deduct 1.5 times interest expenses paid April-December 2020. 400,000 baht limit (form 200,000) for tax deduction of investments in the Super Saving Fund. • Tax relief including for i) for personal income tax deduction for health insurance premium; ii) import duties for products preventing related to prevention or treatment of Covid-19 exempted until September 2020; iii) from January 2020 to December 31, 2021 taxes are exempted and fees are cut for debt restructuring with non-financial creditors; iv) reduction in excise tax on jet fuel for domestic flights; reduced withholding tax.		**Deferred revenue**: Tax relief for businesses: (i) corporate income tax deadline extended to August and September; (ii) one month extension of deadline for filing and payment of VAT, Special Business Tax, and other taxes under the Revenue Department; (iii) Filing of excise tax extended to May and payment to July; (iv) Filing of excise tax by petroleum product operators extended to the 15th of the following month for 3 months. • Expedited VAT refund process for exporters. • Delay in collection of fees and charges levied by government agencies and SOEs.	USD bn	22	2.9	• Soft loans by Social Security Office (30 billion baht at 3 percent) to businesses registered under the Social Security System. • Soft loans for individuals: (i) THB 40 billion soft loan program at 0.1 percent interest without collateral; (ii) THB 20 billion made available for THB 50 thousand baht per person with collateral.	USD bn	11	• The Bank of Thailand has been authorized to lend THB500 billion to financial institutions for on-lending to SMEs. Financial institutions will be compensated up to 60 or 70 percent of the additional loans in case these turn nonperforming.	8.2	• THB 150 billion in soft loans (2 percent interest) sourced from the Government Saving Bank to commercial banks at 0.01 interest per year. THB10 billion out of the 150 bn are set out to lend and preserve liquidity among SMEs in tourism. •THB 100 billion announced but not yet approved in soft loans from the Government Saving Bank for SMEs in the tourism sector.
		% GDP	8.2							% GDP	4.3	0.6		% GDP	2.1		1.6	

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Tunisia	General Government	LC bn	2.1	0.3		1.8	**Additional spending** (TND 1.77 bn): Monthly cash transfers for low income households, disabled, and homeless people for up to three months; temporary support for unemployed and self-employed; strategic stock of basic food items; continued payments of benefits for ALMPs; activation of mechanism for the State to take charge of the interest rate differential between the monetary market rate and the effective interest rate, on investment loans for SMEs (max 3%); creation of a special program for the support of social work institutions and job creation for vulnerable classes.	0.6		LC bn	1.3	1.1		LC bn	0.2			
		USD bn	0.8	0.1	**Additional spending** (TND 0.3 bn): Additional health spending, including the creation of a fund for the acquisition of equipment for public hospitals (TND 0.1 bn). **Forgone revenue:** Waiver of VAT for businesses selling medicines (TND 0.03 bn).	0.6	**Forgone revenue** (TND 0.03 bn): Suspension of penalties for delayed tax returns for three months, starting April 1. Amnesty on customs offenses against industrial establishments convicted before March 20, 2020 (with the latter required to pay the amounts due to customs with a 10% fine). Allow companies to revalue their assets based on real value, while exempting the goodwill.	0.2	**Accelerated spending:** • Accelerated VAT refunds. **Deferred revenue**: • Postponement of CIT payments, other taxes, and social contributions until June. • Rescheduling tax arrears for up to 7 years. • Deferral of car road tax payments.	USD bn	0.5	0.4	• Establishing a financing line for SMEs (TND 0.3 bn). • Some extra-budgetary funds on public donation to the health sector (TND 0.186 bn). • Investment fund to finance private companies to preserve jobs (TND 0.5 bn). • A bridging fund for repurchase of shares in investment funds (TND 0.1 bn).	USD bn	0.1	• Allow the State to guarantee new credits amounting to TND 1.5 bn for management, operation and maintenance provided by the banking system until December 31, 2020 reimbursable over seven years, including a two-year grace period in sectors such as tourism, transport, culture, etc.		
		% GDP	1.9	0.3		1.6		0.5		% GDP	1.2	1.0		% GDP	0.2			
United Arab Emirates	General Government	LC bn	27	n.a.		n.a.	**Additional spending**: Federal government has introduced support measures for the private sector by reducing various government fees and accelerating existing infrastructure projects. Abu Dhabi: AED 9 bn ($2.5 bn) announced by the government as part of the ongoing "Ghadan-21" fiscal stimulus program; provide additional water and electricity subsidies. Dubai: provide additional water and electricity subsidies.			LC bn	n.a.	n.a.		LC bn	n.a.		n.a.	
		USD bn	7.4		**Additional spending:** Additional disinfection procedures carried out in health, education and other public facilities. Active screening and testing, continuous surveillance and rapid response team to deal with suspected cases.		**Forgone revenue:** Abu Dhabi: announced a reduction or suspension of various government fees and penalties, as well as a rebate on commercial lease payments in the tourism and hospitality sectors. Dubai: reduce government fees and simplify business procedures.			USD bn			• The Abu Dhabi government announced provision of loans to SMEs. • State-owned enterprises and banks support the private sector through loan restructuring, lowering lease payments (by real estate companies), halting evictions etc.	USD bn		• Abu Dhabi: Credit guarantees and liquidity support to small- and medium-sized enterprises.		• State-owned enterprises and banks have been asked to support the private sector through loan restructuring, lowering lease payments (by real estate companies), halting evictions, etc.
		% GDP	2.1							% GDP				% GDP				
Bangladesh	Central Government	LC bn	295	20		275	**Additional spending:** **· Expansion of existing social transfer programs for vulnerable households, including allowance programs and food aid distribution; Cash assistance to the jobless poor affected by COVID-19 (Corona-Cash).** **· Wage support (50bn loan) for export-oriented industries; working capital loan interest subsidies (30bn) for COVID-19 affected large industries and the service sector, and Cottage, Micro, Small and Medium Enterprises (CMSMEs); interest waiver subsidies (20bn); and housing scheme support.** **· Subsidies to the agriculture sector (e.g. purchase of fertilizer and agriculture machinery, government procurement).**			LC bn				LC bn				
		USD bn	3.4	0.2	**Additional spending**: Additional spending on healthcare equipment, testing; compensation against COVID-19 related health risks of officials, doctors and field staff; hiring of additional healthcare workers, etc. **Forgone revenue**: The National Board of Revenue has temporarily suspended duties and taxes on imports of medical supplies, including protective equipment and test kits.	3.2	**Forgone revenue:** **· Income tax relief e.g. increase in tax-free limit (from 2.5 to 3.0 lakh for males, from 3.0 to 3.5 for females), reduction in minimum tax rate from 10% to 5% and in the maximum tax rate from 30% to 25%, and introduction of a tax rebate for taxpayers who file income tax returns online for the first time.** **· Corporate tax reductions e.g. reduction in tax rate for non-publicly traded companies from 35% to 32.5%, reduction of tax rate at source of local supply of essential commodities, and withholding tax rate on export proceeds is reduced from 1% to 0.5%.** **· VAT rate reductions (e.g. Advance Tax on imported raw materials for manufacturing industries) and exemptions (penalty and interest in case of failure to submit the VAT return and pay income tax on time).** **· Preferential treatment on import duties for various essential raw materials for targeted industries.**			USD bn				USD bn				
		% GDP	1.0	0.1		1.0				% GDP				% GDP				
Ethiopia	Central Government	LC bn	51	16		35	**Additional spending**: Emergency food distribution to vulnerable individuals; emergency shelter and non-food items, additional protection of vulnerable groups, additional education outlays, logistics, and agricultural sector support.			LC bn	21	21		LC bn				
		USD bn	1.4	0.5	**Additional spending**: Increasing healthcare capacity, diagnostic and medical equipment, boosting human resources. **Forgone revenue:** Import tax exemptions for medical supplies.	1.0	**Forgone revenue:** • Forgiveness of tax debt prior to 2014/15 and amnesty on interest and penalties for tax debt pertaining to 2015/16-2018/19.			USD bn	0.6	0.6	• Capital injection into the Development Bank of Ethiopia by the Ministry of Finance. Not strictly related to Covid, but aimed at facilitating lending by DBE to private enterprises.	USD bn				
		% GDP	1.5	0.5		1.1	• Exemption from personal income tax withholding for 4 months for firms who keep paying employee salaries despite not being able to operate due to Covid-19.			% GDP	0.6	0.6		% GDP				
Ghana	Central Government	LC bn	11.2	0.6	**Additional spending**: address availability of test kits, pharmaceuticals, equipment, and bed capacity. Investment in healthcare infrastructure, including the construction or upgrade of 100 district and regional hospitals.	10.6	**Additional spending**: •The government committed US$100 million to support preparedness and response, and about US$160 million under its Coronavirus Alleviation Programme to the promotion of selected industries (e.g., pharmaceutical sector supplying COVID-19 drugs and equipment), the support of SMEs, and employment.	n.a.	**Deferred revenue**: • Tax filing dates were extended by six months.	LC bn	1.2	1.2		LC bn				
		USD bn	1.9	0.1		1.8				USD bn	0.2	0.2	• Soft loan scheme to support MSMEs including a one-year postponement of interest payments for non-marketable debt and a two-year repayment period.	USD bn				
		% GDP	2.9	0.1	**Forgone revenue:** Tax waiver for health personnel.	2.7	• Food packages and National Buffer Stock Company and subsidies for water and sanitation bills. • Subsidies for water and sanitation bills.			% GDP	0.3	0.3		% GDP				

Country /1	Government Level	A. Above-the line measures								B. Below the line measures			C. Contingent liabilities				
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Guinea-Bissau	Central Government	LC bn	13	11	**Additional spending:** Emergency measures to upgrade the main national hospital, pharmaceuticals, food provision and medical equipment to the country's hospitals. Higher permanent transfers to the main hospital.	2.3				LC bn	15	15		LC bn				
		USD bn	0.0	0.0		0.0	**Additional spending:** Includes CFAF 580 million (US$ 1 million or 0.07 percent of GDP) used to distribute rice and sugar to households. Other transfers to households are planned.			USD bn	0.0	0.0	Loans to banks for on-lending to the cashew sector.	USD bn				
		% GDP	1.6	1.3		0.3				% GDP	1.8	1.8		% GDP				
Honduras	Central Government	LC bn	14	5.6		8.0	**Additional spending:** Temporary unemployment benefits to formal workers (0.6 percent of GDP), delivery of food supplies to poor families (0.2 percent of GDP), and cash transfers to informal workers (0.4 percent of GDP).		**Deferred revenue**: Congress approved deferrals to the second half of 2020 and early 2021 for payments of income taxes and social contributions, favoring especially SMEs. VAT payments were also deferred for SMEs in non-essential sectors not operating during the curfew.	LC bn	12			LC bn	6.9	• Public development bank Banhprovi will provide $275 mn in guarantees to cover potential losses on new loans to SMEs and other companies, with varying coverage of commercial banks' exposures on the loans covered by the guarantee scheme. The scheme will be funded with loans from the regional development bank CABEI.	5.6	
		USD bn	0.5	0.2	**Additional spending**: medical supplies, personnel, adaptation of facilities.	0.3	**Foregone revenue:** Measures on medical supplies and free economic zones (0.1 percent of GDP).			USD bn	0.5			USD bn	0.3		0.2	• Public development bank Banhprovi will deploy additional $225 mn to finance loans to SME and other sectors affected by the pandemic.
		% GDP	2.3	0.9		1.3				% GDP	2.1			% GDP	1.1		0.9	
Kenya	Central Government	LC bn	250	7.6		242	**Additional spending (56 bn)**: Social protection and cash transfers; food relief; and funds for expediting payments of existing obligations to maintain cash flow for businesses during the crisis, rehabilitate road and school infrastructure; hiring of teachers; supply of farm inputs; improve market access for farmers; renovation of tourist facilities.	33	**Accelerated spending:** • Expedite payment of all verified VAT refunds; or in the alternative, allow for offsetting of withholding VAT, in order to improve cash flows for businesses. • Payment of verified pending bills to improve liquidity in the economy and ensure businesses remain afloat by enhancing their cash flows.	LC bn				LC bn				
		USD bn	2.4	0.1	**Additional spending**: Recruitment of additional health workers, expansion of hospital bed capacity, enhanced surveillance, laboratory services, isolation units, equipment, supplies, and communication.	2.3	**Forgone revenue (186 bn):** Full income tax relief for persons earning below the equivalent of $225 per month, reduction of the top pay-as-you-go rate from 30 to 25 percent, reduction of the base corporate income tax rate from 30 to 25 percent, reduction of the turnover tax rate on small businesses from 3 to 1 percent, and a reduction of the standard VAT rate from 16 to 14 percent.	0.3		USD bn				USD bn				
		% GDP	2.3	0.1		2.3		0.3		% GDP				% GDP				
Myanmar	Non-financial Public Sector	LC bn	832	185	• Extend and Improve Quarantine Centres/Facilities; · Importation of Key Medical Products; upgrade Existing Health Facilities based on different priority levels; · Ensure regular, stable electricity supply (including through provision/purchase of generators and fuel) for specialized medical (and associated) facilities handling COVID-19 affected patients in States and Regions where electrification levels are low. · Ensure refrigeration for cold chain maintenance for vaccinations and special drugs	647	**Additional spending:** Cash transfers, food, cash-for-work, pension support, health benefit extension. Support for productivity enhancement in businesses. Waive the 2% Withholding Tax on exports. Further tax relief on additional salary and wage expenses and additional expenditures for capital equipment during Income Year 2019-2020 was granted by an order of the President Office on June 12. **Forgone revenue:** Exempt electricity tariffs for all households (excluding embassies and international organizations) up to 150 units per month for April, May and June, and 75 units for July.			LC bn	300	300		LC bn				
		USD bn	0.5	0.1		0.4				USD bn	0.2	0.2	Establish funds to on lend to support SME, MFI, small farmers, trade financing. Additional 100 billion kyat from re-appropriation of ministries' budget was allocated to COVID-19 Fund for providing soft loans to COVID-19 affected businesses.	USD bn				
		% GDP	0.7	0.2		0.6				% GDP	0.3	0.3		% GDP				
Nepal	General Government	LC bn	68	50		18	**Additional spending**: • Local governments have been instructed to provide for the daily food needs of vulnerable groups (0.5 percent of GDP). · There will be tax exemptions for landlords who exempt vulnerable renters from paying one month's rent. · The government will offer a 10 percent discount on food purchases from its stores. · The government will provide discounts on utility payments (electricity, internet) and extensions of utility payment deadlines. (0.1 percent of GDP). · There are support measures targeted to informal sector workers who have lost their jobs due to the ongoing crisis, which includes deploying them in public works projects or paying 25 percent of local daily subsistence wage (0.2 percent of GDP). · Employment-creation programs (0.5 percent of GDP).			LC bn	51	51		LC bn				
		USD bn	0.6	0.4	0.7 percent of GDP is the estimated cost of treating COVID cases, including through the establishment of necessary facilities, and 0.6 percent of GDP is the estimated cost of additional medical supplies (0.3) and additional incentive payments to healthcare workers (0.3).	0.2				USD bn	0.4	0.4	Lending program to provide support for small and medium-sized enterprises and firms in tourism sector (1.4 percent of GDP)	USD bn				
		% GDP	1.8	1.3		0.5	**Forgone revenue**: Customs duties on the import of medical goods will be waived and the deadline for tax payments will be extended (combined 0.3 percent of GDP).			% GDP	1.4	1.4		% GDP				
Niger	Central Government	LC bn	58	26		33	**Additional spending:** • Compensation for job losses and to businesses for loss of value added. • Support to vulnerable households, food and cash transfers; 2 month-suspension of utility bills for vulnerable households. • Increase social assistance packages; Support to informal enterprises, formal sector for the lost values, and formal job loss for the next 6 months. • Support to local industries, agriculture and food production.			LC bn	100	50		LC bn	50			
		USD bn	0.1	0.0	• Reinforced protection for medical staff; increased capacity to quarantine; recruitment of 1,500 health workers; set up isolation sites; • Exemption of VAT and duties on medical goods.	0.1	**Forgone revenues:** • Higher depreciation cost allowed in tax declaration for businesses; provide new import credits; delay vehicle taxes; suspension of the uniform informal tax and transport VAT in urban centers.			USD bn	0.2	0.1	Credit support to the private sector in the form of loan guarantees placed in dedicated bank deposits.	USD bn	0.1	There are bank guarantees to the government for unpaid taxes beyond the suspension period announced. Credit support to the private sector in the form of loan guarantees worth 50 bn supporting a total of 150 bn in new loans to private sector.		
		% GDP	0.8	0.3		0.4	• Reduction of VAT on the hotel sector to 10 percent and the exemption of the minimum flat tax (IMF) from 2019 tax declarations. Suspension of tax collection from travel agents, restaurant and the sports sector.			% GDP	1.3	0.6		% GDP	0.6			

Country /1	Government Level		A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
		Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Nigeria	General Government	LC bn	2,300	500		1,800	The Federal Executive Council (FEC) approved the N2.3 trillion stimulus package.			LC bn				LC bn				
		USD bn	6.4	1.4	**Additional spending**: A total of N500 bn was allocated for health sector, including contingency funds released to Nigeria's Center for Disease Control for more testing kits and opening more centers and train medical personnel.	5.0	**Additional spending**: Measures include: mass agriculture program, extensive public work and road construction, mass housing program, strengthening social safety net, support micro, small and medium enterprise. Conditional cash transfers are provided to households on the social register, the coverage of which is being expanded from 2.6m to 3.6m households. School feeding programs continue even with school closures. A Special Public Works program is set up.			USD bn				USD bn				
		% GDP	1.5	0.3		1.2	**Forgone revenue:** Income tax relief and import duty waivers for medicine and medical goods will be introduced. Electricity tariff increases are being postponed.			% GDP				% GDP				
Senegal	Central Government	LC bn	414	79		335.4	**Additional spending (295.4 bn):** (i) social safety net programs: urgent food aid, subsidies to help the most vulnerable to pay utility bills (water, electricity) and support to diaspora (FCFA 103 billion - 0.72% of GDP), (ii) other economic support measures, such as direct support to heavily hit sectors (FCFA 100 bn - 0.70% of GDP), (iii) some arrears to private sector suppliers will be settled faster than originally anticipated (FCFA 87 billion - 0.61% of GDP), and (iv) action on securing key food and energy supplies.	15		LC bn	70			LC bn	70	• Guarantee fund will provide credit guarantees for companies affected by the COVID-19 crisis (CFAF 70 billion) through the budget, including with support from the European Investment Bank, which would leverage another FCFA 130 billion from the banking sector. Money would be deposited in a special account, with the government portion to be called first. Unused resources would flow back to the government.		
		USD bn	0.7	0.1	**Additional spending**: Enhance treatment and testing capacity through procuring medical supplies, improve prevention, intensify communication.	0.6		0.0	**Deferred revenue**: Deadline for payment of suspended VAT extended from 12 to 24 months (CFAF 15 billion). Accelerated refund of VAT credits, deferral of CIT for SMEs and companies in hardest hit sectors.	USD bn	0.1			USD bn	0.1			
		% GDP	2.9	0.6		2.3	**Forgone revenue (40 bn)**: Tax rebates for companies that keep their workers on payroll or pay 70% of salary (FCFA 40 billion - 0.28% of GDP).	0.1		% GDP	0.5			% GDP	0.5			
Uzbekistan	General Government	LC bn	22,200	4,500		17,700	**Additional spending** (8375 billion): • Expanded the number of recipients of social benefits by about 35 percent; • Raised spending to cover the average salary for worker taking care of their children during the quarantine period. • Increased spending to cover leave payments of employees of age 60+ with chronic illnesses (that must stay at home during quarantine period). • Provided assistance to affected businesses via revolving facilities, debt service deferrals at subsidized interest. • Increased spending for public works to support infrastructure in the regions and support employment.			LC bn	11,515	11,515		LC bn				
		USD bn	2.2	0.4	Additional spending on medicines, quarantines, and treatment. Salary supplement for medical employees (6 percent of wage for the time engaged in anti-COVID-19 measures).	1.8	**Forgone revenue** (5000 billion): • Reduction of minimum payment of social tax for individual entrepreneurs (a single tax for small businesses) from UZS 223,000 to UZS 111,500 per month during Apr-Oct 2020: (Central government). Reduced tax rate for usage of water resources for farmland by 50 percent: (Central government); Suspension of tourism tax during Apr-Jul 2020: (Central government); Postponing property tax and land tax during Apr-Oct 2020 - 6 months interest free deferrals: (Central government); Extending the moratorium on tax audits until 2021: (Central government) Delaying tax declarations for 2019 income taxes from April to August: (Central government); • Tourism and hotel activities tax relief: These activities are exempt from paying property and land tax until end of 2020, and social tax rate is reduced from 12 to 1 percent (Central government). SMEs whose revenue drops 50% (m-o-m) can defer payments of turnover tax, land tax, property tax, social and water use tax until October 2020. •Exemption of income tax for self employees			USD bn	1.2	1.2	Government loans to some strategic SOEs (national air carrier) to repay loans and other expenses (for UZS 1 trillion). Rollover loans issued under the government program for individual entrepreneurs (for UZS 1 trillion)	USD bn				
		% GDP	3.7	0.8		3.0				% GDP	1.9	1.9		% GDP				
Vietnam	General government	LC bn	98,500	16,200		82,300	**Additional spending:** Planned cash transfers of VND36 tn a cash transfer package from April to June: (i) the poor and near poor households (VND 250 thousand/person/month); (ii) recipients of social protection program (additional VND 500 thousand/person/month on top of the monthly allowance); (iii) workers who temporarily stopped working (VND 1.8 million/person/month); (iv) unemployed workers without insurance, and self-employed workers (VND 1 million/person/month); (v) households with monthly taxable revenue below VND 100 million that temporarily suspended business (VND 1 million/household/month).	180,000	**Accelerated spending:** Government is targeting 100 percent disbursement of public investment capital valued VND 686 trillion or nearly 9 percent of GDP (of which VND 225 trillion is carried-over from previous years).	LC bn	37,500	9,500		LC bn			28,000	
		USD bn	4.2	0.7	**Additional spending**: Additional spending on medical equipment and materials. Treatment costs of Covid-19 positive patients are covered by either Health Insurance Fund (under Vietnam Social Security) or by the state budget. **Forgone revenue**: Exemption of import tariff for medical material. Suspension of VAT for domestically produced medical material.	3.5	**Forgone revenue:** Raise the deductibles of personal income tax starting in July, including individual thresholds and dependent deduction. Fees reduction for supporting firms and workers, effectively from May through December 2020, including construction and tourism-related fees are cut down by 50 percent. Water resource-related fees were also downward adjusted by 20 percent. Lower business registration fee; streamline tax and custom audit and inspection at firms; continued exemption of agricultural land use tax; corporate income tax relief for SMEs.	7.7	**Deferred revenue:** Payments of VAT, CIT and of land rental fees are deferred by 5 months, and payment of PIT tax obligations is deferred to year-end (total value of VND 180 tn). In addition, affected firms and workers are allowed to defer their contribution (up to 12 months) to the pension fund and survivor-ship fund with no interest penalty for late payment (estimated to be VND 9.5 tn).	USD bn	1.6	0.4	Affected firms and workers are allowed to defer their contribution (up to 12 months) to the pension fund and survivor-ship fund with no interest penalty for late payment (estimated to be VND 9.5 tn).	USD bn			1.2	• Proposal to cut electricity prices by 10 percent for certain enterprises and households, and exempt payment for quarantine zones, with Vietnam Electricity (EVN) bearing costs of price adjustment (0.1 percent of GDP). Moreover, firms receive concessional loans from the development bank (VSBP), financed by the central bank through a refinancing window at zero interest rate, to make salary payments to their workers who are temporarily laid off (0.2 percent of GDP).
		% GDP	1.2	0.2		1.0		2.3		% GDP	0.5	0.1		% GDP			0.4	

		A. Above-the line measures							B. Below the line measures			C. Contingent liabilities				
Country /1	Government Level	Unit	Total on-budget (A-D)	Total size	Additional spending and forgone revenue in the health sector	Total size	Additional spending and forgone revenue in areas other than health	Total size	D. Accelerated spending and deferred revenue in areas other than health	Unit	Total off-budget (B+C)	Total size	Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds	Unit	Total size	Guarantees (on loans, deposits etc.)	Total size	Quasi-fiscal operations (noncommercial activity of public corporations on behalf of government)
Zambia	Central Government	LC bn	7.1	1.0	The government has announced an 8 billion kwacha Covid-19 Mitigation Bond to finance related spending, which includes 1 billion in health-related spending: purchases of equipment and clearance of arrears to local drug suppliers.	6.1	Additional spending: • 3.1 billion to clear arrears to suppliers of goods and services, on VAT refunds, on pensions, as well as third-party arrears to micro-finance institutions. • 0.5 billion for youth empowerment programs; • 1.7 billion for grain purchases; • 0.8 billion for other purposes; **Forgone revenues:** Import duties on mineral concentrate and export duties on precious metals and crocodile skin were suspended. The government has waived tax penalties and interest on outstanding tax liabilities resulting from the impact of COVID-19.			LC bn	0.9	0.9		LC bn				
		USD bn	0.4	0.1		0.3				USD bn	0.1	0.1	Recapitalize NATSAVE (development bank).	USD bn				
		% GDP	2.1	0.3		1.8				% GDP	0.3	0.3		% GDP				

Sources: National authorities and IMF staff estimates.

Note: Total size of on-budget measures (A) does not include accelerated spending and deferred revenues (D). Although the latter incur a change in the timing of the cash flows, there are usually no net impact on reported accrued revenue and expenditure flows in cases where the obligation to pay is unchanged. 'mn', 'bn', and 'tn' refer to million, billion, and trillion respectively; 'LC bn' refers to local currency billion and 'n.a.' are not available. Numbers in U.S. dollar and percent of GDP are based on October 2020 World Economic Outlook projections for 2020 unless otherwise stated. For Argentina, U.S. dollar values use end-August 2020 exchange rate. G20 = Group of Twenty; AE = Advanced Economy; EM = Emerging Market; LIDC = Low Income Developing Country.

1/ The country list includes European Union as well, but the total global fiscal support does not include measures announced by the European Union because those are financing the measures by member states, which are included individually.

Table 1. Summary of Country Fiscal Measures in Response to the COVID-19 Pandemic

(USD billion and percent of GDP)

	USD Billion								Percent of GDP							
	Above the line measures				Liquidity support				Above the line measures				Liquidity support			
	Additional spending or foregone revenues			Accelerated spending / deferred revenue		Below the line measures: equity injections, loans, asset purchase or debt assumptions.	Contingent liabilities		Additional spending or foregone revenues			Accelerated spending / deferred revenue		Below the line measures: equity injections, loans, asset purchase or debt assumptions.	Contingent liabilities	
	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations
G20: Advanced economies																
Australia	**157**	7	150		**24**	10	14		**11.7**	0.5	11.2		**1.8**	0.8	1.0	
Canada	**200**	15	185	63.1	**68**	4	64		**12.5**	0.9	11.6	3.9	**4.3**	0.2	4.0	
European Union	**479**	0	489		**875**	800	74		**3.9**	0.0	3.9		**6.9**	6.3	0.6	
France	**134**	16	118	64.6	**402**	24	378		**5.2**	0.6	4.6	2.5	**15.7**	0.9	14.8	
Germany	**316**	26	289		**1,166**	229	937		**8.4**	0.7	7.7		**30.9**	6.1	24.8	
Italy	**91**	7	84	8.0	**610**	4	606		**5.0**	0.4	4.6	0.4	**33.0**	0.2	32.8	
Japan	**555**	48	508	242.6	**1,163**		146	1,017	**11.3**	1.0	10.3	4.9	**23.7**		3.0	20.7
Korea	**56**	4	51	27.6	**170**		28	142	**3.5**	0.3	3.2	1.7	**10.7**		1.8	8.9
Spain	**45**	6	39		**177**	0	166	11	**3.6**	0.5	3.1		**14.2**	0.0	13.3	0.9
United Kingdom	**241**	41	201	5.1	**437**	1	436		**9.1**	1.5	7.6	0.2	**16.6**	0.0	16.5	
United States	**2,449**	304	2,145	18.0	**510**	56	454		**11.8**	1.5	10.3	0.1	**2.5**	0.3	2.2	
G20: Emerging markets																
Argentina	**15**	1	14	0.1	**8**		8.1		**3.9**	0.2	3.7	0.0	**2.1**		2.1	
Brazil	**113**	12	101	38.9	**86**	13.5		72.9	**8.4**	0.9	7.5	2.9	**6.5**	1.0		5.5
China	**680**	22	658	237.6	**198**		59.4	138.1	**4.5**	0.1	4.3	1.6	**1.3**		0.4	0.9
India	**46**	5	41	9.3	**135**	6.8	116.1	12.2	**1.8**	0.2	1.6	0.4	**5.2**	0.3	4.5	0.5
Indonesia	**29**	5	24		**13**	2.4	10.3		**2.7**	0.5	2.2		**1.2**	0.2	0.9	
Mexico	**7**	2	5	2.1	**5**	1.7		3.0	**0.7**	0.2	0.5	0.2	**0.5**	0.2		0.3
Russia	**35**	3	31	6.0	**15**	1.0	6.9	6.9	**2.4**	0.2	2.2	0.4	**1.0**	0.1	0.5	0.5
Saudi Arabia	**15**	13	3	12.8	**6**	5.9			**2.3**	1.8	0.4	1.9	**0.9**	0.9		
South Africa	**15**	1	14	2.6	**12**		11.7	0.2	**5.3**	0.4	4.9	0.9	**4.3**		4.1	0.1
Turkey	**5**	2	3	9.6	**84**	2.9	66.2	15.3	**0.8**	0.3	0.5	1.5	**13.0**	0.4	10.2	2.4
Other Selected Advanced Economies																
Austria	**36.6**	2.1	34.5		**10.3**		10.3		**8.5**	0.5	8.0		**2.4**		2.4	
Belgium	**20**	4	16	18.4	**59**		59.4		**4.0**	0.7	3.2	3.7	**11.8**		11.8	
Cyprus	**1.0**	0.1	0.9	0.3	**1.1**	0.5	0.6		**4.5**	0.5	4.0	1.5	**4.6**	2.0	2.6	
Czech republic	**11**	3	8	1.6	**37**	0.0	37.3		**4.4**	1.0	3.3	0.7	**15.5**	0.0	15.4	
Denmark	**20**	0	20	26.8	**31**	9.0	21.7		**5.9**	0.0	5.9	7.9	**9.0**	2.6	6.4	
Estonia	**1.1**	0.3	0.8		**1.3**	1.0	0.3		**3.5**	0.9	2.7		**4.4**	3.2	1.1	
Finland	**8**	2	6	4.9	**19**	2.8	14.7	1.1	**3.0**	0.6	2.3	1.8	**7.0**	1.0	5.5	0.4
Greece	**13.3**	0.3	12.9	1.4	**3.0**		3.0		**6.8**	0.2	6.6	0.7	**1.5**		1.5	
Hong Kong SAR	**37.0**	1.3	35.7		**2.6**	0.0	2.6		**10.7**	0.4	10.3		**0.7**	0.0	0.7	
Iceland	**0.9**	0.0	0.9	0.0	**0.9**	0.0	0.9	0.0	**4.2**	0.1	4.1	0.0	**4.4**	0.0	4.4	0.0
Ireland	**23.0**	2.2	20.7	2.8	**9.0**	4.5	4.5		**6.1**	0.6	5.5	0.7	**2.4**	1.2	1.2	
Israel	**25.9**	4.0	21.9	2.1	**11.2**	1.0	10.2		**6.8**	1.0	5.7	0.5	**2.9**	0.2	2.7	
Latvia	**2.6**	0.2	2.4		**1.0**	0.2	0.8	0.0	**8.0**	0.7	7.3	0.0	**3.2**	0.7	2.5	0.0
Lithuania	**2.6**	0.6	2.0	2.5	**2.0**	0.4	1.6		**4.7**	1.0	3.7	4.5	**3.6**	0.7	2.9	
Luxembourg	**3.5**	0.2	3.3	0.0	**4.1**		2.9	1.3	**5.2**	0.3	4.8	0.0	**6.0**		4.2	1.8
Macao SAR	**6.6**	0.1	6.5						**25.0**	0.2	24.8					
Malta	**0.7**	0.1	0.6	0.2	**0.9**	0.0	0.9		**5.0**	1.0	4.0	1.6	**6.2**	0.0	6.2	
The Netherlands	**41**	4	36	30.9	**38**		37.7		**4.6**	0.5	4.1	3.5	**4.3**		4.3	
New Zealand	**31**	1	30		**8**	3.9	4.0		**16.2**	0.3	15.9		**4.2**	2.1	2.1	
Norway	**17**				**19**	5.3	13.8		**5.4**				**6.0**	1.7	4.3	
Portugal	**7.2**	1.8	5.4	9.0	**16.2**	1.4	14.9		**3.2**	0.8	2.4	4.1	**7.3**	0.6	6.7	
Singapore	**53**	1	52		**14**	14.4			**15.6**	0.2	15.4		**4.3**	4.3		
Slovak Republic	**2.5**	0.2	2.3	1.4	**4.6**	0.0	4.6		**2.5**	0.2	2.3	1.4	**4.5**	0.0	4.5	
Slovenia	**4.1**	0.1	4.0		**3.4**	0.7	2.6	0.1	**7.9**	0.2	7.7		**6.6**	1.3	5.1	0.2
Sweden	**28**	2	26	34.3	**28**	1.3	27.2		**5.2**	0.3	5.0	6.5	**5.4**	0.2	5.1	
Switzerland	**34**	3	31		**45**	1.0	44.2		**4.8**	0.4	4.4		**6.4**	0.1	6.3	

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(USD billion and percent of GDP)

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	Above the line measures				Liquidity support				Above the line measures				Liquidity support			
	Additional spending or foregone revenues			Accelerated spending / deferred revenue		Below the line measures: equity injections, loans, asset purchase or debt assumptions.	Contingent liabilities		Additional spending or foregone revenues			Accelerated spending / deferred revenue		Below the line measures: equity injections, loans, asset purchase or debt assumptions.	Contingent liabilities	
	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations
Other Selected Emerging Markets																
Albania	**0.2**	0.0	0.1		**0.2**		0.2		**1.2**	0.2	1.1		**1.7**		1.7	
Algeria	**0.6**	0.2	0.3						**0.4**	0.2	0.2					
Angola	**0.3**								**0.5**							
Antigua and Barbuda	**0.1**	0.0	0.1			0.0			**5.3**	0.3	5.1			0.0		
Armenia	**0.2**	0.1	0.1	0.0	**0.2**	0.2	0.0	0.0	**1.5**	0.6	0.9	0.0	**1.4**	1.4	0.0	0.0
Aruba	**0.2**	0.1	0.1						**10.0**	3.9	6.1					
Azerbaijan	**1.9**	0.2	1.7		**1.0**	0.7	0.3	0.0	**4.7**	0.5	4.1		**2.3**	1.6	0.7	0.0
Bahamas, The	**0.2**	0.0	0.2	0.1	**0.1**	0.1			**2.0**	0.3	1.6	0.8	**0.7**	0.7		
Bahrain	**2.0**	0.5	1.5	0.0	**0.3**	0.0	0.3	0.0	**5.7**	1.4	4.3	0.0	**0.8**	0.0	0.8	0.0
Barbados	**0.1**	0.0	0.1	0.1	**0.1**	0.0	0.1		**1.8**	0.4	1.4	1.4	**3.0**	0.9	2.2	
Belarus		0.0								0.0						
Belize	**0.0**				**0.1**	0.1			**0.7**				**3.6**	3.6		
Bolivia	**2.0**	0.5	1.5	0.0	**4.1**	0.2	2.9	1.0	**5.2**	1.3	3.9	0.0	**10.6**	0.6	7.4	2.6
Bosnia and Herzegovina	**1.0**								**5.2**							
Botswana	**0.2**								**1.1**							
Brunei Darussalam	**0.1**								**1.4**							
Bulgaria	**1.8**	0.5	1.4	0.4	**2.7**	0.9		1.8	**2.7**	0.7	2.0	0.5	**4.0**	1.4		2.6
Cabo Verde	**0.0**	0.0	0.0		**0.0**	0.0	0.0		**1.6**	1.0	0.6		**1.6**	0.0	1.6	
Chile	**20.6**	1.7	18.8	5.6	**5.6**			5.6	**8.4**	0.7	7.7	2.3	**2.3**			2.3
Colombia	**7.1**	2.4	4.7	0.1	**0.9**	0.9			**2.7**	0.9	1.8	0.0	**0.3**	0.3		
Costa Rica	**0.9**	0.2	0.7	0.4					**1.4**	0.3	1.1	0.7				
Croatia	**2.9**	0.1	2.9						**5.2**	0.1	5.1					
Dominica	**0.0**	0.0	0.0			0.0			**2.7**	0.3	2.8			0.0		
Dominican Republic	**1.6**	0.7	0.8						**2.0**	0.9	1.1					
Ecuador																
Egypt	**6.2**	0.5	5.7		**0.2**		0.2		**1.7**	0.1	1.6		**0.1**		0.1	
El Salvador	**0.9**	0.5	0.5						**3.7**	1.9	1.8					
Equatorial Guinea	**0.2**	0.1	0.1	0.0	**0.0**		0.0		**1.7**	1.0	0.7	0.3	**0.0**		0.0	
Eswatini	**0.1**	0.0	0.1						**2.8**	0.4	2.5					
Fiji	**0.2**	0.0	0.2						**5.7**	0.4	5.3					
Gabon	**0.3**	0.1	0.2		**0.0**	0.0	0.0		**2.0**	0.7	1.2		**0.1**	0.0	0.1	
Georgia	**0.6**	0.2	0.5		**0.0**	0.0			**4.1**	1.0	3.1		**0.0**	0.0		
Grenada	**0.0**	0.0	0.0	0.0					**2.4**	0.7	1.7	0.3				
Guatemala	**2.6**	0.2	2.4						**3.5**	0.2	3.3					
Guyana																
Hungary	**6.2**	1.8	4.4		**6.6**		6.6		**4.1**	1.2	2.9		**4.4**		4.4	
Iran	**30.7**	11.5	19.2	34.4					**5.0**	1.9	3.1	5.6				
Iraq	**0.3**	0.1	0.3	0.0		0.0	0.0	0.0	**0.2**	0.0	0.1	0.0		0.0	0.0	0.0
Jamaica	**0.1**	0.1	0.1						**0.9**	0.4	0.5					
Jordan	**0.2**	0.1	0.2		**0.7**			0.7	**0.5**	0.2	0.4		**1.7**			1.7
Kazakhstan	**3.4**				**4.6**	3.2		1.5	**2.1**				**2.8**	1.9		0.9
Kosovo	**0.4**	0.0	0.4	0.0	**0.2**	0.2			**5.4**	0.1	5.3	0.3	**2.8**	2.8		
Kuwait	**1.7**								**1.5**							
Lebanon																
Libya	**0.4**								**1.7**							
Malaysia	**14.9**	0.4	14.5	3.9	**11.9**	0.0	11.9		**4.4**	0.1	4.3	1.2	**3.5**	0.0	3.5	
Maldives	**0.3**	0.1	0.2						**5.5**	1.8	3.7					
Mauritius	**0.2**	0.0	0.2		**3.7**	0.1		3.6	**1.8**	0.3	1.5		**32.0**	1.0		31.0
Micronesia, Fed. States of	**0.1**	0.0	0.1						**17.7**	5.1	12.6					
Mongolia	**1.0**	0.1	0.9		**0.3**	0.0	0.0	0.3	**7.6**	1.1	6.5		**2.3**	0.3	0.0	2.1
Montenegro, Rep. of	**0.4**	0.0	0.4	0.1			0.0		**7.8**	0.4	7.4	2.2			0.0	

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	USD Billion								Percent of GDP							
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	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations
Morocco	**3.1**	1.0	2.0						**2.8**	0.9	1.9		**0.5**	0.5		
Namibia	**0.1**	0.1	0.1		**0.1**		0.1		**1.1**	0.6	0.6		**1.3**		1.3	
Nauru	**0.0**	0.0	0.0		**0.0**			0.0	**5.9**	0.0	5.9		**5.9**			5.9
North Macedonia	**0.3**	0.0	0.3		**0.2**			0.2	**2.1**	0.1	2.0		**1.5**			1.5
Oman																
Pakistan	**5.2**	1.1	4.1	3.0					**2.0**	0.4	1.6	1.2				
Palau	**0.0**	0.0	0.0						**8.0**	0.0	8.0					
Panama	**1.8**	0.9	0.9						**3.0**	1.5	1.5					
Paraguay	**0.9**								**2.6**							
Peru	**12.9**	0.9	12.0	3.9	**17.9**		17.9		**6.6**	0.4	6.1	2.0	**9.2**		9.2	
Philippines	**8.5**	1.3	7.2		**3.9**	1.5	2.4	0.0	**2.3**	0.4	2.0		**1.1**	0.4	0.7	0.0
Poland	**38.7**	2.2	36.6		**29.1**	10.2	18.9		**6.7**	0.4	6.3		**5.0**	1.8	3.3	
Qatar	**0.4**								**0.2**							
Romania	**5.4**	2.8	2.6		**8.0**	0.4	7.6		**2.2**	1.1	1.0		**3.2**	0.2	3.0	
Samoa	**0.1**	0.0	0.0	0.0	**0.0**			0.0	**6.8**	0.9	5.9	2.3	**2.7**			2.7
Serbia	**2.9**	0.7	2.2	1.4	**0.7**		0.5	0.2	**5.6**	1.3	4.3	2.8	**1.4**		1.0	0.4
Seychelles	**0.1**	0.0	0.1	0.0					**5.8**	0.5	5.3	0.2				
Sri Lanka	**0.2**	0.0	0.2						**0.3**	0.0	0.3					
St. Kitts and Nevis	**0.0**	0.0	0.0						**5.1**	0.9	4.3					
St. Lucia	**0.1**	0.0	0.1						**3.5**	0.4	3.0					
St. Vincent and the Grenadines	**0.0**	0.0	0.0						**3.8**	0.5	3.3					
Thailand	**41.7**				**21.7**	2.9	10.6	8.2	**8.2**				**4.3**	0.6	2.1	1.6
Tonga	**0.0**	0.0	0.0						**5.2**	1.7	3.5					
Trinidad and Tobago	**0.6**	0.0	0.5						**2.5**	0.1	2.4					
Tunisia	**0.8**	0.1	0.6	0.2	**0.5**	0.4	0.1		**1.9**	0.3	1.6	0.5	**1.2**	1.0	0.2	
Turkmenistan	**0.0**	0.0	0.0		**0.0**	0.0			**0.0**	0.0	0.0		**0.0**	0.0		
Tuvalu	**0.0**	0.0	0.0						**29.0**	14.5	14.5					
Ukraine	**4.8**	1.3	3.5						**3.4**	0.9	2.5					
United Arab Emirates	**7.4**								**2.1**							
Uruguay	**0.5**								**0.8**							
Vanuatu	**0.0**	0.0	0.0	0.0		0.0			**4.4**	0.0	4.4	0.6		0.0		
Selected Low-Income Developing Countries																
Afghanistan	**0.3**	0.1	0.2						**1.5**	0.4	1.1					
Bangladesh	**3.4**	0.2	3.2						**1.0**	0.1	1.0					
Benin	**0.3**	0.1	0.2	0.0		0.0			**1.7**	0.5	1.2	0.2		0.0		
Bhutan																
Burkina Faso	**0.7**	0.3	0.4						**4.3**	1.9	2.3					
Burundi	**0.1**	0.1	0.0						**2.7**	2.5	0.2					
Cambodia	**0.1**	0.1	0.0						**0.2**	0.2	0.0					
Cameroon	**0.3**	0.1	0.2						**0.9**	0.3	0.6					
Central African Republic	**0.0**	0.0	0.0						**1.2**	0.7	0.4					
Chad	**0.6**	0.1	0.5		**0.2**	0.2			**5.7**	0.7	5.0		**1.8**	1.8		
Comoros	**0.0**	0.0	0.0						**2.8**	2.0	0.9					
Congo, Republic of	**0.2**				**0.0**		0.0		**2.3**				**0.4**		0.4	
Côte d'Ivoire	**1.1**	0.2	1.0						**1.8**	0.3	1.6					
Democratic Republic of the Congo	**0.5**	0.1	0.4						**1.1**	0.2	0.9					
Djibouti	**0.1**	0.0	0.1						**2.4**	0.8	1.6					
Eritrea																
Ethiopia	**1.4**	0.5	1.0		**0.6**	0.6			**1.5**	0.5	1.1		**0.6**	0.6		
Gambia, The	**0.0**	0.0	0.0						**0.5**	0.5	0.0					
Ghana	**1.9**	0.1	1.8		**0.2**	0.2			**2.9**	0.1	2.7		**0.3**	0.3		
Guinea	**0.2**	0.1	0.1		**0.0**		0.0		**1.4**	0.9	0.5		**0.1**		0.1	

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	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations	Subtotal	Health sector	Non-health sector		Subtotal		Guarantees	Quasi-fiscal operations
Guinea-Bissau	**0.0**	0.0	0.0		**0.0**	0.0			**1.6**	1.3	0.3		**1.8**	1.8		
Haiti	**0.1**	0.0	0.1						**1.6**	0.5	1.1					
Honduras	**0.5**	0.2	0.3		**0.5**		0.3	0.2	**2.3**	0.9	1.3		**2.1**		1.1	0.9
Kenya	**2.4**	0.1	2.3	0.3					**2.3**	0.1	2.3	0.3				
Kiribati	**0.0**	0.0	0.0						**10.6**	3.5	7.1					
Kyrgyz Republic	**0.1**	0.0	0.1						**2.0**	0.4	1.6					
Lao P.D.R.	**0.0**	0.0	0.0						**0.0**	0.0	0.0					
Lesotho	**0.2**	0.0	0.2		**0.0**		0.0		**10.2**	2.0	8.2		**1.3**		1.3	
Liberia	**0.0**		0.0						**0.1**		0.1					
Madagascar	**0.2**	0.1	0.1						**1.5**	0.8	0.7					
Malawi	**0.0**	0.0	0.0						**0.2**	0.2	0.0					
Mali	**0.9**	0.1	0.8	0.1	**0.0**		0.0		**4.9**	0.5	4.4	0.6	**0.2**		0.2	
Mauritania	**0.4**	0.0	0.4						**5.8**	0.4	5.4					
Moldova	**0.3**	0.1	0.1		**0.0**	0.0	0.0		**2.2**	1.2	1.1		**0.4**	0.3	0.0	
Mozambique	**0.7**	0.1	0.6	0.1					**4.8**	0.8	4.0	0.9				
Myanmar	**0.5**	0.1	0.4		**0.2**	0.2			**0.7**	0.2	0.6		**0.3**	0.3		
Nepal	**0.6**	0.4	0.2		**0.4**	0.4			**1.8**	1.3	0.5		**1.4**	1.4		
Nicaragua	**0.2**	0.1	0.1						**1.4**	0.9	0.5					
Niger	**0.1**	0.0	0.1		**0.2**	0.1	0.1		**0.8**	0.3	0.4		**1.3**	0.6	0.6	
Nigeria	**6.4**	1.4	5.0						**1.5**	0.3	1.2					
Papua New Guinea	**0.2**	0.0	0.1						**0.7**	0.2	0.5					
Rwanda	**0.3**	0.1	0.2				0.0		**3.3**	1.0	2.3				0.0	
São Tomé and Príncipe	**0.0**	0.0	0.0						**3.0**	1.5	1.6					
Senegal	**0.7**	0.1	0.6	0.0	**0.1**		0.1		**2.9**	0.6	2.3	0.1	**0.5**		0.5	
Sierra Leone	**0.1**	0.0	0.1						**3.3**	1.0	2.3					
Solomon Islands	**0.0**	0.0	0.0		**0.0**	0.0			**0.2**	0.2	0.1		**0.1**	0.1		
Somalia	**0.0**	0.0	0.0						**0.2**	0.2	0.0					
South Sudan	**0.0**	0.0	0.0						**0.2**	0.2	0.0					
Sudan	**0.3**	0.2	0.2						**1.1**	0.5	0.5					
Tajikistan	**0.3**	0.2	0.1		**0.0**	0.0			**3.4**	2.3	1.1		**0.5**	0.5		
Tanzania	**0.0**	0.0	0.0	0.0					**0.0**	0.0	0.0	0.0				
Timor-Leste, Dem. Rep. of	**0.2**								**7.8**							
Togo	**0.2**	0.1	0.1	0.0					**3.2**	1.8	1.5	0.0				
Uganda	**0.1**	0.1	0.0		**0.2**	0.2			**0.2**	0.1	0.0		**0.6**	0.6		
Uzbekistan	**2.2**	0.4	1.8		**1.2**	1.2			**3.7**	0.8	3.0		**1.9**	1.9		
Vietnam	**4.2**	0.7	3.5	7.7	**1.6**	0.4		1.2	**1.2**	0.2	1.0	2.3	**0.5**	0.1		0.4
Yemen																
Zambia	**0.4**	0.1	0.3		**0.1**	0.1			**2.1**	0.3	1.8		**0.3**	0.3		
Zimbabwe	**0.7**	0.0	0.7						**4.8**	0.1	4.7					
Global	**5,920**	610	5,303	**947**	**5,791**	**440**	**3,927**	**1,424**	**5.8**	**0.6**	**5.2**	1.0	**6.0**	0.5	4.1	1.4

Sources: National authorities and IMF staff estimates.

Note: Estimates as of September 11, 2020. Numbers in U.S. dollar and percent of GDP are based on October 2020 World Economic Outlook unless otherwise stated. For Argentina, U.S. dollar values use end-August 2020 exchange rate.

The country list includes European Union as well, but the total global fiscal support does not include measures announced by the European Union because those are financing the measures by member states, which are included individually The global estimate of fiscal support includes above-the-line measures of additional spending and foregone revenue, as well as below the line measures and contingent liabilities from guarantees and quasi-fiscal operations.