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FISCAL MONITOR

Fiscal Policy from Pandemic to War

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. . . to indicate that data are not available

— to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist

– between years or months (for example, 2008–09 or January–June) to indicate the years or months covered, including the beginning and ending years or months

/ between years (for example, 2008/09) to indicate a fiscal or financial year

"Billion" means a thousand million; "trillion" means a thousand billion.

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"n.a." means "not applicable."

Minor discrepancies between sums of constituent figures and totals are due to rounding.

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PREFACE

The projections included in this issue of the Fiscal Monitor are drawn from the same database used for the April 2022 *World Economic Outlook* and *Global Financial Stability Report* (and are referred to as "IMF staff projections"). Fiscal projections refer to the general government, unless otherwise indicated. Short-term projections are based on officially announced budgets, adjusted for differences between the national authorities and the IMF staff regarding macroeconomic assumptions. The fiscal projections incorporate policy measures that are judged by the IMF staff as likely to be implemented. For countries supported by an IMF arrangement, the projections are those under the arrangement. In cases in which the IMF staff has insufficient information to assess the authorities' budget intentions and prospects for policy implementation, an unchanged cyclically adjusted primary balance is assumed, unless indicated otherwise. Details on the composition of the groups, as well as country-specific assumptions, can be found in the Methodological and Statistical Appendix of the April 2022 *Fiscal Monitor*.

With Russia's invasion of Ukraine, war is back in Europe. The world is facing renewed uncertainty, as war comes on top of the persistent and still-evolving COVID-19 pandemic.

Since the start of the pandemic in early 2020, fiscal policy has demonstrated unexpected power and agility. Governments jumped into action, extending support to households and firms affected by the Great Lockdown. They delivered on their role of protecting the most vulnerable when things fell apart. Together with exceptionally accommodative monetary policies by major central banks, fiscal policies prevented a much deeper and prolonged recession. In the early stages of the pandemic, monetary and fiscal policies worked harmoniously toward the common objective of preventing deflation. It worked, although it came at the cost of large deficits adding to already-elevated global debt levels.

Unprecedented macroeconomic policy support combined with supply disruptions eventually led to a situation where the recovery in demand outpaced supply. In 2021, inflation surprises began to pile up. As a result, the backdrop against which fiscal policy operates has now shifted abruptly. As interest rates are raised to keep inflation in check, fiscal space is becoming more constrained. The question of how much—and how fast—deficits and debts should be reduced is taking center stage.

When global credit conditions tighten, the most vulnerable countries suffer the biggest squeeze. Some emerging market spreads have reached dangerous territory, and 60 percent of the lowest-income economies are already in or at high risk of debt distress. The Debt Service Suspension Initiative (DSSI) expired at the end of 2021, and the G20 Common Framework for Debt Treatments beyond the DSSI has yet to deliver on its promise. Additional efforts are also needed for emerging markets and developing economies not eligible for it. Muddling through will amplify costs and risks to debtors, creditors and, more broadly, global stability and prosperity. The IMF will work with creditors and debtors to find effective frameworks for collective action.

In emerging markets, the rise in sovereign debt during the pandemic was financed to a large extent by domestic banking sectors. As Chapter 2 of the April 2022 *Global Financial Stability Report* highlights, this has led to deepened linkages between the sovereign and commercial banks, which means that as sovereign assets come under stress, the risk of an adverse feedback loop being set off has risen.

Treasuries in advanced economies must heed rising inflation. For the past two decades, they have benefited from declining debt service costs, stemming from trends both in nominal interest rates and neutral real interest rates. It is true that inflation surprises contribute to lower debt ratios but in a regime of permanently high and volatile inflation, the attractiveness of sovereign bonds is undermined, making it harder to sustain elevated levels of debt.

The war has led to spikes in energy and food prices coming on top of already elevated levels. As in 2020 and 2021, governments must act to protect people from the worst consequences of this new shock. But as before, it remains crucial that chosen policies are implemented in timely, targeted, and temporary fashion, particularly given the more limited fiscal space and heightened public finance risks. A fundamental principle is to support people while allowing domestic prices to adjust, which will help spur additional supply and avoid shortages. In some countries, targeted and temporary transfers may go a long way to help. Where social safety nets and information systems are less complete, other measures can be considered, such as smoothing consumption bills or lump-sum utility bill discounts. In all cases, ensuring access to adequate nutrition for everybody is imperative for public policies. Where needed, pass-through can be gradual, for example for the prices of staple foods and cooking fuels.

Chapter 2 of the *Fiscal Monitor* discusses how global cooperation on tax policy—income taxes but also carbon pricing—can move us toward a fairer and greener economy. Tackling the looming climate crisis is now especially urgent. We are dramatically off-track to limit global warming to 2°C. A commitment to an international carbon price floor by key emitters— appropriately differentiated and accommodating

equivalent measures—would curb emission sufficiently to deliver on such a goal. To reconcile the management of the energy crisis today with the looming climate crisis, countries should commit now to gradually eliminate fossil fuel subsidies and to increase carbon prices. COP-27 in Egypt must deliver effective action, including on finance for development, climate adaptation and a commitment to international cooperation to deliver on 2030 mitigation targets. Policy makers must also manage the implications of the green transition on labor markets, a topic covered by Chapter 3 of the April 2022 *World Economic Outlook*.

Given the ongoing war in Ukraine, the most urgent priority is to reach a peaceful settlement that puts a stop to the associated humanitarian crisis. Amid a changed political landscape, global cooperation remains possible and is necessary more than ever, including to manage the legacies of COVID-19, to prevent and prepare for future pandemics, to address the immediate needs created by soaring food and energy prices, to fight climate change, to improve sovereign debt resolution and, more generally, to promote sustainable development with an urgent emphasis on the elimination of poverty and hunger.

Vitor Gaspar
Director of the Fiscal Affairs Department

Chapter 1: Fiscal Policy from Pandemic to War

Just as uncertainty associated with the COVID-19 pandemic was abating, *Russia* invaded *Ukraine*. Uncertainty endured, shifting from pandemic to war. Besides the death toll, human misery, and destruction of infrastructure, the war is causing costly displacement of refugees and loss of human capital, disrupting commodity markets, and further fueling inflation. Higher food and energy prices raise the risks of social unrest. Since the war started, more than 4.5 million refugees have fled *Ukraine* as of April 10. Fiscal policy has a special role to play when things go wrong. It can protect the most vulnerable from the impact of high and rising food and energy prices on household budgets. More generally, governments' responses will be shaped against the difficult background of high and increasing inflation; slowdown in growth; high debt and tightening credit conditions. Budget constraints are increasingly binding, as central banks hike interest rates to fight inflation.

The unusually high degree of uncertainty affects all countries differently. Emerging markets and low-income developing countries serving as net importers of energy and food will be hit by elevated international prices, putting pressure both on growth and public finances. Many of these countries have faced scarring from the pandemic and have little fiscal space to buffer these new shocks. Some commodity exporters, especially large oil exporters, will benefit from significant revenue windfalls. Countries also face uneven effects of the COVID-19 pandemic on households' incomes and poverty. While an estimated 70 million more people (relative to the prepandemic trend) experienced extreme poverty in 2021, poverty was stable or even declined where fiscal support was large. With this support, household incomes grew or were stable in 2020 in some advanced and emerging market economies despite an economic recession. Amid COVID-19 restrictions and high uncertainty, household savings rose sharply relative to prepandemic levels—by a combined $3½ trillion in the *United States* and the *European Union* during 2020–21. In contrast, fiscal support was insufficient to prevent a fall in household income in many developing economies.

Above-target inflation rates and inflation surprises—the difference between actual and projected inflation rates—and monetary policy reactions to them have significant implications for public budgets. Inflation surprises reduced public debt-to-GDP ratios in advanced and emerging market economies (excluding *China*) by 1.8 and 4.1 percentage points of GDP in 2021. Although inflation surprises can reduce deficits in the short term—as nominal revenues increase faster than nominal spending—their relief to public finances is usually temporary. If inflation expectations and inflation volatility increase, government bonds become less attractive to investors, and the costs of borrowing rise.

The fiscal outlook is subject to elevated uncertainty, as the full consequences of the war and spillovers from sanctions on *Russia* are unknown and will vary across countries. Deficits are falling globally but are expected to remain above prepandemic levels. The average public debt in advanced economies is projected to decline to 113 percent of GDP by 2024, mirroring the recovery from the pandemic-related recession. Debt is projected to continue to rise in emerging markets, mainly driven by *China*, reaching 72 percent of GDP by 2024. Among low-income developing countries, debt is expected to gradually decline to 48 percent of GDP by 2024. Public debt is expected to go down faster in commodity exporters thanks to positive terms-of-trade shocks. There are large risks around the outlook for deficits and debt, especially if economic growth disappoints or inflation dynamics continue to surprise.

High uncertainty and marked divergences across countries require a tailored and agile fiscal policy response. To support economies that will be hardest hit by the war, fiscal policy will need to address the humanitarian crisis and economic disruption. Given rising inflation and interest rates, fiscal support should target those that are most affected and focus on priority areas. If economic activity deteriorates significantly, broader fiscal support could become appropriate for countries with fiscal space but should be done in ways that avoid exacerbating ongoing

demand-supply imbalances and price pressures. In countries where economic growth is less exposed to the conflict and central banks are raising rates to fight high inflation, fiscal policy should move away from the exceptional support provided during the pandemic towards normalization. In many emerging markets and low-income developing countries, trade-offs are harsher. Higher inflation and tightening global financial conditions call for prudence, whereas fiscal support is needed for those countries that will be the hardest hit by the higher commodity prices and where the recovery was already weak. Fiscal reforms can ease these trade-offs. Sound and credible medium-term fiscal frameworks help to manage market expectations, containing sovereign borrowing costs. Mounting public spending pressures in some areas (for example, safety nets and defense) require reprioritizing spending and mobilizing revenues.

Governments around the world are taking measures to shield their economies from the spike in international energy and food prices. Such measures can help protect vulnerable households and preserve social cohesion; however, they can also have undesirable consequences and large fiscal costs. In many cases, countries have taken measures to limit the rise in domestic prices (cut taxes or grant subsidies), which could exacerbate the global imbalances between demand and supply, putting further upward pressure on international prices, and lead to energy or food shortages. This will hurt further low-income countries that import energy and food. Many governments have also provided generalized subsidies or transfers, which can imply large fiscal costs. A better solution would be to provide targeted, temporary, and direct support to vulnerable households, while allowing domestic prices to adjust. This strategy would contain fiscal pressures, as many countries face rising debt burdens, and preserve incentives for the private sector to increase supply of energy and food.

Measures to address immediate needs from high food and energy prices should not detract from action to tackle long-standing challenges such as climate change. It is even more urgent now to ensure greater resilience through investment in health, food, and energy security from cleaner sources. Moving toward a more diverse, clean, and renewable energy matrix will ensure energy security and facilitate the green transition. For example, increases in carbon taxes in most countries envisage a gradual phasing-in that is far

smaller and more predictable than recent gyrations in energy markets. Short-term responses to high energy prices should avoid investing in long-duration and capital-intensive fossil fuel projects.

Global cooperation is more important now than ever—to address the consequences of the COVID-19 pandemic and energy and food disruptions, to help refugees from the war, to prevent and prepare for future potential pandemics, and to mitigate climate change. Unilateral actions, such as restricting food exports, could worsen the food crisis. It will be crucial that countries work together to address supply concerns on fertilizers and food products, like wheat, toward supporting the most vulnerable populations. International cooperation in corporate taxation, transparency, and exchange of information for personal taxation, and carbon pricing can mobilize resources to promote necessary investments, reduce inequality, and alleviate perceptions that the tax burden is not distributed fairly (Chapter 2). Likewise, financial and technical support for low-income developing countries is warranted. Cooperation is crucial where high debts become unsustainable: where reprofiling or restructuring is called for, a multilateral cooperative approach that goes beyond SDR channeling is essential.

Chapter 2: Coordinating Taxation across Borders

Mobilizing tax revenues, enforcing tax rules, and mitigating climate change are matters of common concern for countries around the world. International coordination can help in three areas: corporate taxation, personal taxation, and carbon pricing. From a global perspective, insufficient coordination leads to unsatisfactory outcomes. To illustrate, lower income taxation in one country attracts tax bases, and hence revenues, from others, pressuring those countries to also lower their taxes. Similarly, a unilateral carbon tax can curb emissions in one country but can cause production, and therefore carbon emissions, to move to other countries. Uncoordinated actions thus can result in inefficiently low taxes—as reflected in downward trends in corporate and personal income tax rates—as well as inefficient action to mitigate climate change. Whereas effective coordination in corporate and income taxes requires global participation, an agreement among a small number of key emitting countries could curb global warming.

Corporate Tax Coordination

The historic October 2021 two-pillar agreement under the Inclusive Framework on Base Erosion and Profit Shifting—to date agreed to by 137 jurisdictions—will significantly improve the taxation of multinationals when implemented, but more actions can be taken:

- Under Pillar 1, allocating a portion of the tax base to market countries (allowing them to tax even without a physical presence) is more efficient than unilateral digital-services taxes. Although the scope of such a reallocation covers only 2 percent of global profits of multinational corporations, the global revenue impact is broadly comparable with that of revenues from existing unilateral digital-services taxes.
- Under Pillar 2, a corporate minimum tax of 15 percent reduces firm incentives to shift profits across countries and puts a floor on tax competition—giving countries room to raise their corporate income taxes, including through revisiting wasteful tax incentives. The minimum tax is estimated to raise global corporate income tax revenues by 5.7 percent through the top-up tax and potentially by an additional 8.1 percent through reduced tax competition. Country and firm responses are essential for realizing the gains.
- Further concrete actions can incorporate the interest of low-income countries, such as agreeing on tax simplification measures, strengthening withholding taxes on specific cross-border payments, and facilitating timely access of country-by-country information on multinationals.

Personal Tax and Exchange of Information

International cooperation on information sharing can curtail offshore tax evasion. Building on progress achieved through the Global Forum on Transparency and Exchange of Information for Tax Purposes, three directions for reform are highlighted:

- Establish beneficial ownership registries, or comparably efficient alternative mechanisms, so that tax authorities may access reliable and up-to-date beneficial ownership information.
- Build capacity in data analytics and specialized units in tax administrations, especially for low-income countries, to support tax compliance.
- As cooperation improves, adjust tax policy, especially in regard to those at the top of the income distribution, in countries where implementation capacity now constrains tax policy choices.

As opportunities expand for cross-border remote work, a bigger segment of the labor income tax base becomes more mobile—estimated currently at 1¼ percent of the global personal income tax base. In the future, personal tax coordination will gain importance and raise issues such as those related to corporate taxation.

Carbon-Pricing Coordination

As global warming threatens our planet, urgent actions and coordination are required to curtail emissions. Despite progress under the Paris Agreement and the UN 26th Climate Change Conference (COP26), there remain critical gaps in both policy and the ambition for global mitigation. A small number of key emitting countries could coordinate speedily to deliver the emission reductions required to complement the Paris Agreement. Price-based approaches such as carbon taxation or emission-trading systems are generally the most efficient. However, alternative approaches such as regulations can be accommodated in the same agreement. The following are the main findings:

- Reinforcing the Paris Agreement with an international carbon price floor for key emitting countries (accommodating alternative approaches through the calculation of equivalent prices) can limit global warming to 2°C or less, while accommodating differentiated responsibilities, depending on income level. Implementing such an agreement would reduce emissions in 2030 by 35–50 percent below baseline levels for advanced economies and 20–30 percent for emerging market economies. This computation assumes measures equivalent to a carbon price of $75 per ton for advanced economies, $50 per ton for high-income emerging market economies such as China, and $25 per ton for low-income emerging market economies such as India.
- Nonpricing policies such as regulations can be accommodated through a consistent cross-country method (outlined in Chapter 2) to map the agreed-upon emission reductions into an equivalent carbon price, which can serve as a common metric.

International coordination is essential to overcome the limits of unilateral action. Recent progress in the income tax area has shown that countries can together deliver tangible results. With such progress as inspiration, the priority is to agree on concrete plans to limit global warming to below 2°C, before it is too late: What are we waiting for?

FISCAL POLICY FROM PANDEMIC TO WAR

Introduction

Fiscal policy is operating in a highly uncertain environment, under pressure from a lingering pandemic, the economic consequences of a recently erupted war, and elevated inflation. Just as increasing vaccinations offered hope to many countries, *Russia*'s invasion of *Ukraine* disrupted the global economic recovery (April 2022 *World Economic Outlook*). The war is causing death, human misery, destruction of infrastructure, costly displacement of refugees, and loss of human capital. Moreover, because *Russia* is a major exporter of fossil fuels and *Russia* and *Ukraine* are key players in the market for grains, global commodity prices have risen further and have become more volatile, heightening the risks of food shortages and social unrest well beyond the regions affected by the war. With these developments putting additional pressures and uncertainty on inflation, the landscape in which fiscal policy operates has shifted abruptly. Less than a year ago, many central banks in advanced economies were constrained by the effective lower bound on interest rates, and fiscal support was helping them move toward their inflation targets. Now, the situation has changed significantly: fiscal policy needs to tackle the effects of the war while navigating an environment of rising inflation and interest rates, slower economic growth, and high debt and borrowing costs that make budget constraints increasingly binding.

These new shocks exacerbate the effects of the COVID-19 crisis and are likely to shape future government policies. Fiscal support during the pandemic—together with the economic recession—resulted in

the largest one-year debt surge since World War II. Total (public plus nonfinancial private) debt rose by 28 percentage points in 2020 to 256 percent of global GDP (Figure 1.1). More than half of this surge occurred on public balance sheets, with government debt now accounting for 40 percent of total global debt.[1] Moreover, the pandemic heightened the great financing divide among countries. Although leverage rose in advanced economies with the support of low interest rates and central banks' purchase of sovereign debt, many low-income developing countries faced limited access to funding (Gaspar, Medas, and Perrelli 2021). As central banks in the largest advanced economies increase interest rates to counteract inflationary pressures, sovereign bond spreads will likely continue to widen, worsening debt vulnerabilities. The war in *Ukraine* has also heightened the great financing divide among countries, with borrowing costs rising significantly for the most affected emerging markets and low-income developing countries (April 2022 *Global Financial Stability Report*).

Advanced economies, emerging market economies, and low-income developing countries face disparate challenges. Advanced economies that were projected to return to prepandemic GDP trends in 2022–23 now face lower-than-expected economic growth. Emerging markets and low-income developing countries serving as net importers of food and energy will be even more affected. Many of these countries carry scars from the pandemic and have little fiscal space. Although extreme global poverty declined in 2021, partly undoing the rise in 2020, an estimated 70 million more people were in extreme poverty relative to prepandemic trends (Box 1.1; Online Annex 1.1). A worse outlook and rising food and energy prices will negatively affect the poorest households more. Countries in sub-Saharan Africa, where food represents about 40 percent of the consumption basket, are especially vulnerable.

[1]For a complementary focus on private debt, see the April 2022 *World Economic Outlook* Chapter 2.

Figure 1.1. Global Public and Private Debt, 1995–2020
(Percent of GDP)

1. Public Debt

- Advanced economies
- Emerging markets
- Emerging markets excluding China
- Low-income developing countries

2. Private Debt

- Advanced economies
- Emerging markets
- Emerging markets excluding China
- Low-income developing countries
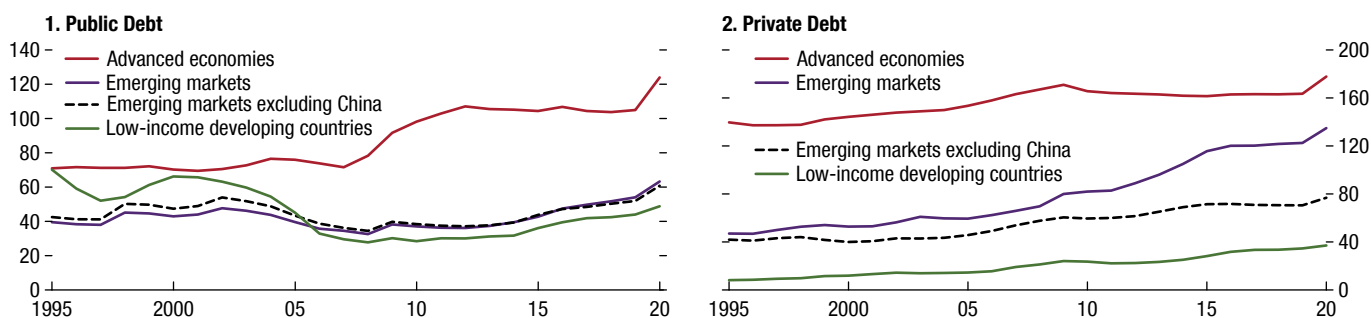
Sources: IMF Global Debt database; and IMF World Economic Outlook database.

The fiscal outlook is subject to elevated uncertainty, as the full consequences of the war are unknown and will vary across countries. Deficits are falling globally but are expected to remain above prepandemic levels. The global public debt-to-GDP ratio at the end of 2021 was 2.8 percentage points lower than anticipated as of estimates from the October 2020 *Fiscal Monitor*, in tandem with higher-than-expected nominal GDP growth. The average debt in advanced economies is expected to decrease to 113 percent of GDP by 2024, mirroring the relatively stronger recovery. Meanwhile, public debt is projected to continue to rise in emerging markets, driven mainly by *China*, reaching 72 percent of GDP by 2024. Among low-income developing economies where deficits widened less during the crisis, debt is expected to gradually decline to 48 percent of GDP by 2024, above prepandemic levels. Public debt is expected to go down faster in oil exporters thanks to positive terms-of-trade shocks, falling from almost 56 percent of GDP in 2021 to 50 percent of GDP in 2024. The reduction of deficits and debt could prove difficult, especially if economic growth is lower than expected.

Amidst pandemic legacies and the war, fiscal policy needs to remain flexible and ready to adjust as the outlook becomes clearer. The unpredictable developments related to the war, high volatility in commodity prices, and rising inflation and borrowing costs make the environment especially challenging. New spending pressures require reprioritizing spending and mobilizing revenues especially in countries with tighter budget constraints. The strategy to address the recent spike in energy prices will need to involve both short-term measures, including to protect vulnerable households,

and step-up actions to ensure energy security and achieve the green transition toward a low-carbon economy. International cooperation is critical for meeting these goals.

Recent Fiscal Developments and Outlook

An urgent challenge for governments is the risk of the war in *Ukraine,* and the spillovers from economic sanctions on *Russia,* triggering major disruptions in commodity markets. *Russia* accounts for about 45 percent of the *European Union*'s total gas imports and 10 percent of global oil exports. In food markets, *Russia* and *Ukraine* account for one-quarter of global wheat, one-seventh of corn, and three-quarters of sunflower oils exports. Since the war started, supply disruptions have steepened the rising trends in energy and food prices (Figure 1.2). The broad-based food price index of the Food and Agriculture Organization of the United Nations reached its all-time high since the index was introduced in 1990. Commodity prices are also more volatile. The rise in food prices can be amplified by fertilizer shortages. *Russia* and *Belarus* account for one-fifth of global fertilizer exports, especially potassic fertilizers (one-third of global trade) and nitrogenous fertilizers. As the production of potash fertilizers relies on mining, and as producing nitrogen-based fertilizers requires natural gas, upsizing production in other countries is not straightforward. Fertilizers' prices had already increased by about 80 percent over the last 12 months The additional tension could impact future harvests in large economies (*Brazil*, *India*, *United States*), and most low-income developing countries,

Figure 1.2. International Energy and Food Prices, 2000–22
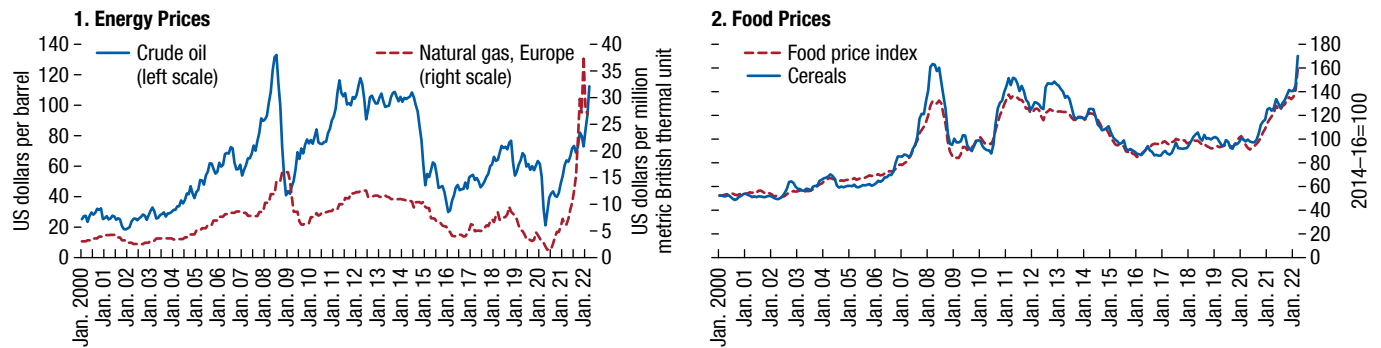
Sources: US Energy Information Administration; and UN Food and Agriculture Organization.

especially in Africa, which rely almost exclusively on imported fertilizers.

The fiscal impact of rising commodity prices will vary significantly across countries as economic activity and terms of trade adjust to the new environment. Importers of energy will feel the worse economic impact and fall in budgetary revenues, whereas large energy exporters will benefit the most. The effects on governments' budgets will also depend on how policies react to rising prices. Energy subsidies could pose significant fiscal costs—measured as the change in net taxes.[2] On average, for gasoline and diesel, the pass-through of global energy prices to domestic prices has been the highest in advanced economies and the lowest in low-income developing countries (including those in the Middle East and Northern Africa and sub-Saharan Africa) given that they rely more on ad hoc fuel pricing mechanisms (Figure 1.3, panel 1). If the levels of international oil prices and domestic retail prices as of the end of February 2022 persist during the remainder of the year, the latter group would face another round of substantial fiscal effects (Figure 1.3, panel 2).

Rising fiscal pressures will also stem from an increase in support to households as a result of higher food prices, the cost of managing the refugee crisis, and greater defense spending in some countries

(for example, *Germany*). Budgetary costs could come from higher food subsidies in countries that control domestic prices or introduce measures to limit the pass-through. For example, during the 2008 global food price crisis, many countries reduced taxes or increased explicit subsidies. Between 2006 and 2008, with comparable food price increases, more than 80 countries reduced food taxes. The fiscal cost of these measures reached more than 0.5 percent of GDP in countries for which data are available and up to 1.1 percent of GDP in some cases (IMF 2008). For the current crisis, countries have provided different types of support, including transfers to households (Box 1.2).

Fiscal deficits and debts are evolving with large differences across country groups, reflecting divergent economic recoveries (Figure 1.4). After a large increase at the onset of the pandemic, deficits declined in 2021 as economies recovered and countries started to withdraw exceptional support. Deficits are expected to decline further in advanced economies, mirroring the pace of the recovery. In emerging markets and low-income developing countries, on average, deficits are projected to decline more gradually over the medium term. Scarring from the pandemic, more expensive food and energy imports, risks of social unrest,[3] and tighter financing constraints in the developing world will make meeting the United Nations Sustainable Development Goals even more challenging. Global public

[2]Net taxes are positive when domestic retail prices are greater than supply costs and negative when less than supply costs. Where countries impose ad valorem taxes, tax levels can change even when tax rates do not. Moreover, the total fiscal effect of changes in oil prices may be larger than the effect of changes in net taxes if, for example, oil exporters receive higher (lower) oil revenues when prices increase (decrease).

[3]For evidence of the effect of food prices on social unrest risks, see Redl and Hlatshwayo (2021). Social unrest can also entail economic costs as evidenced by Hadzi-Vaskov and others (2021) and Barrett and others (2021).

Figure 1.3. Fiscal Effects of Energy Subsidies When International Prices Change
(Percent of GDP)

1. 2020–21

2. 2021–22
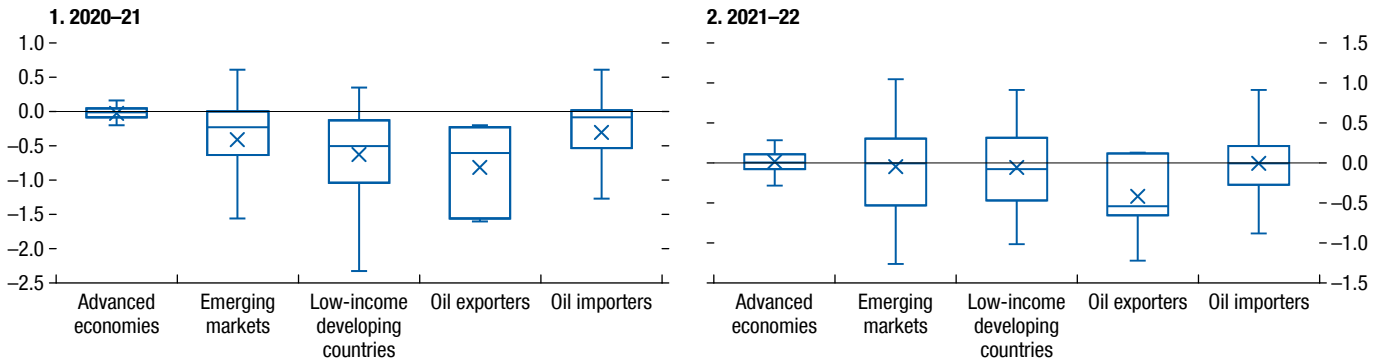
Source: Global Petrol Prices database; International Energy Agency; Parry and others 2021; October 2021 *World Economic Outlook*; and IMF staff calculations.
Note: For each country, the fiscal effect is calculated in terms of net tax revenues by subtracting the average supply cost from the domestic retail price and multiplying by total consumption in a given period. The results are divided by GDP in that period. The change in fiscal effect is calculated by subtracting the fiscal effect (in percent of GDP) in the current year from the previous year. Domestic retail prices are obtained from the Global Petrol Prices database. Supply cost is obtained from the International Energy Agency. There are three different international oil prices (cost, insurance, and freight or free on board) used depending on the region of the country. A transportation cost of $0.10 per liter is added for all countries and an additional margin of $0.10 per liter is added to oil-importing countries. Consumption data is obtained from Parry and others (2021). Actual data were used for 2020, and predicted data were used for 2021 and 2022.

Figure 1.4. Uneven Economic Recoveries and Fiscal Deficits

1. Advanced Economies: Deviations from Prepandemic Projections, 2019–24

2. Emerging Market Economies: Deviations from Prepandemic Projections, 2019–24

3. Low Income Developing Countries: Deviations from Prepandemic Projections, 2019–24

— Primary deficit   - - - Primary deficit excluding China   — Real GDP   - - - Real GDP excluding China

4. Advanced Economies: Latest Developments and Outlooks, 2019–24

5. Emerging Market Economies: Latest Developments and Outlooks, 2019–24

6. Low Income Developing Countries: Latest Developments and Outlooks, 2019–24

— Primary deficit
- - - Primary deficit excluding China

— Cyclically adjusted primary deficit
- - - Cyclically adjusted primary deficit excluding China

— Output gaps
- - - Output gaps excluding China

Sources: World Economic Outlook database; and IMF staff calculations.
Note: Primary deficit is shown as a percentage of GDP. Cyclically adjusted primary deficit is shown as a percentage of potential GDP. Prepandemic projections are from the January 2020 *World Economic Outlook*.

debt is expected to stabilize at around 94 percent of GDP during 2022–24, well above prepandemic levels, raising concerns about debt vulnerabilities and financial stability and weighing on growth prospects, especially if interest rates rise faster than expected.

The fiscal outlook is subject to unusually high uncertainty. A protracted and intensified war in *Ukraine*, beyond a worsening humanitarian crisis, would disrupt commodity markets for longer, further pressuring inflation and undermining economic growth (April 2022 *World Economic Outlook*), and exacerbating fiscal deficits. This would also increase the risk of private sector bankruptcies and financial sector distress adding to fiscal risks (April 2022 *Global Financial Stability Report*). Measures that address supply constraints would reduce uncertainty and help the economy and, as a consequence, improve the health of public finances over time. Tighter-than-expected global financial conditions would be particularly detrimental for countries with large debt vulnerabilities.[4] The evolution of the pandemic also remains a source of uncertainty amid uneven vaccination progress across countries. High public debt, coupled with record leverage in nonfinancial corporate balance sheets, may also constrain governments' ability to cope with new shocks and reduce growth prospects. In this regard, history shows that half a decade after the global financial crisis began, many advanced economies and emerging markets had not restored precrisis primary balances.

Advanced Economies

Primary deficits in advanced economies declined from their 2020 record levels in 2021 and are expected to fall further in 2022, reflecting a recovery in tax revenues and withdrawal of pandemic-related fiscal measures (Table 1.1). However, the deficit reduction in 2022 is subject to high uncertainty given the war in *Ukraine*. In the euro area, primary deficits are expected to decline by about 1 percent of GDP in 2022 on average, compared with an expected fall of 2½ percent of GDP before the war (January 2022 *World Economic Outlook* Update). This projection reflects additional spending in response to the consequences of the war and downward revisions to economic growth.

Policies are also shifting from COVID-19 support to promoting structural transformation. For example, on average, advanced economies are projected to increase annual public investment by 0.5 percentage points of GDP in the medium term relative to prepandemic forecasts. The *United States* passed an infrastructure bill totaling around 2 percent of GDP in new funding spread over the medium term for projects in transportation, utilities, broadband, environmental remediation, and resilience. In November 2021, *Japan* announced a new fiscal package (5 percent of GDP[5]) for 2022–23 including extended pandemic relief, broader social spending, and infrastructure investment. Public investment in the *European Union* is projected to be 0.5 percent of GDP higher than prepandemic forecasts in 2022 as its countries have started to implement national Recovery and Resilience Plans, partly financed by the common EU budget, with a focus on climate and digitalization. The *United Kingdom*'s Plan for Growth program, centered on infrastructure, skills, and innovation, includes a pledge to raise public sector net investment to an average 2.7 percent of GDP until 2024–25, nearly twice the average of the past 40 years.

After jumping by 19 percent of GDP in 2020, public debt in advanced economies is expected to decline slightly over the medium term (Table 1.2). Debt-to-GDP ratios surprised in 2021, staying on average about 6 percentage points below forecasts reported in the October 2020 *Fiscal Monitor*, amid nominal GDP growth above expectations and lower-than-expected deficits. In addition, some of the planned exceptional support did not materialize (for example, take-up of government guarantees, and credit lines was smaller than announced limits). Cumulative deficits over 2021–26 would partially offset an anticipated boon from negative interest-growth differentials. In the *European Union*, Next Generation EU support financed by the common EU budget will provide fiscal space to member countries severely affected by the pandemic.[6] In light of high debt levels, closed or

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[4]For example, see Chapter 3 ("The Sovereign-Bank Nexus in Emerging Markets: A Risky Embrace") in the April 2022 *Global Financial Stability Report*.

[5]This amount estimated by IMF staff excludes measures contingent on future health and economic developments and previously announced measures.

[6]EU member states have requested Recovery and Resilience Facility grants and loans amounting to €331 billion and €166 billion, respectively, out of which €46.6 billion in grants and €19.9 billion in loans have been disbursed as of the beginning of February 2022. These are financed by EU-level debt issuance.

Table 1.1. General Government Overall Fiscal Balance, 2017–27
(Percent of GDP)

	2017	2018	2019	2020	2021	Projections 2022	2023	2024	2025	2026	2027
World	**−3.0**	**−2.9**	**−3.6**	**−9.9**	**−6.4**	**−4.9**	**−4.0**	**−3.9**	**−4.0**	**−4.0**	**−3.9**
Advanced Economies	**−2.4**	**−2.5**	**−3.0**	**−10.5**	**−7.3**	**−4.3**	**−2.9**	**−2.8**	**−3.0**	**−3.0**	**−3.0**
Canada	−0.1	0.4	0.0	−11.4	−4.7	−2.2	−0.8	−0.7	−0.5	−0.4	−0.3
Euro Area	−0.9	−0.4	−0.6	−7.2	−5.5	−4.3	−2.5	−2.0	−1.8	−1.7	−1.7
France	−3.0	−2.3	−3.1	−9.1	−7.0	−5.6	−3.8	−3.4	−3.3	−3.3	−3.3
Germany	1.3	1.9	1.5	−4.3	−3.7	−3.3	−0.7	−0.1	0.3	0.4	0.4
Italy	−2.4	−2.2	−1.5	−9.6	−7.2	−6.0	−3.9	−3.3	−3.0	−2.8	−2.5
Spain[1]	−3.0	−2.5	−2.9	−11.0	−7.0	−5.3	−4.3	−3.9	−3.9	−3.9	−3.9
Japan	−3.1	−2.5	−3.0	−9.0	−7.6	−7.8	−3.5	−2.5	−2.5	−2.6	−2.8
United Kingdom	−2.4	−2.2	−2.2	−12.8	−8.0	−4.3	−2.3	−1.5	−1.4	−1.3	−1.0
United States[2]	−4.6	−5.4	−5.7	−14.5	−10.2	−4.8	−4.0	−4.4	−5.2	−5.1	−5.2
Others	1.2	1.2	−0.1	−4.7	−2.6	−1.7	−0.9	−0.6	−0.5	−0.4	−0.3
Emerging Market Economies	**−3.9**	**−3.6**	**−4.6**	**−9.3**	**−5.3**	**−5.7**	**−5.5**	**−5.4**	**−5.3**	**−5.3**	**−5.2**
Excluding MENA Oil Producers	−3.8	−3.7	−4.7	−9.4	−5.6	−6.6	−6.1	−5.9	−5.7	−5.6	−5.5
Asia	−3.6	−4.2	−5.8	−10.4	−6.6	−7.7	−6.9	−6.8	−6.6	−6.6	−6.5
China	−3.4	−4.3	−6.1	−10.7	−6.0	−7.7	−7.1	−7.0	−6.9	−6.9	−6.8
India	−6.2	−6.4	−7.5	−12.8	−10.4	−9.9	−9.1	−8.5	−8.0	−7.7	−7.5
Europe	−1.8	0.3	−0.6	−5.6	−1.9	−4.6	−4.8	−4.6	−4.3	−3.9	−3.5
Russian Federation	−1.5	2.9	1.9	−4.0	0.7	−4.0	−5.3	−4.8	−4.1	−3.0	−1.9
Latin America	−5.4	−5.0	−4.1	−8.8	−4.5	−4.7	−4.2	−3.4	−3.0	−2.8	−2.7
Brazil	−7.8	−7.0	−5.9	−13.3	−4.4	−7.6	−7.4	−5.6	−4.9	−4.4	−4.5
Mexico	−1.1	−2.2	−2.3	−4.4	−3.8	−3.2	−3.2	−2.9	−2.8	−2.8	−2.8
MENA	−5.4	−1.9	−2.9	−8.0	−3.1	1.5	0.1	−1.0	−1.6	−1.9	−2.2
Saudi Arabia	−9.2	−5.7	−4.4	−11.3	−2.4	5.5	4.7	4.4	4.3	4.5	4.6
South Africa	−4.0	−3.7	−4.7	−9.7	−6.4	−5.8	−6.1	−6.6	−7.0	−7.5	−7.9
Low-Income Developing Countries	**−3.7**	**−3.3**	**−3.5**	**−5.1**	**−4.9**	**−5.2**	**−4.6**	**−4.3**	**−4.2**	**−4.1**	**−4.0**
Kenya	−7.4	−6.9	−7.4	−8.1	−8.1	−6.9	−5.3	−4.5	−4.3	−4.0	−3.8
Nigeria	−5.4	−4.3	−4.7	−5.7	−6.0	−6.4	−5.9	−5.9	−6.1	−6.3	−6.4
Vietnam	−2.0	−1.0	−0.4	−3.9	−4.2	−5.0	−5.1	−4.7	−4.4	−4.0	−3.7
Oil Producers	**−2.8**	**0.3**	**−0.4**	**−7.4**	**−2.2**	**0.2**	**−0.5**	**−1.0**	**−1.3**	**−1.4**	**−1.5**
Memorandum											
World Output (percent)	**3.7**	**3.6**	**2.9**	**−3.1**	**6.1**	**3.6**	**3.6**	**3.4**	**3.4**	**3.3**	**3.3**

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, 2021 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. MENA = Middle East and North Africa.

[1] Including financial sector support.

[2] For cross-economy 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.

positive output gaps, and above-target inflation rates, some countries have started to develop consolidation strategies (for example, the *United Kingdom* is set to introduce tax increases) and proposals to resume using fiscal rules, including new ones, to rebuild fiscal buffer. The medium-term fiscal plans and projections, however, face an exceptional degree of uncertainty depending on developments in war, especially in Europe, inflation, and interest rates.

Emerging Markets

Fiscal deficits declined in emerging market economies in 2021, partly undoing the large increase in 2020. Revenues outperformed and spending was lower than expected in the October 2020 *Fiscal Monitor* projections. As a result, primary deficits narrowed, on average, 4 percentage points of GDP. On average, approximately two-thirds of the improvement come from discretionary policy and one third from less

Table 1.2. General Government Debt, 2017–27
(Percent of GDP)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
						Projections					
Gross Debt											
World	**82.0**	**82.2**	**83.6**	**99.2**	**97.0**	**94.4**	**94.1**	**94.5**	**95.0**	**95.4**	**95.5**
Advanced Economies	**103.2**	**102.7**	**103.8**	**123.2**	**119.8**	**115.5**	**113.7**	**113.1**	**113.0**	**112.9**	**112.7**
Canada[1]	88.9	88.9	87.2	117.8	112.1	101.8	98.5	96.2	93.4	90.5	87.7
Euro Area	87.5	85.5	83.5	97.3	96.0	95.2	93.4	92.1	91.0	90.0	88.9
France	98.1	97.8	97.4	115.2	112.3	112.6	112.9	113.1	113.3	113.6	114.0
Germany	64.7	61.3	58.9	68.7	70.2	70.9	67.7	65.5	63.2	60.9	58.7
Italy	134.2	134.4	134.1	155.3	150.9	150.6	148.7	147.2	145.7	144.3	142.9
Spain	98.6	97.5	95.5	120.0	118.7	116.4	115.9	114.7	114.5	114.5	114.6
Japan	231.4	232.5	236.1	259.0	263.1	262.5	258.3	258.7	259.4	260.5	261.8
United Kingdom	85.1	84.5	83.9	102.6	95.3	87.8	82.7	79.6	76.3	73.4	70.7
United States[1]	106.2	107.5	108.8	134.2	132.6	125.6	123.7	124.0	125.1	126.2	127.4
Emerging Market Economies	**50.5**	**52.3**	**54.6**	**64.9**	**66.1**	**67.4**	**69.8**	**72.1**	**74.2**	**75.9**	**77.2**
Excluding MENA Oil Producers	52.1	54.1	56.3	66.8	68.3	70.8	73.2	75.6	77.6	79.4	80.7
Asia	52.8	54.5	57.6	68.9	72.9	76.5	79.5	82.6	85.4	87.7	89.6
China	51.7	53.8	57.2	68.1	73.3	77.8	81.8	85.8	89.6	92.8	95.4
India	69.7	70.4	75.1	90.1	86.8	86.9	86.6	86.1	85.3	84.7	84.2
Europe	30.0	29.7	29.2	37.9	36.3	37.1	38.6	40.1	41.6	42.9	43.5
Russian Federation	14.3	13.6	13.7	19.2	17.0	16.8	18.9	20.0	20.9	21.4	21.2
Latin America	61.1	67.5	68.4	77.8	72.4	71.7	71.9	71.8	71.5	71.0	70.2
Brazil[2]	83.6	85.6	87.9	98.7	93.0	91.9	92.8	93.4	94.2	94.9	94.3
Mexico	54.0	53.6	53.3	60.3	57.6	58.4	58.9	59.2	59.5	59.8	60.1
MENA Region	43.2	41.0	44.4	53.8	52.6	43.1	42.9	43.3	43.5	43.5	43.6
Saudi Arabia	17.2	18.3	22.5	32.4	30.0	24.1	24.5	24.4	23.9	23.3	22.6
South Africa	48.6	51.6	56.3	69.4	69.1	70.2	73.4	76.7	80.1	83.7	87.5
Low-Income Developing Countries	**42.1**	**42.4**	**43.6**	**49.5**	**49.8**	**50.3**	**48.8**	**47.8**	**47.1**	**46.5**	**45.9**
Kenya	53.9	56.4	58.6	67.6	68.1	70.3	69.4	67.7	65.5	62.8	60.4
Nigeria	25.3	27.7	29.2	34.5	37.0	37.4	38.8	40.2	41.6	42.9	44.2
Vietnam	46.3	43.7	41.3	41.7	40.2	41.3	42.0	42.3	42.4	42.4	42.2
Oil Producers	**42.4**	**44.0**	**45.0**	**58.7**	**55.6**	**49.0**	**49.5**	**49.5**	**49.2**	**48.7**	**48.2**
Net Debt											
World	**67.3**	**67.5**	**68.5**	**80.1**	**79.8**	**77.2**	**76.3**	**76.3**	**77.1**	**77.7**	**78.2**
Advanced Economies[3]	**74.5**	**74.4**	**75.2**	**87.5**	**87.3**	**84.8**	**83.8**	**83.9**	**84.9**	**85.8**	**86.7**
Canada[1]	25.8	25.7	23.1	33.6	33.2	32.1	31.6	31.3	30.8	29.1	27.6
Euro Area	72.4	70.6	69.1	79.6	79.2	79.2	78.1	77.3	76.5	75.9	75.1
France	89.4	89.2	88.8	102.6	99.8	100.1	100.4	100.6	100.7	101.0	101.4
Germany	45.4	42.6	40.5	46.3	49.0	51.1	49.0	47.5	45.7	43.9	42.2
Italy	121.3	121.8	121.7	141.8	138.3	138.5	137.1	136.0	134.8	133.7	132.6
Spain	85.1	83.7	82.3	103.0	103.0	101.6	101.8	101.2	101.5	101.9	102.5
Japan	148.1	151.1	151.4	162.4	168.9	172.1	171.0	171.4	172.1	173.2	174.5
United Kingdom	75.7	74.8	74.1	90.2	84.3	76.1	71.3	68.0	64.8	61.9	59.2
United States[1]	80.3	81.2	83.0	98.7	101.3	95.8	94.9	96.1	99.2	102.4	105.6
Emerging Market Economies	**36.0**	**36.7**	**38.1**	**45.4**	**46.2**	**44.0**	**44.0**	**44.4**	**44.7**	**44.8**	**44.6**
Asia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Europe	29.9	30.3	29.0	36.4	39.1	39.0	38.0	38.9	39.6	40.5	40.5
Latin America	42.5	43.0	44.2	51.7	49.2	50.4	51.6	52.3	52.8	53.2	53.1
MENA Region	28.5	29.4	33.7	42.0	45.5	36.3	34.9	34.6	34.2	33.6	33.0

Source: IMF staff estimates and projections.

Notes: 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, 2021 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. MENA = Middle East and North Africa.

[1] For cross-economy comparability, gross and net debt levels reported by national statistical agencies for economies 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.

[3] Net debt for advanced economies includes the grants portion of the Next Generation EU package disbursed in 2021 (€73 billion, 0.5 percent of European Union GDP).

expansionary automatic stabilizers. Nevertheless, there was considerable heterogeneity across countries. Those that experienced the largest increases in deficits in 2020 also had the largest deficit reductions in 2021 (*Brazil*, *Saudi Arabia*). In *Brazil*, most of the pandemic-related fiscal support expired at the end of 2020. Primary balances changes in *Mexico* and *Turkey* were comparatively small during those years as pandemic-related fiscal support was smaller. Few emerging markets experienced further widening of deficits in 2021 (*The Philippine*s, *Thailand*). In *China*, fiscal policy was tightened in 2021 as most pandemic-related exemptions on employer social security contributions expired while a growth-induced tax rebound drove revenue strongly upward. Investment delays resulting from COVID-19 outbreaks and a tighter control of current spending limited expenditures.

Although overall deficits are expected to decline, on average, by less than 1 percent of GDP in emerging markets (excluding *China*) during 2022, this outlook is particularly uncertain as many countries are affected by the war and its spillovers. The fiscal outlook is derailed in *Belarus*, *Russia*, and *Ukraine* with large increases in deficits as the war and the economic sanctions curtail economic activities (April 2022 *World Economic Outlook*). Commodity importers are also likely to face a deterioration in fiscal dynamics with increased spending pressures. Many countries have announced new spending and tax measures in response to rising food and energy prices (Box 1.2). Further, resurgence of Covid-19 cases and associated lockdown is weighing on the recovery in output and revenues, especially in China. By contrast, the primary balance in commodity exporters is expected to improve from a deficit of 2.3 percent of GDP in 2021 to a surplus of almost 2 percent of GDP in 2022, driven by higher commodity prices and an even sharper improvement among oil producers, as governments are expected to use the windfall revenue to rebuild buffers. As a result, debt would decline from 50 percent of GDP in 2021 to 43 percent in 2022 among commodity exporters, reflecting both these surpluses and a boost in nominal GDP.[7]

Beyond 2022, primary balances in emerging markets (excluding *China*) are expected to improve

by 0.4 percent of GDP, from 1.2 percent of GDP in 2022 to 0.8 percent of GDP by 2024, driven mainly by a reduction in primary expenditures as a share of GDP. This would broadly stabilize their average debt-to-GDP ratio around 59 percent of GDP,[8] above medium-term projections of 52½ percent of GDP before the pandemic. For example, in *Indonesia*, the plan is to return to a deficit below 3 percent of GDP by 2023 mainly by gradually withdrawing COVID-related fiscal support and increasing revenue mobilization. However, in *China*, spending needs are projected to lead fiscal deficits to hover around 7 percent of GDP (above prepandemic years) and public debt to rise from 73 percent of GDP in 2021 to around 86 percent of GDP by 2024 (compared with 57 percent of GDP in the year prior to the pandemic). Also, in *South Africa*, the debt-to GDP-ratio, which rose significantly during the pandemic, is projected to surpass 75 percent in the next two years.

Reflecting the gradual improvement in primary balances, average gross financing needs for emerging markets (excluding *China*) are expected to decline by about 0.5 percent of GDP in 2022 compared to 2021. However, over the medium term, the average gross interest bill for these countries is projected to increase from about 3 to 3.5 percent of GDP.

Low-Income Developing Countries

The average fiscal deficit in low-income developing countries remained broadly stable in 2021 at about 5 percent of GDP. Fiscal deficits of commodity exporters remained broadly unchanged as higher revenues driven by the rebound in commodity prices were offset by increases in spending. Deficits widened further in countries that rely on tourism (*Cambodia*) and those that face fiscal pressures from social spending. On average, government revenues remained well below prepandemic projections as the decline in revenue mobilization—1½ percentage points of GDP lower revenue-to-GDP ratio—was compounded by a severe output loss (about 6 percentage points of GDP). Under pressure, several countries reduced real capital spending for the second consecutive year (*Republic of Congo*, *Zambia*).

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[7]To focus on the gains resulting from commodity price increases, these averages exclude *Russia* and countries for which commodity exports usually transit through *Russia*.

[8]Excluding *Venezuela*, whose debt-to-GDP projection is above 280 percent for 2027.

Fiscal deficits are expected to widen slightly in 2022 for both net exporters and net importers of commodities, albeit reflecting different forces. Commodity importers are challenged by limited fiscal space to address the energy and food price increases, whereas commodity exporters (especially energy exporters) will benefit from a revenue windfall. For importers, the average overall fiscal deficit in low-income developing countries is expected to rise, from 4.9 percent of GDP in 2021 to 5.1 in 2022 as revenue increase would not match spending increase. Higher food prices and potential food shortages can increase poverty or prompt social unrest and thus trigger pressure on governments to grant higher subsidies, but fiscal space is very limited. In the medium term, if pressures abate, the average deficit will narrow to 4.2 percent of GDP in 2024, still above the prepandemic average. In commodity exporters, deficits are expected to widen slightly in 2022 as expenditures grow. Over the medium term, commodity exporters' fiscal deficit would narrow somewhat toward 4½ percent of GDP, as increases in revenues would be more durable than increases in spending. More broadly, looking at low-income developing economies averages, revenues are expected to mirror output developments and hence remain below prepandemic projections. On average, expenditures in low-income developing countries are projected to fall to 19 percent of GDP by 2024, with a gradual scaling down of current spending.

The average gross debt in low-income developing countries remained broadly unchanged at around 50 percent of GDP in 2021. Debt ratios continued to rise in almost two-thirds of countries but fell in some commodity exporters (*Liberia, Mauritania*). Over the medium term, low-income developing countries will face increasing debt vulnerabilities amid rising borrowing costs. Although the average debt is projected to decline moderately to 48 percent of GDP by 2024, it will remain above the prepandemic level in almost two-thirds of countries. The median debt service to tax ratio is expected to remain above the prepandemic level and exceed 40 percent in several highly indebted countries (*Ghana, Myanmar, Nigeria*). About 60 percent of low-income developing countries are now at high risk or already in debt distress—compared with slightly less than 30 percent in 2015—and continue to rely on international support to end the pandemic and ensure growth (Georgieva and Pazarbasioglu 2021).

Government Support, Poverty, and Household Savings during the Pandemic

The COVID-19 pandemic has had uneven effects on households, depending primarily on the scale of government support. Government programs and transfers—such as employment subsidies, tax relief, and cash transfers—have enabled people to live with containment measures and have prevented a deeper recession. The degree of government support, however, varied greatly across countries, with distinct effects on household incomes (Figure 1.5). Advanced economies, and a few emerging markets, provided the largest support. In some countries, disposable income grew, mainly reflecting governments' direct support to households that more than compensated for the fall in market income (*Canada, United States*). In other countries, government support was provided indirectly, through job-retention schemes, thereby reducing or preventing a fall in wage incomes. In some cases, it helped keep household income broadly stable (*France, Germany, United Kingdom*), whereas in others it limited the fall (*Italy, Spain*). Government measures had a limited effect on cushioning the decline in people's income in low-income developing economies,

Figure 1.5. Changes in Household Income, 2020
(Percent of 2019 disposable income per capita)
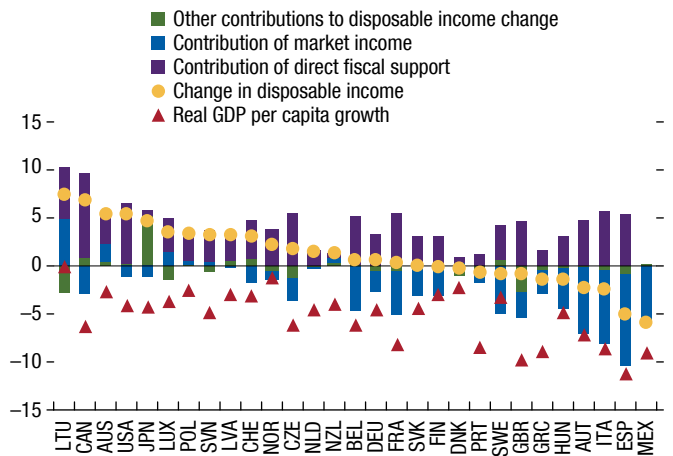
Sources: Australian Bureau of Statistics; US Bureau of Economic Analysis; Organization for Economic Co-operation and Development; Statistics New Zealand; World Economic Outlook database; and IMF staff calculations.
Note: Gross disposable household income is reported. Market income includes gross operating surplus, mixed income, compensation of employees, and net property income. Direct fiscal support includes current taxes on income and wealth, social benefits, and social contributions, and does not include support channeled to firms that indirectly supported households such as job retention schemes. Other includes personal current transfers. All quantities are per capita and converted into 2019 prices using the Consumer Price Index. Data labels use International Organization for Standardization (ISO) country codes.

amid large informal sectors and low social protection coverage.[9]

Although global poverty increased significantly in 2020, government support has helped limit the rise in—or promote the reduction of—poverty in some countries. For example, pandemic-related support prevented a rise of poverty in the *United States* (Figure 1.6, panel 2; Box 1.1). The US Supplemental Poverty Measure rate from the US Census Bureau, which accounts for government assistance, was 9.1 percent of the population in 2020, 2.6 percentage points lower than in 2019. In *Brazil* poverty fell sharply but temporarily in 2020 mainly as a result of the emergency social assistance program (Figure 1.6, panel 1; Box 1.1; Online Annex 1.2). Similarly, Neri (2021) estimates that the number of poor individuals in *Brazil* decreased from 23 million in 2019 to 9.8 million in September 2020, but the number rose sharply in early 2021 to around 27.7 million as the exceptional government support was reduced. In *Belgium*, *Italy*, *Spain*, and the *United Kingdom*, simulations suggest that fiscal support substantially lessened the shock and may have prevented a rise in inequality but not an increase in poverty—according to an early analysis based on preliminary data (Cantó and others 2021).

Despite large government transfers, private consumption declined, reflecting mobility restrictions and precautionary motives, and household savings rose sharply. The relative contributions of each driver to the rise in savings vary across countries (Figure 1.7). In the *United States*, direct government transfers to households played the most important role in 2020 and early in 2021. Low-income households experienced the largest percentage gains in net savings in 2020 (Figure 1.8), while also increasing consumption. In the *European Union*, consumption restraint and excess saving have been more protracted up to 2021. In *Mexico*, where government support was limited, the increase in household savings was driven by larger consumption cuts and personal transfers and remittances from abroad.

Governments now face the challenge of managing the potential economic effect of excess savings. These excess savings (above prepandemic trends) amount to approximately $2.5 trillion in the *United States* and $1 trillion in the *European Union* during 2020–21 (Figure 1.9). These savings could now help

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[9]For example, Lastunen and others (2021) analyzed a sample of African countries and Avellaneda and others (2021) analyzed Andean economies.

buffer the effect of the higher inflation and lower growth but, in some cases, could add to inflationary pressures if spent quickly. Another challenge relates to the time-bound nature of poverty support programs that can also meet long-term structural needs—when such support ends, poverty rates could rise. This is a risk given the high level of uncertainty and rise in energy and food prices that would disproportionally affect the most vulnerable households.

Debt, Inflation, and Fiscal Policies

Inflation has important implications for public finances and policies, which depend on how persistent higher inflation is and how monetary policy responds. Although inflation surprises can improve debt dynamics, unexpected inflation cannot last. In the longer run, preserving the special status of government debt as the safe asset of reference requires maintaining price stability.

The initial effect of inflation in 2021 was a reduction in debt-to-GDP ratios. Surprise inflation—the difference between actual and projected inflation rates—contributed to an average decline in global debt projections of around 2 percent of GDP relative to 2020, shaving about 1.8 percentage points off 2021 public debt to GDP ratios in advanced economies and 4.1 percentage points off in emerging markets excluding *China* (Figure 1.10). The war in *Ukraine* has caused a further unexpected rise in food and energy prices, with additional effects on debt ratios. Moderate upward inflation surprises can also reduce primary deficits in the short run. As taxes due are calculated based on nominal incomes, revenues tend to mechanically improve with nominal GDP growth—albeit for a limited time because a share of tax revenues depends on lagged activity. The 2022 fiscal balance may benefit from higher inflation. A cross-country analysis suggests that a surprise of 1 percentage point in the annual inflation rate could increase nominal revenues by 0.8 percent in emerging markets and 0.3 percent in advanced economies (Figure 1.11). By contrast, nominal spending reacts less to moderate surprises in inflation given that it is usually precommitted in nominal terms (Patinkin 1993). The evidence suggests that inflation surprises are associated with lower fiscal deficits in the short term, though spending pressures are likely to rise over time (Online Annex 1.3).

Even so, the rise in inflation is likely to be followed by rising interest rates and higher debt burdens.

Figure 1.6. Poverty Rates for Brazil and the United States, 2020–21

The emergency cash assistance (Auxilio Emergencial) and other social transfers reduced poverty.

Transfers, including the CTC, lowered poverty but the extended CTC ended in December 2021.

**1. Brazil
(Percent, quarterly and monthly)**

**2. United States
(Percent; monthly, January 2020 through January 2022)**
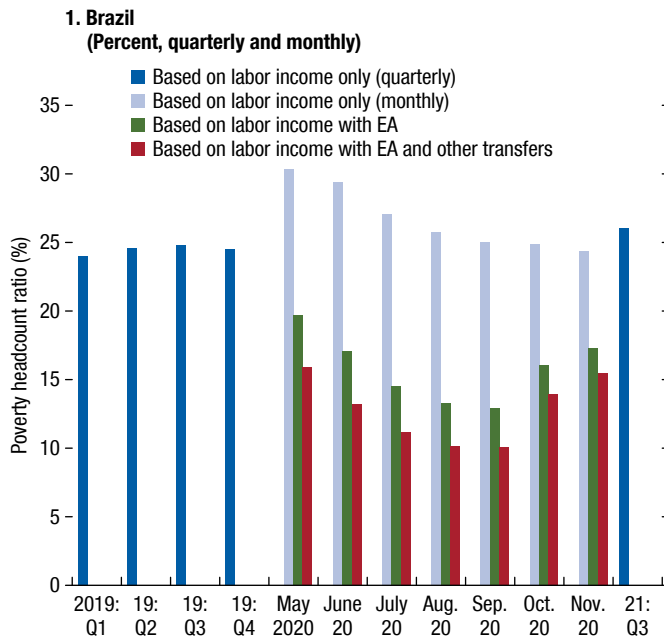
Sources: PNAD COVID and PNAD Continua; and IMF staff calculations.
Note: Estimates are based on international upper-middle-income poverty lines ($5.50 in 2011 PPP), also used by Brazilian Institute of Geography and Statistics (IBGE). All poverty measures include earned labor income. Pre–COVID-19 poverty headcount ratio is based on reported labor income in PNAD Continua. Quarterly transfers for years before 2020 are not available in PNAD Continua. Other social transfers considered in the calculation of poverty headcount ratio from May through November 2020 include, in addition to the EA, Bolsa Familia, income from donations, alimony, income from retirement, unemployment insurance and others (like rent).

Source: Center on Poverty and Social Policy, Columbia University.
Note: The reported monthly measures of poverty are estimates of the Supplemental Poverty Measure and official US poverty measure based on a family unit's monthly income that are reported annually with a considerable lag. The monthly measures of poverty provide close to real-time estimates of the economic well-being of US households, with a lag of two weeks. For full details, see Parolin, Curran, Matsudaira, Waldfogel, and Wimer (2022). CTC = Child Tax Credit; EITC = earned income tax credit.

Figure 1.7. Contributions to Changes in Household Savings, 2019–21
(Percent of country-specific disposable income as of the fourth quarter of 2019)
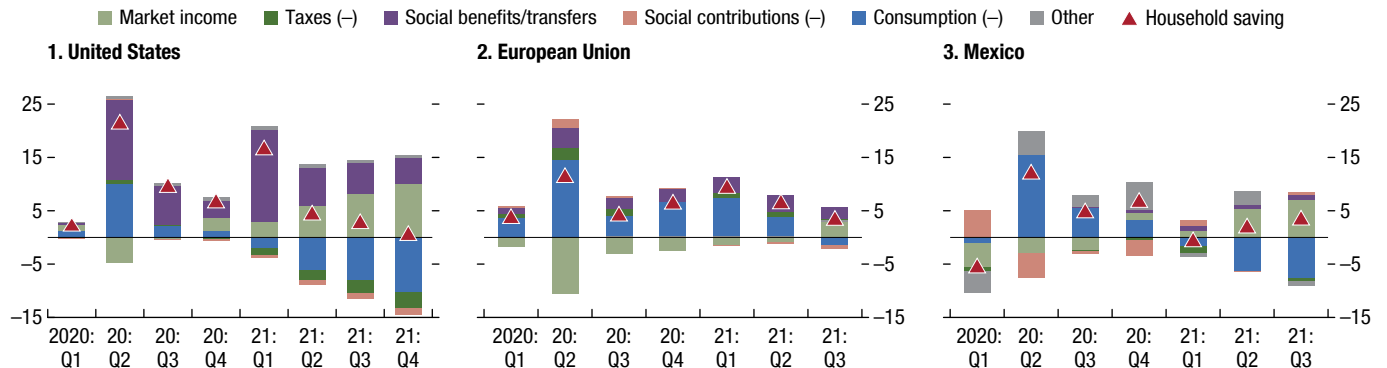
Sources: Bureau of Economic Analysis; Federal Statistical Office; National Institute for Statistics and Geography; and IMF staff calculations.
Note: Savings and components are shown as cumulated changes from the fourth quarter of 2019. Market income includes gross operating surplus, mixed income, compensation of employees, and net property income. Other includes personal current transfers and adjustment for the change in net equity in pension funds.

Figure 1.8. United States: Contributions to Changes in Household Savings, by Income Quintile, 2020
(Percentage of 2019 income after taxes)
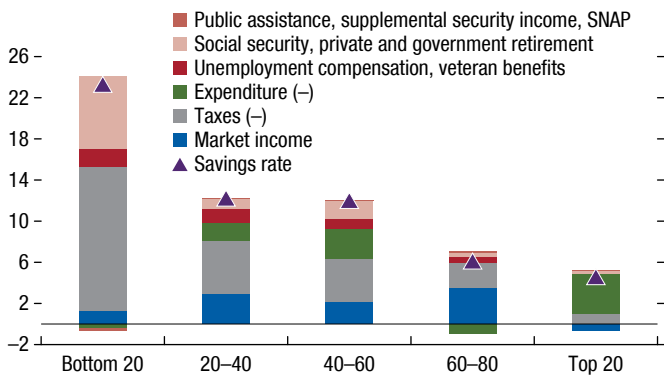
Sources: Consumer Expenditure Survey; US Bureau of Labor Statistics; and IMF staff calculations.
Note: Savings are defined as income after taxes minus total expenditure. Market income includes wages and salaries, self-employment income, interest, dividends, rent, property income, and other income.

As monetary policy tightens to curb inflation, sovereign borrowing costs will rise. Evidence suggests that the effect of domestic monetary policy changes on sovereign debt service is heterogeneous across countries. One important factor is the debt profile (for example, maturity, currency denomination, and types of instruments). Fixed-rate long-term domestic currency denominated debt accounts for 60 percent or more of the government debt in a sample of advanced economies (Figure 1.12), whereas foreign-currency-denominated, short-term, floating rate, or inflation-indexed debt are predominant for governments in most emerging markets. When interpreting these data, it is important to consider the broader public sector (including central banks), however. Through quantitative easing (that

Figure 1.10. Contribution of Inflation to Public Debt Ratios: Predicted versus Actual
(Percent of GDP)

October 2020 versus April 2022 *World Economic Outlook* Vintages
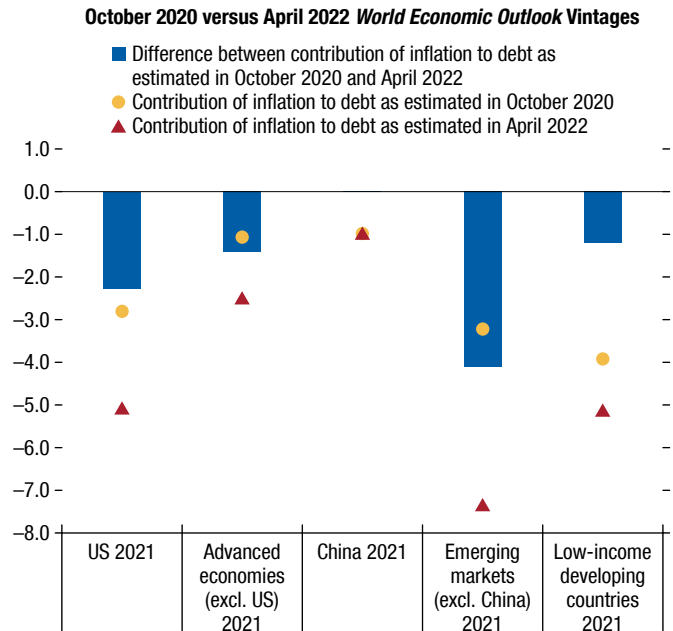
Sources: IMF World Economic Outlook Database; and IMF staff calculations.
Note: Inflation is defined as the percentage change in GDP deflator. The contribution of inflation to debt in October 2020 is estimated with the *World Economic Outlook* October database vintage.

is, a central bank's purchase of government bonds), a sizeable portion of fixed rate long-term debt in some advanced economies is mirrored by larger short-term public sector liabilities (bars with diagonal lines in Figure 1.12). This increases the vulnerability of the public sector in those countries to interest rate rises (for example, by affecting profits of central banks when interest rates rise).

Figure 1.9. Excess Gross Household Savings Rose Significantly in Advanced Economies
(Trillions national currency, cumulative sum since the fourth quarter of 2019)
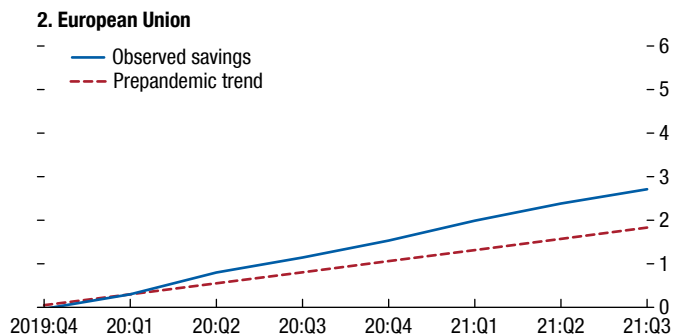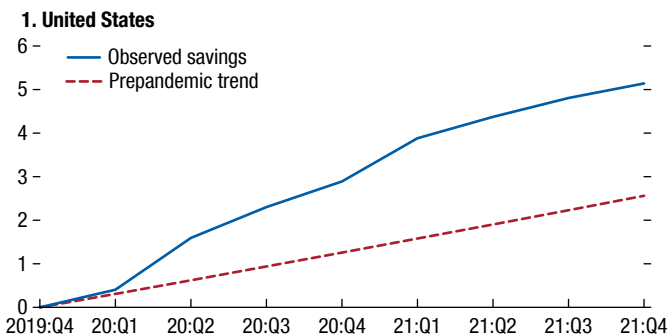
Sources: Bureau of Economic Analysis; Eurostat; and IMF staff calculations.

Figure 1.11. Short-Term Response of Fiscal Flows to Within-Year Inflation Surprises
(Percent, same-year surprises)
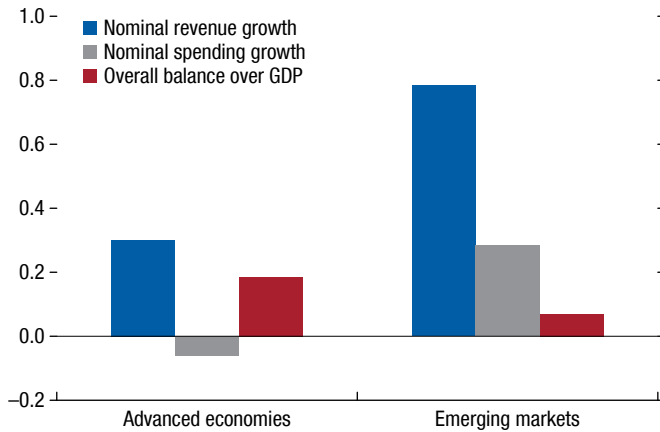
Sources: *World Economic Outlook* October 1992–2020 issues; and IMF staff calculations.
Note: The bars show the average of estimates based on surprises to the average headline CPI growth and GDP deflator growth. Regressions control for the growth rate of private demand and include country and year fixed effects. The sample excludes oil exporters, financial centers, periods of historical revisions to the entire time series (for example, System of National Accounts updates), and observations with regressors outside their 5th to 95th percentiles.

Figure 1.12. Government Debt Composition for Selected Countries
(Percent of GDP)
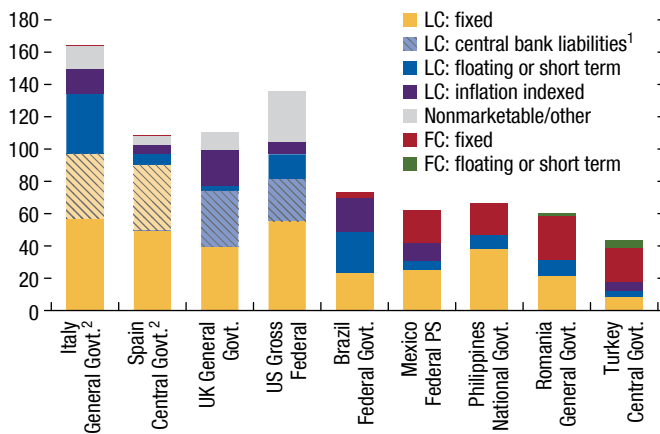
Sources: Haver; FRED; and IMF staff calculations.
Note: Mexico FC debt as of the end of 2020; Brazil, Mexico, Philippines, and Romania financial corporation debt are assumed to be long term and fixed. Bars with diagonal lines indicate the portion of fixed rate long-term debt that has been converted into short-term public sector liabilities through quantitative easing in advanced economies.
[1]Counterpart to bills, notes, and bonds purchased by central bank.
[2]The hatched yellow portion of the bars represents fixed long-term debt held by the European Central Bank that generates short-term liabilities for the Eurosystem.

A simple cross-country analysis suggests a sizable pass-through of short-term policy rates to the effective sovereign interest rate (average interest rate on the stock of sovereign debt). On average for advanced economies, for each increase of 100 basis points in the policy rate, the effective interest rate for the government rises by about 30 basis points one year later. For emerging markets, the median pass-through is smaller, but there is wide dispersion across countries, with some having a pass-through above one (that is, borrowing costs would increase more than proportionally to rises in policy rates). This finding could be related to differences in the monetary policy framework, sensitivity to global financial conditions, sovereign risk premium, and exchange rate movements, among other factors.

Furthermore, a rise in inflation volatility would add pressure on borrowing costs as investors require a higher premium for long-term debt (Rudebusch and Swanson 2012). This could be amplified as some central banks face a difficult choice between continuing to support the economy and controlling inflation. A cross-country analysis suggests that an increase of one standard deviation in inflation volatility can increase long-term government bond yields by 0.5 percentage points in 3 years, and this increase tends to be higher when public debt is higher (Figure 1.13; Online Annex 1.3). More volatile inflation could also depress investment and growth, eventually adversely affecting fiscal space (Choi and others 2022). Although the surprise rise in inflation may have provided short-term relief for fiscal accounts, the effects of higher and

Figure 1.13. Response of Market Sovereign Interest Rate to Inflation Volatility Shocks
(Percentage points)
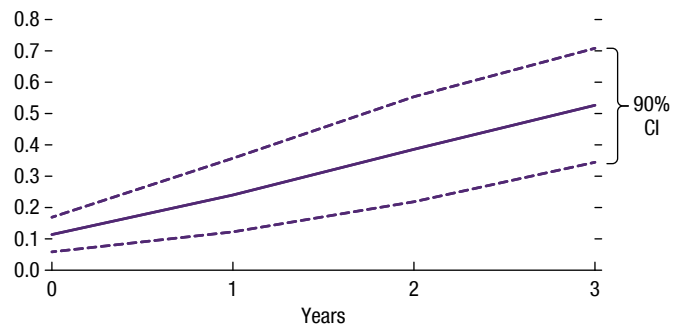
Sources: Jordà, Schularick, and Taylor 2017; Ha, Kose, and Ohnsorge 2021; Mauro and Zhou 2021.
Note: The sample is from 1975 to 2017, including 16 advanced economies. The regressions are based on a local-projection method for a dynamic panel. Country and year fixed effects are included.

persistent inflation could reverse those gains and undermine financial stability and medium-term economic growth. Historical episodes where moderately high inflation helped reduce public debt substantially (for the *United States*, see Hall and Sargent 2022) depended on circumstances that are unlikely to be seen now. Such events have often relied on financial repression that depressed real returns on domestic sovereign bonds even when inflation was anticipated (Reinhart and Sbrancia 2015; Best and others 2020).[10] However, the COVID-19 crisis may not lead to the same pattern because the shorter maturities of consolidated public sector debt, higher degrees of inflation indexation, and availability of alternative investment opportunities increases the chances that higher inflation would lead to higher sovereign interest rates. The risks would also be high. Persistently high and volatile inflation would unanchor inflation expectations, disrupt economic activity, and undermine the credibility of central banks. In turn, this would put further pressure on fiscal accounts through higher borrowing costs and, when inflation is particularly high, lower tax revenue ratios.

Managing the Effects of High Energy and Food Prices

Rising energy and food prices will put pressure on the budget of families and could lead to a food crisis in some countries. Governments are taking actions to help alleviate the burden on vulnerable households, ensure food security, and limit risks of social unrest. Many countries have announced measures to limit the rise in domestic prices, including by cutting taxes or granting subsidies, or generalized transfers to households (Box 1.2). However, many of these actions can have undesirable consequences and large fiscal costs. As many countries are not allowing domestic prices to adjust, these actions can exacerbate the imbalances between global demand and supply, putting further upward pressure on international prices, and leading to energy or food shortages. This will hurt further low-income countries that import energy and food and have less fiscal space. By contrast, allowing the pass-through of higher international prices to domestic prices would also create the right incentives to adjust demand (for example, promote more efficient use of

[10]Financial repression is understood as policies to channel to governments funds that, in a deregulated market environment, would go elsewhere (Reinhart and others 2015).

Figure 1.14. Fiscal Performance during Energy and Food Price Booms, 1991–2018
(Percent and percentage points of GDP)
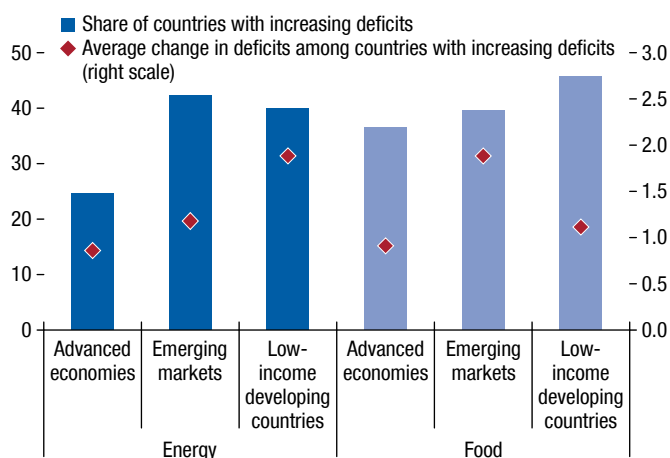
Sources: IMF International Financial Statistics Database; World Economic Outlook Database; and IMF staff calculations.
Note: For energy booms, oil exporters are excluded. Increase in deficit during booms is calculated as an average annual increase in deficit (primary deficit for advanced economies and emerging markets, overall deficit for low-income developing countries) over the period between the year before the start of the boom and the second year of the boom, relative to the average annual change in deficit over 1991–2018 for all countries in the corresponding income group. Booms are identified using the Harding-Pagan algorithm. Energy includes coal, natural gas, crude oil, propane, gasoline, and heating oil.

energy) and supply (for example, invest in renewable energy or increase production of food). In addition, many of the announced measures have been untargeted (such as general fuel subsidies) and will be costly, contributing to higher fiscal deficits as in past episodes of rising commodity prices (Figure 1.14).

While policies will need to be tailored to country-specific circumstances, fiscal support should be designed in a way that preserves appropriate market incentives and contains costs, especially in countries with limited fiscal space. The following strategies would help governments to achieve these objectives:

- *Targeted and direct support to vulnerable households, while allowing domestic prices to follow international prices.* Generalized price subsidies are costly, crowd out productive spending, reduce producer incentives, lead to overconsumption and, in case of energy subsidies, benefit disproportionally higher income households. By supporting those in need while allowing domestic prices to move in tandem with international prices, governments can avoid these pitfalls.
- *Governments with existing energy or food subsidies should gradually pass-through international prices to retail prices especially if social safety nets are not well developed or timely expansion is not feasible.*

Price increases could also be sequenced by product (for example, gasoline versus liquefied petroleum gas (LPG), which is also used for cooking) depending on the extent to which the product is used by lower versus higher income groups. The pace of pass-through should be relatively fast to avoid distortions and large fiscal costs.[11] In the intervening time, capacity should be built to enhance social safety nets against future shocks. If food provision is at risk and cash transfers are not viable, governments could resort to food distribution.

- *Countries with strong social safety nets could use targeted and temporary cash transfers to low-income and vulnerable groups.* They can provide targeted transfers relying on existing social safety nets or information from other existing systems. Cash transfers unconditioned on the extent of use of a product are desirable as this does not distort relative prices and prevents overconsumption. Within the group of conditioned benefits (for example, vouchers and discounts on energy bills), lump-sum benefits are preferred over proportional benefits as they are more progressive and less distortive.
- *Countries with weak social safety nets could expand the most effective programs and leverage digital methods.* Digital tools can help to identify eligible households and provide delivery mechanisms, such as smart cards or mobile money (IMF 2020). In some cases, targeting by geographic region or age could be considered. Governments could also expand school feeding programs, reduce education and health fees, or review public transport subsidies if coverage is inadequate.
- *Governments could also take measures in the markets for foodstuffs and fertilizers.* They could release food reserves to partially offset short-term supply shortages. Similarly, policymakers should consider whether excessive incentives are in place to use corn for biofuel production rather than food supply (Glauber and Laborde 2022).

International cooperation is critical. The United Nations' Food and Agriculture Organization assesses those 44 countries' need for external assistance for food, and their situation could worsen as a result of

higher food prices. Low-income developing countries are more subject to supply shortages especially if their fertilizer costs significantly increase—marginal yield gains from fertilizers are higher in low-income developing countries than in advanced economies. A multidonor funding vehicle could make international support for food security more coherent. For example, in response to the 2008 food price spike, the World Bank launched the Global Food Crisis Response Program, which provided grants to the poorest and most vulnerable countries. In 2010, the Group of Twenty (G20) countries launched the Global Agriculture and Food Security Program, which pooled donor resources to reduce hunger and support agriculture in low-income developing countries through productive and social investments.

Countries should avoid unilateral actions that increase global food prices. Export restrictions can be harmful to global food security and collectively counterproductive if decided unilaterally. They are especially problematic when they concern (1) upstream products in production processes, such as staple foods and (2) when economies imposing the restrictions hold a sizable share of the global market. In the long run, export prohibitions may also adversely affect the countries imposing restrictions. Lower domestic prices can trigger an international domino effect resulting in higher prices for other food products that these countries import. They can also reduce production incentives and increase incentives for smuggling to countries with higher prices. Instead, countries should work together to develop sustainable, inclusive, and efficient food systems.

The large increases in fossil fuel prices also highlight the importance of taking actions to transition to clean and renewable energy sources. Although meeting short-term needs will likely require using all types of energy, such urgent responses should not lead to more permanent use of fossil fuels nor detract from efforts to promote investment in renewable energy sources and greater energy efficiency (Figure 1.15).

Policy Conclusions

Governments face difficult choices amid a sharp rise in uncertainty caused by the war in *Ukraine* and surging and volatile commodity prices. Governments should focus on the most urgent needs including ensuring access to food by the most vulnerable individuals. Failing to tackle these pressures could lead to

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[11]For countries with large differences between domestic and international prices, the pace of pass-through will need to be more gradual depending on the existing price gap, the available fiscal space, and the ability to put in place mitigating measures. The phased price increases should be embedded in a broader reform strategy to eliminate subsidies.

Figure 1.15. Share of Renewable Sources in Total Energy Supply
(Percent of total energy supply)
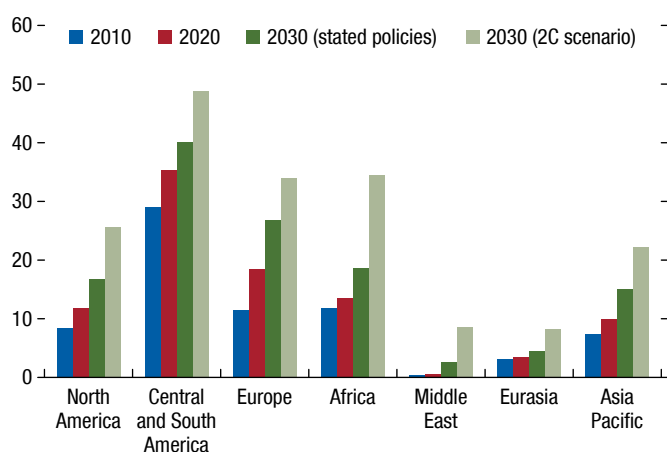
Sources: International Energy Agency; and World Energy Outlook 2021.
Note: The 2030 2C scenario refers to the International Energy Agency scenario consistent with keeping global warming below 2°C.

social unrest. The rise in spending pressures calls for commensurate actions to mobilize domestic revenues. At the same time, fiscal policy must operate amid a slowing economic recovery, rising interest rates as central banks tackle elevated inflation, and increasing debt vulnerabilities. Setting fiscal strategies to ensure medium-term sustainability amid high uncertainty, anchored on credible fiscal frameworks, and accompanied by robust contingency plans, will help communicate policies and reassure financial markets, limiting the rise in borrowing costs.

Marked divergences across countries call for diverse fiscal strategies. In the economies hardest hit by the war in *Ukraine* and by the sanctions on *Russia*, fiscal policy will need to respond to the humanitarian crisis, including supporting war refugees, and to address disruptions in energy and food supply. Given rising inflation and interest rates, fiscal support should preferentially be targeted to those most affected and priority areas. However, if economic activity deteriorates significantly, broader and temporary fiscal support could be appropriate for countries with fiscal space.

For those countries where economic growth is stronger and inflation pressures remain elevated, fiscal policy needs to shift from exceptional support in response to the pandemic to normalization. Such strategy would help reduce demand pressures, helping central banks to contain inflation. Amid unusually high uncertainty,

automatic stabilizers (for example, unemployment insurance) provide a first line of defense while fiscal policy remains attuned to short-term developments. In many emerging markets and low-income developing countries, governments face especially difficult trade-offs. Higher inflation and tightening global financial conditions call for greater fiscal prudence. However, fiscal support is needed for countries that will be affected the most by the rising in commodity prices and where the recovery was already weaker. In countries with tight financing conditions or high risk of debt distress, governments will need to prioritize spending and raise revenues to reduce vulnerabilities while considering distributional effects, including the Sustainable Development Goals agenda. Commodity exporters that benefit from higher prices should seize the opportunity to rebuild buffers, given inflationary pressures and the high uncertainty around commodity prices.

Both the pandemic and the war in *Ukraine* highlight the need for global initiatives to solve global crises. Unilateral actions could worsen the crisis (for example, restricting exports of food could increase risk of food shortages). International cooperation will lead to better solutions to address the risks and costs of energy and food disruptions—including addressing supply constraints. Cooperation is also crucial to better prevent and mitigate potential future pandemics and other health-related crises. On the climate agenda, cooperation, including on carbon pricing (Chapter 2), would also facilitate a faster and smoother transition. Low-income developing countries face increased fiscal strain and need support from the international community to manage the pressures from high energy and food prices.

Likewise, international cooperation is needed to support refugees. As of April 3, more than 4.2 million individuals have fled *Ukraine* since the start of the war, adding to the large numbers of refugees from previous wars. Countries that have admitted refugees could face significant pressures, and international coordination could help.[12] Given likely traumas and skill mismatches, they need a whole-of-the-government approach including health care (Schilling and others 2017) and social support. Streamlining administrative

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[12]While migrants tend to contribute more to taxes and contributions than governments spend on their social protection, health, and education on average (OECD 2021b), the arrival of refugees is costly.

procedures would accelerate their accession to the job market (IMF 2016a). Higher spending on vocational training—such as language courses—and on active labor market policies promotes greater employment growth after an immigration shock (IMF 2020). Furthermore, spreading the flow of refugees across countries and helping refugees to move to places with labor demand for their skills could also facilitate access to jobs (Koczan and others 2021). Most of these policies would reduce upfront net fiscal costs thanks to faster access in job markets.

The Reform Agenda Needs Action Now

Governments cannot afford to delay critical reforms that tackle climate change, address spending pressures from aging, and promote a more inclusive and sustainable economy. Moving toward a more diverse, clean, and renewable energy matrix will help the planet and be crucial for economies to function well by shielding them from volatile fossil fuel prices.

Spending on social protection and on essential public services has increased during the COVID-19 pandemic calling for enhancing revenue mobilization. Limited access to finance will make it harder for countries to make progress toward sustainable development goals (Benedek and others 2021; Duarte Lledo and Perrelli 2021). Furthermore, the war in *Ukraine* can generate durable spending pressures to provide security. This will require bold domestic revenue mobilization reforms. Modernizing tax and customs administrations and improving their efficiency, including greater digitalization, would strengthen compliance, facilitate trade, and secure additional revenue. Broadening and diversifying the tax base would increase revenues while ensuring fairer competition as businesses would face more even tax costs. Enhancing international cooperation could also help (Chapter 2). Also, countries with strong external positions could redirect some of

their special drawing rights to help countries in need, providing room for spending in priority areas.[13] For countries that need urgent and comprehensive debt treatments, it is critical to make the G20 Common Framework fully operational.[14]

Better spending prioritization (education, health, and public investment) would help to overcome the effects of the pandemic and to address climate change (Box 1.3). The pandemic has further highlighted the need to improve safety nets (Box 1.1; Beazley, Barca, and Bergthaller 2021). Better targeting is needed to ensure higher coverage and adequate provision of public services. This crisis has also shown that social protection systems need to be flexible and responsive to build resilience to future shocks (World Bank 2021b). Targeting support for low-income earners and informal workers—and adopting mobile-based platforms for beneficiary identification, registration, and benefit payments—are promising ways to achieve these goals. The pandemic and other adverse shocks have also taught us the importance of investing in more resilient health care, social protection, infrastructure, and production systems. Meeting these challenges requires mobilizing revenues through domestic reforms and international cooperation (Chapter 2).

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[13]Countries with strong external positions could voluntarily channel some of their special drawing rights to poorer and more vulnerable countries. These special drawing rights could be used to expand existing funds (Poverty Reduction and Growth Trust), helping to finance new IMF-administered funds (for example, Resilience and Sustainability Trust), and channeled to prescribed holders (for example, World Bank, some regional central banks, and multilateral development banks)—see IMF 2021.

[14]At the end of 2021, the IMF approved debt service relief from the Catastrophe Containment and Relief Trust for 25 countries totaling a cumulative debt service relief of about $1 billion over two years. The Debt Service Suspension Initiative was extended until December 2021 and delivered more than $10.3 billion in debt relief to more than 40 eligible countries. Several countries have already used all or part of their new special drawing rights allocation for budget support, including funding health and social programs (*Chad, Mauritania, Rwanda, Senegal*).

Box 1.1. Social Protection and Poverty during the Pandemic

The pandemic has reversed the trend decline in global extreme poverty (the number of people living on $1.90 a day or less). On the basis of growth in per capita GDP (Online Annex 1.1), and assuming inequality remained broadly stable, global extreme poverty is expected to be about 70 million people higher in 2021 relative to prepandemic projections. If inequality rises, poverty will be even higher (Online Annex 1.1). For example, an increase of 1 percent in the Gini coefficient of income inequality would add 20 million more people in extreme poverty in 2021. At the same time, well-targeted government support could limit the effect on poverty (Online Annex 1.1). Governments need to be cautious in withdrawing the exceptional support to the most vulnerable households, especially given higher inflation.

Fiscal support has allowed many countries to limit the rise in poverty, but results varied with the size of the support, the design of prepandemic social safety net systems, and changes made during the pandemic. In *Brazil*, the emergency assistance program (*Auxilio Emergencial*) amounted to 4 percent of GDP in 2020. Temporarily, it more than offset the large decline in labor incomes when benefit levels and coverage were at their highest (Figure 1.6, panel 1). Moreover, it is estimated to have cushioned the fall in economic activity (Cunha and others 2022). As the coverage was lowered and benefits declined, poverty rose again (Online Annex 1.2; Neri 2021). In the *United States*, pandemic-related measures (enhanced earned income and child tax credits and stimulus checks) reduced poverty by half to about 9 percent by March 2021 (Figure 1.6, panel 2). With the expiration of the child tax credit in December 2021, poverty is estimated to have risen from 12½ percent to about 15 percent in January 2022 (Parolin and others 2022). In other countries government support was limited. For example, *Mexico* employed a modest increase in support in 2020 (0.7 percent of GDP) compared with other emerging market economies (Hannan and others 2021). The pandemic increased social vulnerabilities as extreme poverty rose by about 2 million between 2018 and 2020, but more would have been poor without social transfers (CONEVAL 2021).

The available cross-country evidence from prepandemic social safety nets show that high coverage and adequacy of social assistance programs matter for poverty reduction (Figure 1.1.1; Online Annex 1.2). But countries' experiences differ significantly reflecting several factors, including financing and capacity constraints. For example, *South Sudan*'s social protection has a negligible poverty effect given that it has very low coverage

Figure 1.1.1. Poverty and Social Safety Nets
(Effectiveness of social safety nets, percent)

High coverage and adequacy matter for poverty reduction.
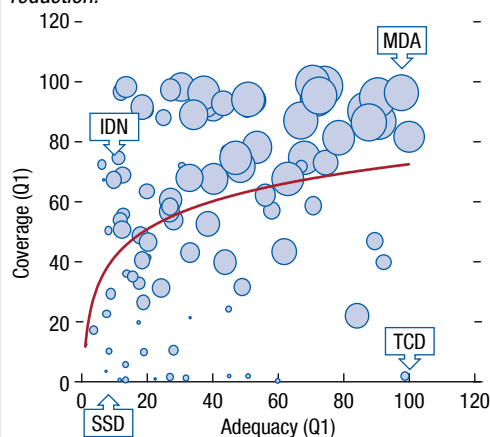
Sources: World Bank ASPIRE database; and IMF staff calculations.
Note: A larger size of bubble represents greater poverty reduction. The red line is the fitted relationship. Poverty reduction is defined as the difference between poverty headcount after and before transfers divided by poverty headcount before transfers. Data are taken from the most recent available year, ranging from 1999 to 2019 and cover 94 countries. Adequacy for the first quarter is the size of transfer amount received by those in the bottom quintile as a share of the pretransfer total income/expenditure of all beneficiaries in the first quarter. Coverage for the first quarter is the share of the bottom quintile that receives a social assistance benefit as a fraction of all individuals in the first quarter. IDN = Indonesia; MDA = Moldova; SSD = South Sudan; TCD = Chad.

and adequacy, *Chad* performs slightly better with high adequacy although low coverage, whereas *Moldova* has a higher poverty effect with both high coverage and adequacy. Higher informality is also associated with a reduction in the impact of social protection and labor programs in poverty alleviation (Online Annex 1.2.).

More generally, the fiscal response to the pandemic ushered experiments worldwide in introducing new social protection programs, enhancing the existing social protection system, and changes in coverage and adequacy of cash transfers. In response, countries quicky adjusted their social protection measures. From the onset of the pandemic to February 2022, vertical expansions (increase in benefits) accounted for 15 percent of measures, horizontal expansions (increase in coverage) 75 percent of measures, and both vertical and horizontal expansions in 4 percent of measures (Gentilini and others 2020).

Box 1.2. Measures in Response to High Energy and Food Prices

Many countries have taken swift measures to mitigate the adverse effect on consumers and firms from the recent spike in international energy and food prices. Results of a survey of 94 countries show that more than two-thirds of advanced economies in the survey (total 29 countries) announced at least one spending measure since the beginning of the year while emerging and developing economies have announced fewer new policy measures (Table 1.2.1).[1]

Many countries limited the pass-through of higher world prices to domestic consumers, especially those that already relied on energy or food subsidies.[2] They maintained the existing programs, kept the level of administered prices unchanged, or announced that they would freeze prices on some energy and food items. As a result, subsidies in these countries are expected to rise substantially in 2022.

- *Energy.* Several oil exporters could see significant rises in fuel subsidies as they usually shield domestic prices from international prices to a large degree and maintain the lowest retail prices globally on average (*Algeria, Ecuador, Kuwait*). *Nigeria*

announced that it would extend fuel subsidies for another 18 months. Oil-importing countries with fuel subsidies (*Burkina Faso, Cameroon*) had been adjusting prices on an adhoc basis but not since the beginning of the year,[3] despite rising international prices. Other countries have increased fuel prices to very different degrees (from a total of 6 to 40 percent) in recent weeks (*Sierra Leone, Sri Lanka, Tunisia*). Several countries have electricity subsidies that will rise if generation is based on fuel and electricity tariffs are not adjustewd (*Djibouti, Guinea-Bissau, Iraq, Libya, Sri Lanka, Tunisia*).

- *Food.* In many cases, countries subsidize consumer prices (for example, *Egypt, Gabon, India, Indonesia, Iraq, Morocco, Sri Lanka*). Some use input subsidies for farmers such as for fertilizers and seeds (*India, Malawi, The Gambia*), vouchers and ration cards (*Egypt, Iraq*), and in-kind food distribution programs (*Djibouti, India*). Subsidies are provided mainly on staple foods such as wheat products (for example, *Burkina Faso, Egypt, Gabon, Iran, Jordan, Morocco*).

Several countries have announced new fiscal measures to provide support to households and firms. On tax, measures focus on lowering prices for consumers by reducing value-added tax rates for certain food items (*Poland, Turkey*) and energy (*Belgium, Italy, Turkey*), temporary exemption of federal taxes and

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[1]Of the 94 countries surveyed, 16 were in Asia, 21 in the Middle East and North Africa, 15 in sub-Saharan Africa, 9 in the Western Hemisphere, and 33 in Europe. The survey was done in March 2022.

[2]About 60 percent of the reported countries (38 countries) have existing energy subsidies and 30 percent have existing food subsidies (19 countries); almost one-quarter of the countries have both energy and food subsidies.

[3]As of March 21, 2022.

Table 1.2.1. Number of Countries That Announced at Least One New Measure Since the Beginning of 2022

	Advanced Economies	Emerging Markets	Low-Income Developing Countries	Oil Importers	Oil Exporters	Large Importers of Wheat from Russia/Ukraine[1]	Wheat Exporters[2]
Spending measures	20	18	3	39	2	14	3
of which are cash transfer	6	4	1	11	0	5	2
Tax measures	15	17	2	31	3	11	3
Below the line	2	5	0	7	0	2	0
Other measures (trade bans, and so on)	0	5	0	5	0	3	0
Number of countries covered by the survey	29	46	19	78	16	41	5

Sources: IMF staff calculations.

[1] Using COMTRADE bilateral trade statistics, a country with more than 10 percent of the country's wheat imports from Russia and Ukraine combined is defined as "large importer of wheat from Russia/Ukraine."

[2] Using COMTRADE bilateral trade statistics, a country is defined as a "wheat exporter" if the share of a country's wheat export in global wheat exports is higher than 3 percent.

Box 1.2. *(continued)*

freeze of state taxes on fuels (*Brazil*), and a temporary reduction or exemption from excise taxes on energy products (*France, Korea, New Zealand, Serbia, Thailand*). Some countries announced a temporary reduction or suspension of import duties on food (*Brazil, Iraq, Turkey*) and on containers to alleviate the rise of shipping costs (*Costa Rica*). On the spending side, some countries announced support to vulnerable households through targeted cash transfers (*Denmark, Germany, Haiti, Latvia, Norway, Philippines, Sweden, United Kingdom*). In some cases, targeted transfers were accompanied by price freezes (*Dominican Republic, France*). In addition, countries announced subsidies to producers, such as an increase in transfers to energy state-owned enterprises (*Nepal*), oil importers and wholesalers (*Japan, Kosovo*), agricultural sector (*China, Turkey*), and taxis (*Brazil, Japan, Morocco*). Some countries have announced loans to energy and agricultural firms (*Dominican Republic, Germany, Serbia*) or eased loan conditions for affected firms (*Japan*).

Many of the announced measures create tension between the need to ensure affordable access to energy in the near term and the green transition. These include measures that reduce consumption taxes on energy products. Furthermore, some measures could encourage production and consumption of carbon-intensive energy. These measures aimed at further boosting coal production to reduce reliance on imported coals (*China*) or to sustain household consumption of coal briquettes through price subsidies (*Mongolia*). In contrast, some countries announced measures that aim at maintaining incentives for green transition, such as additional funding for the climate bonus for environmentally friendly vehicles (*Sweden*) and initiatives toward energy efficiency (*Norway, Luxembourg*).

Some countries have announced temporary export bans of staple foods (*Cameroon, Egypt, Moldova, Serbia, Turkey*) since January 2022. *China* relaxed import restrictions on Russian wheat imports.

Box 1.3. Toward Green Public Finance Management

Forceful fiscal actions are essential to transition to a greener and more climate-change-resilient economy. Governments will need to use a wide set of tools including carbon pricing, regulations, promoting renewable energy, and public investment in clean and resilient infrastructure (see the October 2019 and October 2020 *Fiscal Monitor*, and Chapter 2 in this issue). Assessing the effects of public policies in general on climate change, and managing fiscal risks stemming from climate change, are likewise crucial.

The integration of a climate-friendly perspective into public financial management (PFM) systems—or green PFM—is a key enabler of a greener recovery. The urgency and cross-cutting nature of climate change call for an adaptation of PFM practices to ensure the systematic promotion of fiscal policies that are responsive to climate challenges. Green PFM practices include the following examples:

- Requiring that national and sectoral development strategies are aligned with governments' commitments on mitigation and adaptation to climate change.
- Preparing a medium-term fiscal framework that considers revenue and spending implications of climate policies.
- Setting requirements for the systematic analysis of the climate impact of new fiscal measures before their adoption.
- Identifying and monitoring climate change-related expenditure items in the budget.
- Publishing regular ex post reviews of climate outcomes of budget policies.

Few governments have begun implementing green PFM practices. Early adopters included low-income developing economies in South Asia (*Bangladesh*, *Nepal*) which, despite limited PFM capacity, started developing green budgeting in the late 2000s, with the support of the United Nations. Results have been encouraging, with greater awareness throughout the

government and a measurable increase in the climate relevance of their budgets. More recently, several advanced economies have adopted ambitious green PFM practices. Launched in 2019, France's "green budget" is the most comprehensive initiative, requiring an ex-ante assessment of the environmental impact of all expenditures and the implementation of a scoring system according to their environmental impact, either positive or negative. Green PFM has also gained momentum on the international agenda through several initiatives, such as the Coalition of Finance Ministers for Climate Action and the Paris Collaborative on Green Budgeting of the Organisation for Economic Co-operation and Development (OECD). Even so, 60 percent of OECD countries do not yet implement any form of green PFM (OECD 2021a), and only 19 countries worldwide have implemented a form of climate budget tagging (World Bank 2021a).

Country-specific reform strategies, supported by capacity development, are needed to integrate climate priorities into PFM systems. Green PFM reforms require strong political backing, stewardship by ministries of finance, and coordination across levels of government. Governments should set strategic priorities consistent with their legal frameworks, their capacity and reform agenda. To support countries, the IMF has recently expanded its capacity development toolkit, with a green PFM framework providing a holistic view of entry points and opportunities for the integration of climate priorities into PFM frameworks (Gonguet and others 2021), and the introduction of a new climate change module to the IMF's Public Investment Management Assessment framework (IMF 2021b), to help governments assess their infrastructure governance and set reform priorities for the management of climate-responsive public investment. The IMF Climate Macroeconomic Assessment Program also helps countries examine the macro-fiscal implications of climate change and their climate policies.

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COORDINATING TAXATION ACROSS BORDERS

Introduction

International coordination on tax matters is needed now more than ever. National governments share challenges in securing revenues, addressing inequalities, and curbing greenhouse gas emissions. Succeeding in these efforts increasingly requires dealing with pressures that cannot be stopped by national borders. These cross-border spillovers—the effects of one country's actions on other countries—necessitate international coordination. The most pressing areas for coordination are the taxation of multinational enterprises (multinationals) and individuals, as well as carbon pricing.

Recent achievements toward international tax coordination include the agreement in October 2021 under the Organisation for Economic Co-operation and Development (OECD)/Group of Twenty (G20) Inclusive Framework to reform the taxation of multinationals (OECD 2021d), international agreements to exchange information led by the Global Forum, and countries' pledges under the Paris Agreement and the UN Climate Change Conference at Glasgow (COP26) to reduce emissions.[1] However, much more should be done.

[1]The OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) was established in 2016 for countries to collaborate on implementing the initiative (it currently has 141 member countries and 14 observer organizations). The Global Forum refers to the Global Forum on Transparency and Exchange of Information for Tax Purposes, founded in 2000 (currently with 163 members). *COP26* is the 26th Conference of the Parties (the supreme decision-making body of the United Nations Framework Convention on Climate Change, or UNFCCC). The *Paris Agreement* is a treaty adopted by 196 parties at the COP21 in 2015.

The rising need for international coordination on taxation stems from three developments in the past few decades:

- *Globalization and digitalization* of the economy have created opportunities for development but have also intensified the mobility of the income tax base (profits and personal income) and factors of production (capital and, increasingly, people). Global firms draw on global supply chains to serve global markets, with increased possibilities for generating large profits without physical (taxable) presence. All of these developments have tax implications, which, without coordination, can adversely affect efficiency, distribution, and in some cases, international economic and trade relations.

- *Salience of aggressive tax avoidance and outright tax evasion* has raised demands for fairer and less unequal societies. This call is fueled not only by leaks of documents showing widespread egregious use of offshore opaque structures, but also by systematic evidence of weak tax compliance by rich individuals. As it becomes possible to transfer funds across borders through virtual assets with near anonymity, tax administrations—especially in developing countries—struggle to keep up, even as they upgrade their own use of technology to collect and process data to identify compliance risks.

- *Climate change*—a vital global challenge—demands urgent measures to curtail emissions. Carbon taxation (charges on the carbon content of fossil fuel supply) or other carbon-pricing or regulatory policies aimed at discouraging emissions can make a difference only if adopted by enough large emitters. If carbon pricing cannot be internationally coordinated, then other unilateral approaches would likewise entail international elements.

This chapter opens with brief general considerations for addressing cross-border tax spillovers. Next, the chapter addresses how international coordination can improve the taxation of multinationals and individuals and reduce greenhouse gas emissions. The discussion is framed around improving existing international coordination arrangements, with special attention to the standpoint of developing countries.

Coordinated Approach to Global Tax Challenges

From a global perspective, uncoordinated tax interactions among independent jurisdictions, with their different objectives, often lead to unsatisfactory outcomes. To illustrate, if a country lowers its tax on capital, it attracts tax bases from other countries in the form of real capital or "paper" profits, even without real capital movement (that is, profit shifting). The corresponding contraction in the other countries' tax base lowers those countries' tax revenues. Also, spillovers do not end with profit and capital movements. The other countries are under pressure to lower their capital taxes, too, with further repercussions. A similar interaction can occur in the context of taxing the rich. This "race to the bottom"—which can result in inefficiently low taxation and hence insufficient public investments

and social expenditures (Keen and Konrad 2013)—has been reflected in the downward trends of corporate and top personal income tax rates (Figure 2.1).

Depending on context and specifics, international coordination on the level or location of taxation can improve global outcomes with or without disadvantaging some countries. In federations, tax competition can be alleviated, and compensation can take place through fiscal transfers between subnational governments or through central policies. However, countries need to find common ground in coordination and be guided by economic assessment to understand global and country-specific effects. The ideal assessment entails comparing coordination options not only with the status quo, but also with counterfactuals of *futures*, with and without coordination. For example,

Figure 2.1. National Corporate and Personal Income Tax Rates, by Income Group and Population
(Percent)

Corporate and personal income tax rates have been declining for decades.
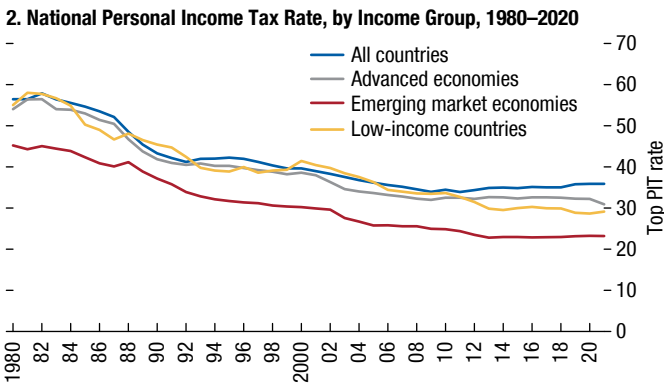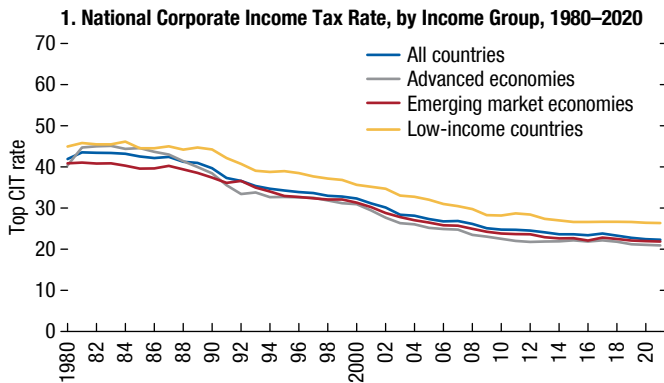
Large countries have higher tax rates.
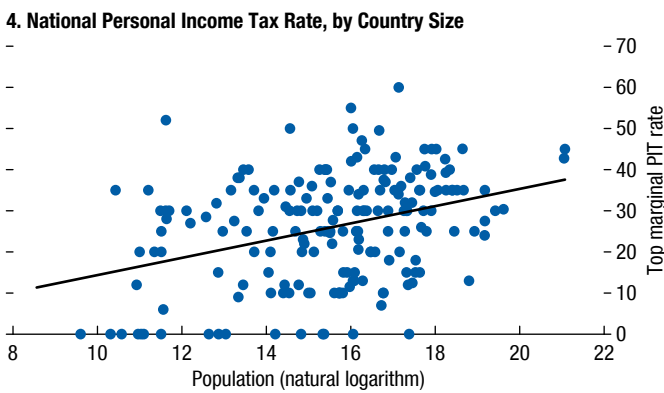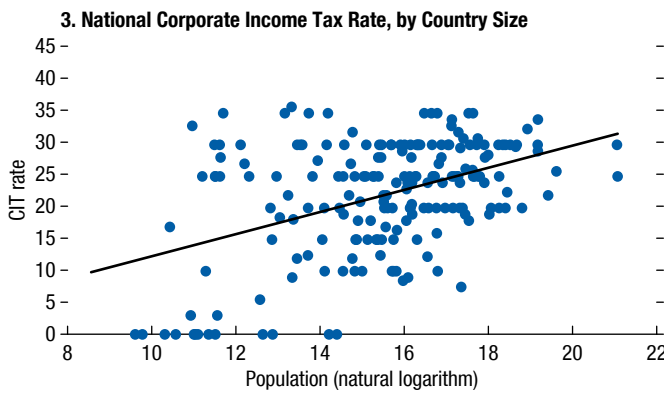
Source: IMF staff calculations.
Note: CIT (PIT) denotes the statutory corporate (top marginal personal) income tax rate, obtained from the IMF Fiscal Affairs Department Tax Database. CIT = corporate income tax; PIT = personal income tax.

unchanged policies may be more beneficial now but less beneficial in the future relative to coordinated outcomes.

Coordination in tax matters is challenging because countries' interests diverge with their characteristics, including the size of their economies and populations. The cost of lowering the tax rate is generally higher for larger economies because they have a larger domestic, relatively *immobile*, tax base. For larger economies, cutting the tax rate (in response to competition pressures on the *mobile* base) means collecting less revenue from the (large) immobile base. This explains why small countries tend to have lower taxes (Figure 2.1). Small, low-tax countries have attracted high shares of international investment (they frequently reach the top of the list of investment countries worldwide), corporate profits (with an estimated 11–36 percent of multinational profits in small low-tax jurisdictions), and global wealth stock (with 8 percent of worldwide financial household wealth).[2] But even (small) low-tax countries incur costs from tax competition to attract a foreign tax base. The costs can take various forms, including unilateral countermeasures (tax and nontax) imposed by other countries and reputational risks that affect some investors' decisions.

In analogy to income tax competition, uncoordinated attempts to discourage greenhouse gas emissions face national hurdles. Higher carbon pricing in one country, for instance, increases the costs for its domestic producers, posing competitiveness concerns and potentially motivating production and emissions to move to other countries (that is, carbon leakage). Even if some countries begin implementing domestic mitigation policies, others may wait to benefit from avoiding the costs of reducing emissions. This "free-riding" issue, together with competitiveness concerns, hampers global progress on emission reduction.

In contrast with the vital role of small countries in hosting global income and wealth, a handful of large economic regions account for the majority of global emissions. International coordination could therefore

generate significant progress—at least initially—in a setting with fewer participants. For example, China, the European Union, India, and the United States together are responsible for 64 percent of global emissions (Parry, Black, and Roaf 2021).

Differences among countries' incomes raise further challenges to coordination. Whereas high-tax advanced economies and developing countries face similar tax base erosion challenges, the latter countries tend to import capital, have far fewer multinational headquarters, and face harder capacity constraints in tax enforcement. An agreement must reconcile the interests of developing countries and advanced economies. Within each set, countries are different, for example, in the relative importance of specific sectors such as digital-heavy companies, natural resources, and financial firms.

The form of coordination can facilitate agreement. For example, regarding corporate income taxation, combining zero-sum reallocation of revenues with a revenue raiser facilitates agreement (as discussed in the "Corporate Income Tax Coordination" section). Coordination of mitigation policies among key large emitters could be effective in the immediate term and would constitute an important start (as discussed in the "Carbon-Pricing Coordination" section).

Countries' common interests can become more coherent in the face of a common threat. Following the global financial crisis, countries agreed on reforms to mitigate risk within the international banking sector (Basel III, in 2009). Climate change is a shared serious threat, but commonalities are masked by differences in discounting short-term versus long-term benefits.

The legal coordination modality also matters in shaping agreement. In practice, coordination can take the form of either "hard law" (with binding legal obligations for the country, for example, through a treaty) or "soft law" (based on political commitments, for example, to international standards) (Table 2.1). A soft-law approach typically offers more flexibility for domestic implementation and can be coupled with a monitoring mechanism (for instance, peer review) to ensure continued commitment to the agreement. The Paris Agreement is often described as combining both hard law (on mandatory transparency) and soft law (on enforcement).

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[2]Data on international investment, corporate profits, and global wealth stock for small, low-tax countries are from the IMF Coordinated Direct Investment Survey (https://data.imf.org/?sk=40313609 -F037-48C1-84B1-E1F1CE54D6D5); Beer, de Mooij, and Liu 2020, Table 3.9 in OECD 2020, and Tørsløv, Wier, and Zucman 2021; and Zucman 2013, respectively.

Table 2.1. Hard and Soft Laws Regarding International Coordination, in Practice

Method of Coordination	Hard Law	Soft Law
Modality	Creation of legally binding obligations	Entry into political commitment
Implementation	Recognition of hard-law instrument	Greater choice of instruments
Enforcement	Remedies for breach of obligations	Monitoring mechanisms (possibly with peer review)
Examples	Tax treaties, WTO rules, EU treaty	BEPS initiative, Basel III

Source: IMF staff compilation.

Notes: BEPS = base erosion and profit shifting; EU = European Union; WTO = World Trade Organization.

Corporate Income Tax Coordination

At a Glance

- The historic October 2021 Inclusive Framework agreement is a watershed moment in international corporate tax coordination, demonstrating that countries can jointly make progress in response to a global challenge.
- Allocating a portion of the tax to market countries is new and efficient, offering a preferable multilateral approach to unilateral digital-services taxes.
- Implementing a global minimum corporate income tax would reduce pressures from profit shifting and tax competition, raising global corporate income tax revenues by about 5.7 percent through the top-up tax and potentially by an additional 8.1 percent through reduced tax competition.
- Domestic tax reforms would be key to complementing the revenue gains from the agreement, including revisiting wasteful tax incentives and better taxation of monopolistic rent on efficiency, equity, and revenue grounds.
- Future coordination efforts should focus on addressing remaining needs of low-income countries.

The historic October 2021 agreement is a watershed moment in international tax coordination that could not have been politically envisaged even a few years ago. Implementation risks and potential refinements, though, continue to be at the forefront, as do broader challenges in taxing multinationals. This section reviews broad outcomes of the agreement and outlines potential further reform directions.

Two questions are at the heart of the ongoing discussion on coordinating taxation of multinationals:

- *Where to tax?* Current outdated arrangements, loosely, split the place of taxation between a headquarters (residence) country (which taxes the foreign "passive" incomes of its multinational affiliates abroad, such as interest income) and a source country where production is located (which taxes the "active" income of the multinational affiliate physically present in the country). This distinction is meant to prevent double taxation when both countries claim to tax a multinational. It is not fit, however, for a digitalized globalized economy, considering it ignores a third possible location of taxation, namely, that of consumers and users (in the destination, or market, countries). For example, under current arrangements, digital-heavy companies can generate profits without a taxable physical presence in a country. This situation has triggered controversial unilateral digital-services taxes, often in the form of a tax on turnover from specific digital activities, spreading tensions to international trade with the use of tariffs as a countermeasure.
- *How much to tax*? How much to tax multinationals has been left internationally uncoordinated since the inception of corporate taxation, resulting in the downward trend in corporate tax rates shown. The long-standing, well-known challenges here stem from (1) difficulties in enforcement (rules apply to affiliates of a multinational as if they were independent, thereby enabling profit shifting)[3] and (2) tax competition among countries through tax rates and preferential regimes.

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[3]Multinationals use several techniques to shift profits. For instance, one affiliate can inflate its costs in a high-tax country by overpricing its imports from another affiliate in a low-tax country (IMF 2014). Pressures on existing corporate income tax arrangements are well known and discussed in de Mooij, Klemm, and Perry (2021).

To date, 137 jurisdictions (of 141 Inclusive Framework members) have joined the two-pillar Inclusive Framework agreement, whose first pillar addresses the "where" question and second pillar addresses the "how much" question. This agreement is the first fundamental change to international tax norms in more than a century—a major achievement on which to build as the international community shifts focus to implementation and beyond.

Major Elements of Pillars 1 and 2

Pillar 1 allocates a portion of profits to market jurisdictions, thereby giving them taxing rights even without a multinationals' physical presence. Pillar 1 applies to multinationals with global turnovers above €20 billion and allocates 25 percent of their "excess" or "residual" profit—that is, profits exceeding 10 percent of global revenue—to market jurisdictions using sales by destination. Currently, the extractives sector and regulated financial services are excluded. Implementing Pillar 1 will require countries to sign a multilateral treaty obligating them to eventually remove unilateral digital-services taxes and similar measures, with a commitment not to introduce new ones. Implementation is mandatory for all signatory jurisdictions, with planned effect in 2023. A parallel—unfinished—workstream under Pillar 1 foresees certain measures to simplify the computation of profits from specific activities of multinationals to be taxed in the source country.

Pillar 2 is an agreement on a global minimum corporate income tax if income in a given country is taxed below 15 percent. This pillar covers multinationals with global turnover exceeding €750 million. The minimum tax is a common approach, meaning that it is not mandatory for countries to implement its rules; however, by joining the agreement, countries accept its adoption by others. Pillar 2 includes three broad interrelated tax rules planned to go into effect in 2023:

- The *headquarters* country (where the parent company is located) subjects profits of affiliates abroad to an income inclusion rule (that is, a top-up tax for affiliates effectively taxed abroad below 15 percent).
- If the tax in the headquarters country is below the minimum (and it does not apply the income inclusion rule), then the *source* country (where the affiliate is located) applies the undertaxed-payments

rule (that is, the top-up minimum tax).[4] Whether to give priority to tax explicitly to the headquarters country has been a contested issue, especially from a developing-country standpoint. However, in principle, the source country can choose reforms to raise its tax to the minimum to preempt the application of minimum tax in the headquarters country. The draft model rules (released in December 2021) enable the adoption of special domestic top-up taxes as opposed to general increases in tax rates to the minimum.

- Separate from the income inclusion and undertaxed-payments rule is a subject-to-tax rule, under which low-income source countries can impose withholding taxes on specific cross-border payments if a multinational is taxed on receipt of those gross payments abroad below a minimum rate. Details are yet to be finalized, including on the scope of covered payments and the minimum rate, but the tax paid under this rule would count in the calculation of the income inclusion and undertaxed-rules, thereby giving it priority and making its scope especially important for developing countries.

What are the effects of both pillars? To answer this question, the discussion starts with an analysis of profits of multinationals and next discusses revenue estimates, then broader outcomes.

Decomposition of Multinationals' Profit

A distinction between "normal" and "excess" profit has been important in the debate on taxation reform for multinationals, considering the two types of profits can be treated separately (IMF 2019). It is empirically challenging to measure excess profit with precision. Normal profit, conceptually, is broadly equivalent to normal return to capital, whereas excess profit is above the normal return to capital. Excess profit is largely associated with firm monopolistic power and firm-specific intangible assets, which are in turn difficult to value or attribute to a geographical location (de Mooij, Klemm, and Perry 2021). Taxing economic rent is efficient because it does not distort investment decisions (IMF 2016, 2019).

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[4]The undertaxed-payments rule would be applied by denying tax deductions for payments (such as interest paid by an affiliate to a parent company) that are taxed below the minimum where they are received.

Figure 2.2. Disaggregation of Total Profit of Multinational Corporations
(Trillions of US dollars)

Rough measures of excess profit can reach 60 percent of total profit of multinationals.

Pillar 1 reallocates a small fraction of total profit of multinationals (2 percent or $150 billion).

Pillar 2 covers 18.5 percent of total profit of multinationals.

1. Normal and Excess Multinational Profit (Simplified Measures), 2019

2. Total Multinational Profit, as Taxed under Pillar 1 of the Inclusive Framework

3. Total Multinational Profit, as Taxed under Pillar 2 of the Inclusive Framework
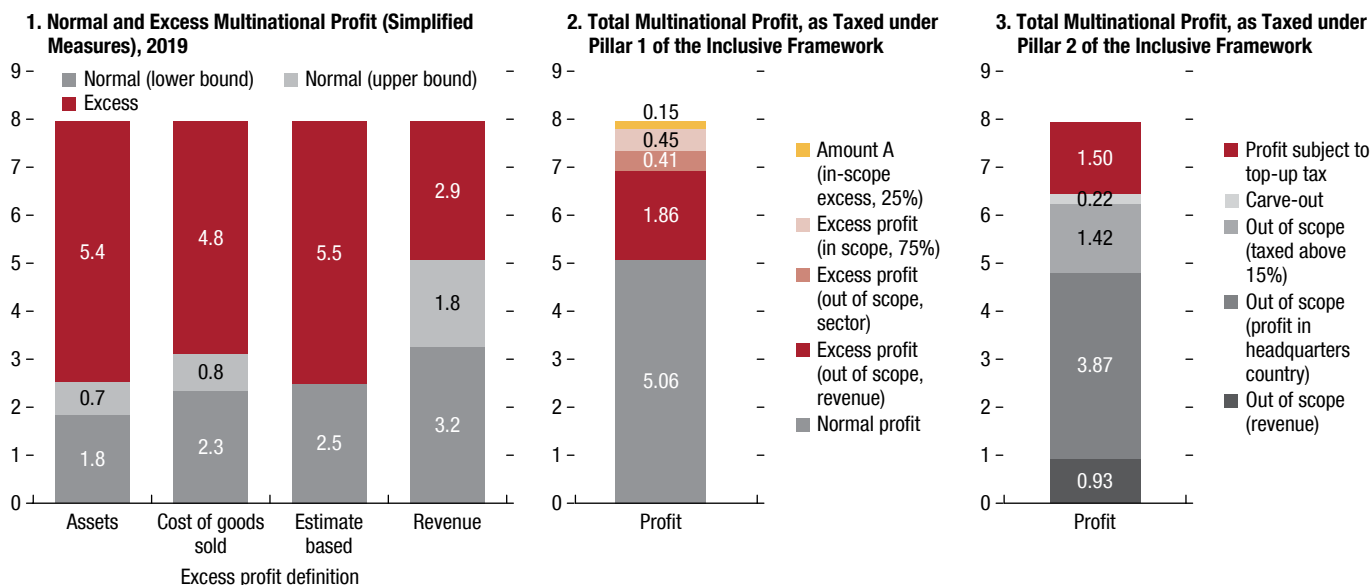
Source: IMF staff estimates, as described in Online Annex 2.1.
Note: These analyses use the Standard & Poor's Capital IQ database. Panel 1 shows empirical proxies for normal and excess profit across four simplifying measures (5.0–7.5 percent of total assets; 5.0–7.5 percent of costs of goods sold; estimate-based model using econometric specifications as specified in Online Annex 2.1; and 5.0–10 percent of revenue). *Amount A* refers to profit reallocated under Pillar 1. Panels 2 and 3 disaggregate total multinational profit into amounts included and excluded in Pillar 1 and Pillar 2, respectively. The *carve-out* is (transitionally) a deduction of 8 percent of assets and 10 percent of payroll. *Out-of-scope (revenue)* refers to companies below the revenue thresholds to be included under Pillars 1 or 2, whereas *out-of-scope (sector)* refers to excluded regulated financial and extractive sectors under Pillar 1. In panel 3, *out-of-scope (profit in headquarters country)* is the sum of profits that multinationals reported in their headquarters countries, and hence are not subject to the income inclusion rule of Pillar 2.

Multinationals generated profit of $7.9 trillion in 2019 (9.2 percent of global GDP). Estimates, based on simplifying assumptions, suggest that a sizable share of multinationals' profit (possibly reaching 60 percent) is excess profit. This illustrative estimate is based on simple ratios, for example, considering normal profits to be 5.0–7.5 percent of total assets or alternatively 5.0–7.5 percent of cost of goods sold. Similar results are obtained from a third method that estimates normal profit using firm-level data, as the counterfactual earnings firms would generate in the absence of market power and risk premia (Online Annex 2.1; Beer and Loeprick 2022). A fourth measure that uses 5–10 percent of revenue reduces excess profits to 37 percent of total profits (Figure 2.2).

Revenue Effects of Pillars 1 and 2

Pillar 1 is a relocation of revenue (creating a zero sum of losers and winners), but Pillar 2 is (mostly) a revenue raiser. Combining both in one coordination package potentially tends to make the Inclusive Framework agreement a net benefit for countries facilitating coordination.

The reallocation of a portion of excess profit to market countries under Pillar 1 is estimated to apply to only about 140 companies, capturing a small global tax base of 2 percent of global profit (Figure 2.2). Results suggest that revenues will be reallocated from low-tax investment hubs (about 2 percent of their total corporate tax) to other countries, raising revenues there by 0.7 and 0.9 percent of corporate tax revenues in low-income countries and advanced economies, respectively (Figure 2.3).[5]

Although the global tax revenue from Pillar 1 is relatively small as a share of total taxes, it appears broadly comparable with that from existing unilateral digital-services taxes. Digital-services taxes

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[5]The reallocation of the tax base depends on the sales-by-destination weights at the firm level, which are not directly observed, generating some uncertainty about the exact reallocated amount.

Figure 2.3. Revenue Effects of the OECD/G20 Inclusive Framework Agreement, Pillars 1 and 2
(Percent of current global corporate income tax)

Pillar 1 reallocates revenues from low-tax investment hubs to other countries.
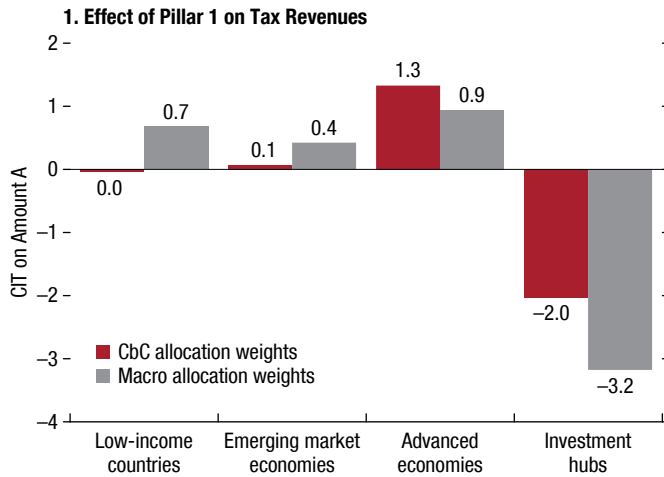
Pillar 2 raises global corporate income tax revenues by 5.7 percent through the top-up tax and by an extra 8.1 percent potentially through reduced tax competition.

1. Effect of Pillar 1 on Tax Revenues

2. Effect of a Global Corporate Minimum Tax (Pillar 2) on Tax Revenues
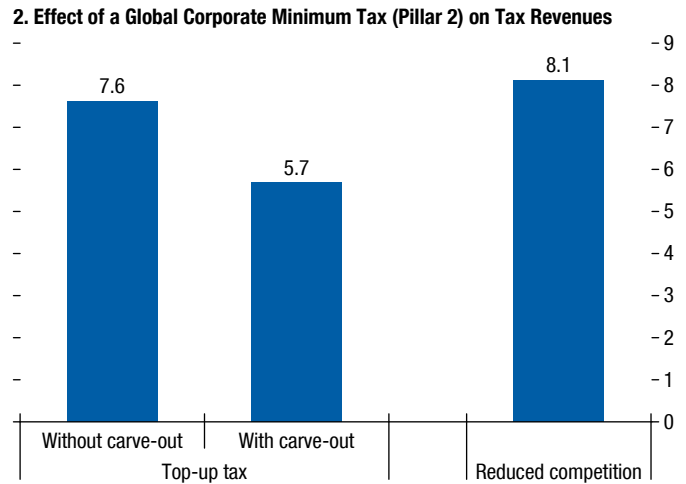
Source: IMF staff estimates based on the Standard & Poor's Capital IQ database, 2017 reports from the Organisation for Economic Co-operation and Development's CbC database, and statistics from the US Bureau of Economic Analysis, as described in Online Annex 2.1.
Note: *Amount A* refers to profit reallocated under Pillar 1. The calculation uses weights to proxy sales by destination for the reallocation. Macro allocation weights are taken from Beer and others (2020) and computed using national accounts, whereas CbC weights are computed using the CbC database. Under Pillar 2, the *carve-out* is (transitionally) a deduction of 8 percent of assets and 10 percent of payroll. The tax base for the minimum tax is excess profit after the carve-out is deducted (that is, the *with carve-out* bar). CbC = country-by-country; CIT = corporate income tax; OECD/G20 = Organisation of Economic Co-operation and Development/Group of Twenty.

typically raise less than 0.02 percent of a country's GDP, although the proportion varies across countries (Aslam and Shah 2020; Dabla-Norris and others 2021). Skepticism about digital-services taxes arises because the digital economy cannot be meaningfully ring-fenced and these taxes are less efficient than the alternative of destination-based taxation under Pillar 1. For example, "digital" taxes on sales would be too high for low-profit or loss-making digitalized businesses, possibly disincentivizing investment, and would imply a lower tax on high-profit businesses raising issues of fairness. Furthermore, destination-based taxation of profits is more robust to tax competition (because consumers are less mobile than capital and profits) or profit shifting (because the tax base is largely based on global consolidated profit rather than profit in each separate jurisdiction).[6]

Pillar 2 is estimated to capture a tax base of $1.47 trillion (Figure 2.2, panel 3), which increases global annual corporate income tax revenues by roughly 5.7 percent (about $150 billion) (Figure 2.3).[7] This calculation applies the minimum tax only to profits exceeding 8 percent of assets and 10 percent of payroll (called the "carve-out" in the agreement). Removing the carve-out would increase Pillar 2 revenues to an estimated 9 percent of current global corporate income tax revenues. Under the assumption that low-tax countries remain below the minimum, these "static" revenue gains are concentrated in advanced economies (Figure 2.3) because multinationals headquartered in these countries generate 20 times more profit than those located in emerging market economies. On the other end of the spectrum, if all source countries apply the minimum, then source countries will capture the revenue gains (it is the same amount of revenue gains because it is a top-up tax).

[6]Various international reform options tax excess profit largely in the destination country (de Mooij, Liu, and Prihardini 2019; IMF 2019; Hebous, Klemm, and Stausholm 2020; Devereux and others 2021). The extractive sector is one exception for taxing the (location-specific) excess profit in the source country (Albertin and others 2021).

[7]Estimated global annual corporate income tax revenues under Pillar 2 decrease to 4.8 percent if the United States is excluded, considering that it levies its own minimum tax (the global intangible low-taxed income provision). The estimates in the paragraph are smaller than those of Barake and others (2021) and larger than those of OECD (2020).

The likely outcome depends on how countries and firms react to the implementation of the Inclusive Framework agreement. To obtain a complete assessment, the discussion next considers these reactions.

The Reactions of Firms and Countries to Corporate Income Tax Coordination

The agreement affects firms by reducing incentives for profit shifting that in turn affect real investment decisions and countries by reducing incentives for tax competition. These effects could further increase global revenues and the tax base shares allocated to nonheadquarters countries. The outcome of countries' tax-setting responses, following a minimum tax, would likely be higher tax rates and revenues for most.

Firms' reactions can be summarized as follows:

- *Profit shifting by in-scope[8] multinationals generally decreases* to the extent that the effective minimum rate is above that firms are currently paying and the tax rate differential between countries declines. This reduction in profit shifting implies that the global profit reported in low-tax jurisdictions declines, thereby increasing tax revenues in the other countries.[9] Pillar 1 also helps reduce profit shifting, as discussed.

- *Investment becomes more costly, but the aggregate effect is modest.* The effective tax rate on investment—which considers both the statutory tax rate and the tax base, such as with depreciation allowances—increases because of the smaller scope for profit shifting and higher taxation (attributable to the minimum tax). The OECD (2020) estimates this increase to be 1.4 percentage points (expressed as a global weighted average rate), with variation across countries. However, in calculating the full effect on multinationals' investment, any analysis should also consider that a minimum tax brings a high-tax country closer to the world average (that is, it reduces the *tax rate differential*). Estimates indicate that aggregate investment in fixed assets remains roughly constant at a global minimum tax of 15 percent, but with large differences in country-specific effects, reaching a decline of 20 percent in some low-tax countries (Keen, Liu, and Pallan 2022).

Low-tax countries are likely to raise their taxes to the minimum—possibly only on in-scope companies, because incentives to compete over the out-of-scope tax base remain intact. Countries are permitted under the Inclusive Framework agreement to impose a minimum tax only on in-scope companies (OECD 2021e). This top-up tax enables low-tax countries to collect revenues from multinationals without raising their *general* corporate tax rate, thereby weakening the incentives to raise the general rate. Raising the general rate, however, can be beneficial for low-tax countries, especially if high-tax countries raise their rates as well (Hebous and Keen 2021).

High-tax countries are likely to halt their downward trend and possibly raise their corporate taxes. Empirical evidence and historical experience suggest that countries' tax rates tend to move in the same direction. If low-tax countries raise their rates to the minimum (even through a top-up tax on in-scope multinationals), then high-tax countries would likely react by raising their rates as well. New estimates are broadly in line with previous studies indicating that a 1-percentage-point change in the average foreign statutory tax rate leads the home rate to change by up to 0.6 percentage point in the same direction (Online Annex 2.2). Concurrent discussions in some countries (such as the United Kingdom and the United States) also indicate that tax rate increases are possible, or at least that future rate cuts can become less attractive (Seely 2021; US Department of the Treasury 2022).[10]

Developing countries have a strong case for revisiting, and potentially abolishing, ineffective and inefficient tax incentives, which would support both revenues and the integrity of the tax system (IMF and others 2015). Pillar 2 reduces competition pressures: multinationals would not react to a tax holiday, for example, because they would then be liable for tax in the headquarters country. Although the motivation is somewhat muted by the existence of the carve-out and out-of-scope companies, the agreement is generally an opportunity to reconsider the use of tax incentives as a tool to attract foreign investment.

Rough estimates suggest that the agreement would result in reduced tax competition, thereby increasing global corporate tax revenues by an extra 8.1 percent (Figure 2.3, panel 2). Such revenues could finance social spending, public investment, or reductions in

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[8]In-scope multinationals are those that meet the criteria of Pillars 1 or 2.

[9]The OECD (2020, Table 3.10) estimates that the amount of profits in investment hubs would be reduced by 9–10 percent as a result of a minimum tax of 12.5 percent with no carve-out.

[10]As mentioned earlier, the higher tax would have a muted effect on aggregate investment of multinationals in the presence of a global minimum tax.

more distortionary taxes. Precisely quantifying this effect is challenging. The calculation here assumes that below-minimum countries raise their rates to the minimum—increasing the world average tax rate—and, in turn, other countries raise their rates by 0.6 percentage point in reaction to each 1 percentage point increase in the world average rate. As a result, the average world corporate tax rate rises from 22.2 to 24.3 percent.[11]

Opportunities to Enhance Coordination

The two-pillar solution demonstrates that coordination can succeed. The Inclusive Framework agreement is a step in the right direction, considering that Pillar 1 breaks with old norms and Pillar 2 puts a floor on tax competition. Still, both pillars are somewhat limited in scope. Hence, following their implementation more steps will be needed to address spillovers and further incorporate the interests of low-income countries. The agreement lays the foundation for the international community to expand both pillars to capture more of the tax base.

Building on the two pillars, efforts can focus more on low-income countries' circumstances by taking the following actions:

- *Agree on simplification measures* (based on those delayed under Pillar 1) that allow source (mostly low-income) countries to apply a simplified tax (for example, a fixed sales ratio) to some activities (such as buying from affiliated companies for resale, "redistribution activity"). Although such a simplified approach lowers administrative and compliance costs, it entails a margin of error in taxing actual returns, with possible adverse efficiency effects. Such costs are estimated to be the lowest for redistribution activity and a few subsectors of manufacturing—indicating that simplifications could be extended to include them (Beer, Leduc, and Loeprick 2022).
- *Maximize the benefits of a minimum tax* for low-income countries by considering withholding

taxes on a wider set of cross-border payments than currently envisaged under Pillar 2's subject-to-tax rule.

- *Facilitate timely access to the country-by-country information* on multinationals on the part of low-income developing countries to support tax enforcement. Access to information is part of the broader enforcement challenges, which include capacity building to improve administration (as provided by the IMF and other international organizations) and information availability. To make taxation more transparent, the 2015 Base Erosion and Profit Shifting initiative requests multinationals (with a global turnover exceeding €750 million) to provide information about their activities on a country-by-country basis, which would be essential for enforcing current and envisaged rules. A recent analysis finds that only three low-income countries have access to these reports (OECD 2021a). Other low-income countries cannot access this information until they meet requirements concerning confidentiality, consistency, and appropriate use of information (see the "Tax Transparency and Personal Income Tax Coordination" section). Progress on this front is critical to maximizing the benefits of coordination for low-income countries and helping them strengthen corporate taxation.[12]

Existing rules to curb profit shifting remain important. Current corporate tax arrangements remain largely applicable (because of various exceptions). Hence, a multitiered framework is likely, because the agreement reduces, but does not eliminate, profit-shifting possibilities.[13]

International coordination makes domestic corporate tax reforms more feasible, particularly reforms to better tax monopolistic rent on efficiency, equity, and revenue grounds. For instance, one option to target excess profit is to offer deductions to returns to equity (like those to interest expenses) and increase the tax rate.[14] Such deductions are efficient because they

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[11]Generally, it is difficult to determine who ultimately pays the corporate income tax because it may be passed on as lower wages for employees, as higher prices to consumers, or as lower prices to producers. However, a tax on economic rent does not affect the investment or price decisions of a firm that maximizes economic rent. The rent tax is thus efficient because it does not distort investment. Moreover, as the price is unaffected, its burden is not shifted to consumers or employees or producers (Devereux and others 2021). As profitable businesses tend to be owned by the better off, rent taxation supports progressivity.

[12]Other initiatives to enhance country-by-country reporting include the Extractive Industries Transparency Initiative and the European Banking Authority's Capital Requirement Directive, which requests that banks established in the European Union publish country-by-country reports.

[13]The rules of the Inclusive Framework agreement use financial accounts (ultimately prepared for shareholders), rather than the domestic tax accounts based on a country's tax system. This implies that it will also be important to prevent abuse of financial accounting to minimize taxes.

[14]On the taxation of economic rent, see de Mooij (2012), IMF (2016), Hebous and Ruf (2017), and Hebous and Klemm (2020).

resolve the chronic debt bias in corporate taxation, which encourages debt by allowing interest deductions without analogous deductions for returns to equity. This nonneutrality adversely affects investment decisions and amplifies economic-instability risks (IMF 2016). Excess-profits taxes generally can be compatible with the broad directions of international reforms (Hebous, Prihardini, and Vernon 2022). For example, Pillar 1 distinguishes between two types of profit, whereas Pillar 2 treats the carve-out differently from the rest of profit.

Tax Transparency and Personal Income Tax Coordination

At a Glance

- Curbing tax evasion requires availability, sharing, and effective use of information.
- Significant steps have been taken to exchange information among countries under the Global Forum on Transparency and Exchange of Information for Tax Purposes.
- Establishing beneficial-ownership registries would enhance tax enforcement and compliance, and further capacity building—for example, to upgrade tax administration technology—is critical for enabling low-income countries to reap the full benefits from cross-border information-sharing agreements.
- Stronger enforcement, through international information coordination, offers opportunities to revisit personal income taxation to address increasing income inequality.
- As the mobility of workers—including digital nomads—increases with the expansion of opportunities for cross-border remote work, coordination in this area will likely gain importance.

Personal taxation in a global digital economy, much like corporate taxation, requires coordination across borders to tackle tax base erosion, primarily through information sharing to enforce tax laws. Furthermore, cross-border mobility of people is increasingly relevant for taxation.

Tax Evasion and Exchange of Information

Global undisclosed offshore wealth is sizable, with macro-relevant fiscal implications.[15] Wealth generates capital income (such as rental income, dividends, interest, and capital gains). Yet, the concern about tax evasion using nontransparent offshore structures goes beyond revenue leakage; it is also a matter of tax progressivity and perception of fairness. The issue is related directly to tax compliance at the top of the income and wealth distributions, considering that capital income constitutes a significant fraction of income at the top of these distributions (Scheuer and Slemrod 2020). Available estimates suggest that the wealthiest 1 percent (who own up to 40 percent of the wealth in some countries) evade up to 25 percent of their income taxes using offshore structures (Alstadsæter, Johannesen, and Zucman 2019; Guyton and others 2021).

Moreover, governance-related concerns arise about the sources of undisclosed wealth. For example, the proportion of wealth held abroad correlates with characteristics in the wealth's countries of origin, such as political and economic instability, natural resources, and inflows of foreign aid (Alstadsæter, Johannesen, and Zucman 2018; Andersen, Johannesen, and Rijkers 2022). Thus, nontransparent offshore structures can be associated with other serious legal aspects beyond taxation (and the coverage of this chapter), including concealing the proceeds of corruption, financial crimes, and other illicit uses.[16]

Individuals are typically taxed in the country of residence. A notable exception is the United States, which taxes its citizens irrespective of residence (that is, even if they are permanently living in a foreign country) but generally credits taxes paid abroad. The United States

[15]Global undisclosed offshore wealth is estimated at $7 trillion (8 percent of global household wealth or 9.3 percent of global GDP; Zucman 2013; Alstadsæter, Johannesen, and Zucman 2018). Estimates suggest that this hidden wealth corresponds to roughly $150 billion in unpaid income tax annually. This calculation assumes that hidden wealth (1) earns a rate of return of 7 percent (the five-year average return on US federal funds and the MSCI World Index, with 75 percent of offshore funds invested in securities markets) and (2) would be taxed at 28 percent (the average capital income tax rate, weighted by GDP). This estimate reflects only income taxation, excluding inheritance, transaction, or wealth taxes.

[16]The IMF has actively contributed to policies against money laundering and the financing of terrorism. The IMF's work in these areas is fully integrated into other IMF workstreams, including capacity development and fintech. Likewise, work on transnational facilitation of corruption is part of the IMF Framework for Enhanced Engagement on Governance (see the April 2019 *Fiscal Monitor*).

typically levies the tax on individuals on labor incomes (wages) and capital income. The latter is also relevant for the self-employed. A few countries additionally tax the stock of net wealth.

Enforcing capital taxation requires reliable third-party information, including from other countries. Salaries are generally easier to monitor than capital taxation because employers usually withhold taxes on behalf of employees and remit the amounts to the tax authorities. Taxing capital requires more third-party information (to cross-validate and verify the final tax) that can be difficult to obtain, especially if the taxpayer has offshore activities.

Difficulties arise in enforcing capital taxation:

- *Information sharing*: Foreign authorities should be willing and have the legal framework to share information with other countries. For example, if a resident holds a bank account offshore, then tax authorities need to access information about this account through foreign authorities to assess self-declared information about this account.
- *Information availability*: Reliable information must be available, considering that determination of beneficial ownership is essential to ensuring the integrity of the tax system (Box 2.1). Ownership can be obscured by using an anonymous ("shell") offshore company (or a trust) that holds a bank account offshore, which is used to manage private wealth (Sharman 2010).[17] As a result, a verified identity of the beneficial owner can be lacking. For example, based on leaked data, Collin (2021) finds that 80 percent of financial assets in his sample are held by entities (such as trusts) rather than individuals and the location of the beneficial owner is generally different from that of the legal owner.

As the use of crypto assets rises, lax reporting requirements in this domain further complicate tax enforcement and increase risks of tax evasion.[18] Even as some countries strengthen their rules to combat anonymous crypto transactions and prepayments,

countries still need to share information promptly. Some countries also effectively exempt crypto-asset investment gains from taxes, with potential spillovers onto other countries' tax bases.

International coordination on information sharing, such as on residents' foreign bank accounts, is necessary for enforcing capital taxation. Without information, tax authorities lack a cost-effective mechanism to protect the tax system, and tax audits generally fail to detect offshore income and assets. Ad hoc unilateral enforcement initiatives and occasional offshore voluntary disclosure programs can lead to disclosures of offshore wealth, but usually of only a small portion (for example, only 10 percent of total offshore hidden wealth was disclosed after enforcement initiatives in 2008 in the United States that included offshore voluntary disclosure; Johannesen and others 2020).[19] During the past decade, progress has been made on information sharing among countries, although much improvement is needed to maximize the benefits, as will be discussed.

International Arrangements for Exchanging Information

After the global financial crisis, in 2009, the G20 committed to ending banking secrecy and restructured the Global Forum—with its current 163 member jurisdictions, the primary multilateral body for global transparency and exchange of information standards to combat offshore tax evasion.

In 2014, the Global Forum reached an agreement on *automatic* exchange of information. To date, 120 countries are committed to implementing the standard outlined in the agreement (among large advanced economies, the United States is a notable exception). Under this standard, financial institutions (such as banks and hedge funds) report predefined financial information on nonresidents to domestic tax authorities, who in turn share it automatically and annually with tax authorities where the account holders are tax resident.[20] The Global Forum monitors

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[17]There can be legitimate nontax reasons to establish trusts. There can also be tax avoidance opportunities that are not necessarily considered illegal evasion (Collins 2021). Tax evasion or avoidance structures can include taxes on income, wealth, and inheritance, as well as stamp duty.

[18]There are also other risks. For example, Alnasaa and others (2022) find that crypto asset usage is higher in countries with perceived weak governance, strengthening the case for taking appropriate policy and regulatory actions.

[19]For an overview of design of voluntary disclosure programs, see Benedek and others (2022). Tax amnesties reduce future compliance because current evaders may expect to have amnesty available in the future, reducing the cost of evading (for example, see Bayer, Oberhofer, and Winner 2015).

[20]Information on nonresidents includes bank account number, account balance, name of account holder, and address. Also, complementarily, since 2009 the standard of *exchange of information on request* allows exchanging of broader information that is foreseeably relevant for the administration of taxes.

and reviews the effectiveness of the implementation of this standard.

Additional international channels to share taxpayers' information include bilateral tax information exchange agreements and ad hoc requests. In 2010, the United States introduced the Foreign Account Tax Compliance Act, requiring financial institutions to share financial account information on US taxpayers with the US Internal Revenue Service. Further international and regional forms of cooperation on tax administration complement or use information-sharing mechanisms, including those to resolve international tax disputes, conduct joint audits and risk assessments, trace cross-border debtors and assets to collect tax arrears, and tackle cybercrimes and threats related to crypto assets.

Benefits from Exchange of Information

Automatic exchange of information has achieved notable success, globally covering nearly 75 million financial accounts in 102 jurisdictions in 2020 (OECD 2021c). Also, through the Foreign Account Tax Compliance Act, 110 countries currently provide information to the United States. Empirical studies suggest that information sharing reduced bank deposits in and portfolio investment from low-tax jurisdictions by 11–38 percent and 21–29 percent, respectively (Menkhoff and Miethe 2019; O'Reilly, Ramirez, and Stemmer 2019). Still, there is evidence of behavioral responses to information sharing that dampen its effectiveness: shifting hidden wealth to locations with less-stringent regulations or fewer information-sharing agreements, escaping reporting by using citizenship-by-investment schemes, or shifting wealth to assets not (easily) reported under the agreements (Casi, Spengel, and Stage 2020; De Simone, Lester, and Markle 2020; Langenmayr and Zyska 2021).[21]

Some (especially low-income) countries have not yet realized the full benefits from exchange of information. Not only must information be available and an exchange agreement in place, but standards of confidentiality and data safeguarding also are necessary to prevent misuse or unauthorized disclosure of received information. For several low-income countries, this is the same obstacle as in the context of sharing information on multinationals' country-by-country

activities. Moreover, countries need a domestic legal framework that requires financial institutions to collect and report the information, and systems, as well as processes, for the information (including the appropriate information technology). All are nontrivial conditions for low-income developing countries to meet.

To better understand constraints on the effective use of exchanged information, IMF staff conducted a survey, for this chapter, covering tax authorities from 72 countries (of which 18 are not members of the Global Forum). Among the respondents, 9 countries did not receive information from abroad in 2019 through any channel, and another 20 countries received no more than 10 incoming exchanges. Among those that received information, almost half responded that they did not use the information in their risk and tax enforcement analyses.

Capacity constraints in data analytics and knowledge management are an additional hurdle to overcome. The use of incoming information in compliance risk analysis is strongly correlated with tax administrations' adoption of adequate information technology (Figure 2.4). Furthermore, the use of incoming information is also significantly correlated with the presence of a dedicated unit in the tax administration focusing on enhancing tax compliance among high-net-worth individuals (Figure 2.4). Audits and compliance programs focusing on high-net-worth individuals require specialized skills and training, and hence a permanent specialized group can help improve the use of available information and strengthen tax compliance (Buchanan and McLaughlin 2017).

Countries recognize the opportunities from exchange of information (along various dimensions in the survey, including reduced tax leakage and stronger enforcement capability). The Global Forum and other bodies are currently working to strengthen countries' capacity in this area.

Countries are also becoming increasingly aware of, and taking actions against, professional enablers (those that engage in illegal facilitation of tax crimes). Several avenues have been pursued, for example, communication with taxpayers and intermediaries (publishing alerts about arrangements that misapply the law), mandatory-disclosure rules (requiring taxpayers and intermediaries to report to the authorities arrangements with particular hallmarks), and fines for facilitators of breaches by taxpayers (OECD 2021b).

International cooperation is also essential for success in tackling enablers of tax crimes. For instance, five

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[21]Note that information sharing also entails compliance costs, especially for financial institutions (Dharmapala 2016).

Figure 2.4. Use of Internationally Shared Information in Risk Analysis by Tax Authorities

Better technology and specialized tax units are correlated with the use of incoming information in risk analysis.
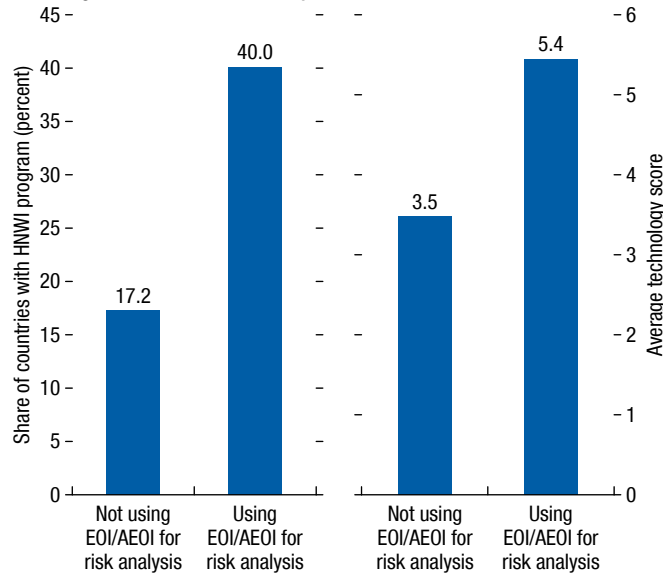
Source: IMF staff analysis based on a survey of 72 countries and the International Survey on Revenue Administration database, 2017.
Note: See Online Annex 2.3 for details on the survey of countries. A tax administration's average technology score is the sum of 6 indices of technologies, scored from 0 (technology is not used) to 3 (technology is fully in place). The *p*-values of mean-differences tests are 0.03 (technology score) and 0.05 (HNWI program). (A)EOI = (automatic) exchange of information; HNWI = high-net-worth individual.

countries known as the J5 (Australia, Canada, The Netherlands, United Kingdom, and United States) formed an operational alliance in 2018 to pool resources, share intelligence, and unite investigators and data scientists. J5 investigations ultimately led to the prosecution of a fraudulent crypto-asset scheme in 2020 (OECD 2021b).

Improved Domestic Tax Policy through Transnational Enforcement

International coordination supports tax enforcement and compliance, thereby offering individual countries opportunities to strengthen personal taxation policy and thus address increasing income and wealth inequalities. There are arguments for a flat, low capital income tax rate—as is currently used in several countries—including the capital mobility and enforcement difficulties caused by offshore tax evasion and avoidance. Yet, information sharing across borders would make it more difficult to use offshore structures to minimize taxes, and

that can be complementary to high taxation at the top (Keen and Slemrod 2017). In countries where implementation capacity now constrains tax policy choices, better tax enforcement could allow policy to adjust, especially at the top of the income distribution. A distinct but related issue is that effective use of information can reveal tax loopholes that may not be illegal; hence, domestic tax laws can be upgraded to capture such loopholes, if this is the policy intention.

Personal Tax Implications of Geographic Relocation

Wealth mobility across borders for tax purposes is mainly—but not only—on paper, as opposed to the actual migration of wealth holders. The foregoing discussion, therefore, has focused on tax evasion and avoidance. There are, however, known (and certainly less-known) cases of high-net-worth individuals' changing their country of residence for tax purposes (including prominent examples from the entertainment and sports professions).

Labor is generally less mobile than capital, exposing it less to tax competition. But physical mobility becomes more attractive when personal tax rates vary across countries and preferential tax regimes target specific groups from abroad, such as retirees, high-skilled workers, managers, and the super-rich (such as citizenship by investment and other similar regimes). Kleven and others (2020) find evidence that mobility decisions respond to cross-border differences in personal taxation, while acknowledging that nontax factors also matter. Tax-induced mobility varies across occupations and across countries within an occupation, although it has been concentrated at the top of the income and wealth distributions.

With expanding opportunities for cross-border remote work, a bigger segment of the labor income tax base has become more mobile. For example, since the onset of the COVID-19 pandemic, the number of countries offering digital-nomad visas, targeted at high-skilled individuals who can work remotely, has increased from 16 to 40. This development indicates that the tax elasticity of labor mobility could increase, thereby expanding international personal tax competition to more professions and income groups. Little is known thus far about the magnitude of the revenues at stake.

Rough estimates suggest that personal tax differentials across countries, coupled with the ease of remote work, reallocate annually about $40 billion of personal income tax base globally (1¼ percent of the

total personal income tax base in the sample; Online Annex 2.4). Country-specific estimates of the average potential revenue loss and gain are between 0.1 and 0.2 percent of GDP. Small emerging market economies with below-average tax rates and good remote work capability typically gain tax base (Figure 2.5). The estimates do not consider restrictions to international labor mobility, possible double taxation of income, and the potential for investment incomes to move with people.

The estimated tax revenue implications of cross-border remote work are small. Personal tax coordination will likely gain importance, however, raising issues not unlike those related to corporate taxation: Where is active labor income taxed? Is it the source country where the employer resides or the residence country where the employee works remotely? Does the place of remote work constitute a physical presence of the employer in the employee's residence country? Issues of consistency of legal rules across countries and the avoidance of double taxation can come to the fore.

Figure 2.5. Effect of Cross-Border Remote Work on a Country's PIT Base, by Income Group

Cross-border remote work potentially reallocates tax base to below-average tax rate countries; the aggregate effect is 1¼ percent of the global PIT base.
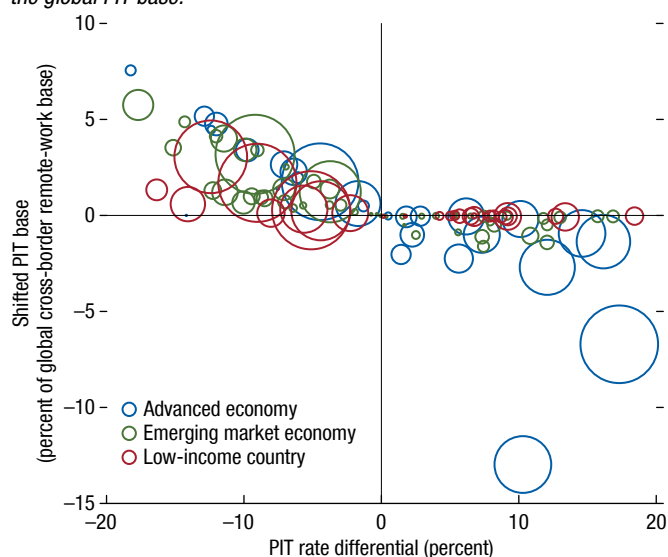
Source: IMF staff analysis.
Note: See Online Annex 2.4 for details on the analysis. PIT differential is a country's PIT rate minus the world average PIT rate. Shifted PIT base is the estimated country-specific loss or gain as a result of cross-border remote work, as a share of globally affected PIT base. Marker weights express the loss (or gain) in terms of GDP. PIT = personal income tax.

Carbon-Pricing Coordination

At a Glance

- Global warming is threatening our planet, and the window of opportunity for containing climate change to manageable levels is closing rapidly. International coordination is urgently needed.
- An internationally coordinated carbon price floor among key large emitters—in the form of a carbon tax designed flexibly to accommodate equity considerations and constraints on national policies—can, in conjunction with Paris mitigation pledges, reduce emissions by 32 percent by 2030, thereby keeping warming below 2°C.
- A carbon price floor can readily accommodate emissions-trading systems. The equivalent carbon price of other approaches (such as renewables policies, emission-rate standards, and feebates) can be mapped.
- In contrast with carbon pricing, other instruments do not trigger the full demand response to promote the whole range of mitigation opportunities.
- Unilateral border carbon adjustments would be far less effective at scaling up global mitigation than a more comprehensive carbon-pricing regime, as emissions in traded products are typically well below 10 percent of countries' total emissions.

Climate change is an existentially important global externality that requires carbon taxation or pricing and other tools tailored to country-specific circumstances to address it. For individual countries, scaling up their mitigation policy, including through taxation, can be difficult without international coordination, owing to concerns about competitiveness and uncertainty over trading partners' policies.

There remain critical gaps in both global mitigation *ambition* and *policy*. About 140 countries, representing more than 85 percent of greenhouse gas emissions, have now committed to net-zero emissions by around midcentury. But even if mitigation pledges were fully achieved, global carbon dioxide (CO_2)

would be cut by only one-third to two-thirds of the reductions needed by 2030 to limit global warming to 1.5°C to 2°C above preindustrial levels. Worse, there is an even larger gap in mitigation policy consistent with temperature goals. Measures equivalent to a global carbon price exceeding $75 per ton are needed by 2030, whereas the global average emission price is currently only $4 per ton (High-Level Commission on Carbon Prices 2017; Black and others 2022).

An additional international mechanism to complement the Paris Agreement, with a concrete plan to deliver the required emission reductions in 2030, is critical. Without an urgent narrowing of mitigation ambition and policy gaps, a dangerous cliff edge for emission reductions for 2030–40 will emerge, greatly increasing transition costs and potentially putting temperature goals beyond reach.

Recent proposals have focused on coordinated carbon-pricing regimes. The IMF has suggested an international carbon price floor (October 2019 *Fiscal Monitor*; Parry, Black, and Roaf 2021), and in a similar vein, in August 2021, the German government called for an international climate club (BMF 2021). The chapter next discusses design issues for a coordinated carbon-pricing regime (potentially accommodating other measures such as regulations), the effects of such a regime, and their relation to emerging instruments (border carbon adjustments).

Coordinated Carbon-Pricing Regime

The key element of an international carbon-pricing agreement is a carbon price requirement for participants, with prices set to align emissions with global temperature goals. The price of carbon emissions is an easily understood parameter. Carbon pricing would promote the full range of behavioral responses for reducing energy use and shifting to cleaner energy sources (if imposed comprehensively) and effectively address concerns about competitiveness and policy uncertainties (if internationally coordinated). A price *floor* requirement (drawing parallels with the Pillar 2 agreement on a minimum global corporate tax) is preferable, because it provides flexibility for countries to impose higher carbon prices if needed to meet their Paris mitigation pledges.

The agreement can allow countries to use carbon taxation or emissions-trading systems. The negotiating

parties should also retain flexibility for those countries that prefer to use alternative or complementary policies such as partial pricing, regulations, or fiscal incentives. If emission reductions from alternative policies can convincingly be assessed—and IMF and World Bank staff have developed a method that might be used for this purpose (Online Annex 2.5)—the equivalent economywide carbon price (that would deliver the same emission reduction) can be estimated using country-specific information on various emission sources and responsiveness to price changes. In this regard, carbon prices and their equivalents facilitate negotiations by serving as a common metric.

To further facilitate negotiation, a few key emitting parties could make a crucial start (though it is difficult to predict which coalition of countries might prove most feasible). For illustration, an agreement among China, the European Union, India, and the United States would cover 64 percent of baseline global CO_2 emissions in 2030, whereas an agreement among the G20 members (encompassing all European Union countries) would cover 85 percent (Figure 2.6).

Covered emission sources would need to be specified. The agreed-upon carbon-pricing regime might initially apply to CO_2 emissions from the power and industrial sectors, because these emissions are reliably measured

Figure 2.6. Baseline CO₂ Emissions

G20 countries will account for 85 percent of global CO₂ emissions in 2030.
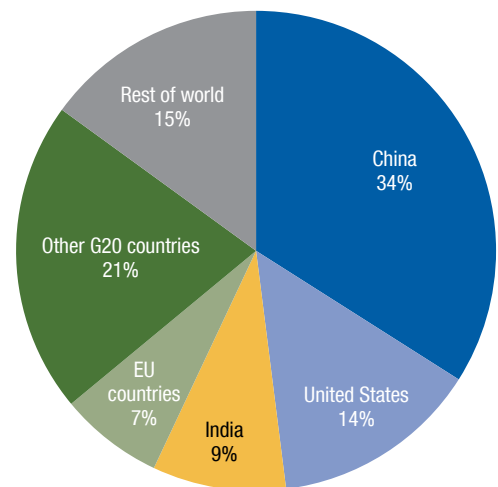
Sources: Updated from Parry and others (2021); and IMF staff analysis.
Note: Baseline refers to projected emissions with no new, or tightening of existing, mitigation policy. CO₂ = carbon dioxide; EU = European Union; G20 = Group of Twenty.

and are generally the most responsive to pricing in the near term. The regime might then be extended to all fossil fuel CO_2 emissions and, as monitoring technologies evolve, broader emission sources (for example, agriculture and methane leaks from fuel extraction and distribution). Some countries may choose to rely, at least initially, on increases in existing energy taxes or taxes on specific items (for example, coal) rather than more comprehensive carbon pricing. In such cases, the effect on emissions can also be significant (Online Annex 2.5), and an equivalent carbon price can be computed for international comparisons.

The carbon-pricing regime would need to address the differentiated responsibilities of developing countries, potentially by differentiating price floor requirements according to a country's level of economic development. Additional options include supplementary mechanisms for transferring financial and technological assistance, a priority for low-income countries and emerging market economies.

Scenario of an International Carbon Price Floor

Reinforcing existing pledges with a (concrete example of a) price floor could cut global CO_2 emissions by 29 percent below baseline levels. The illustrative computation presented here is for an international carbon price floor on fossil fuel CO_2 emissions in 2030, which is aligned with keeping global warming below 2°C. It differentiates prices according to development level: $75 per ton for advanced economies, $50 per ton for high-income emerging market economies such as China, and $25 per ton for low-income emerging market economies such as India. The simulation suggests that it is sufficient for only six G20 members to participate (Canada, China, the European Union, India, the United Kingdom, and the United States). When all G20 members participate in the price floor, global emissions decrease by 32 percent. In stark contrast, existing mitigation pledges would cut global CO_2 emissions in 2030 only by 20 percent below baseline (Figure 2.7).

Under this illustrative pricing regime (Figure 2.8), emission reductions are about 35–50 percent below baseline in 2030 for advanced economies and 20–30 percent for emerging market economies. The pricing floor (rather than the mitigation pledge) is binding for 6 out of 10 emerging market economies, but for only one advanced economy. Applying a

Figure 2.7. CO₂ Emission Projections

A carbon price floor can align emissions with keeping global warming below 2°C.
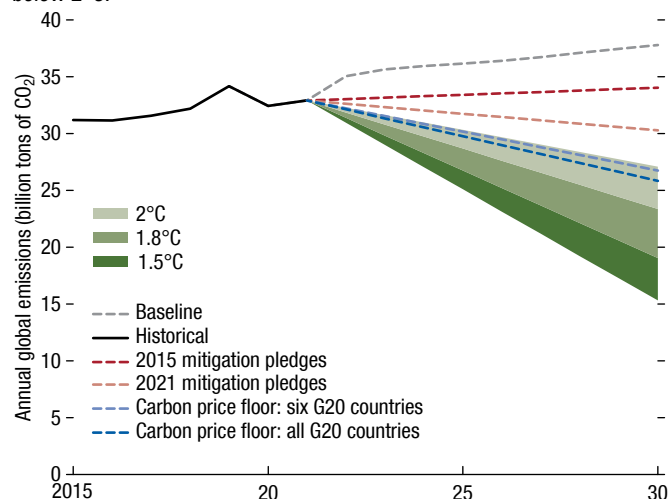
Source: Updated from Parry and others (2021).
Note: Fossil fuel CO_2 emissions shown exclude international aviation and maritime emissions. Six G20 countries refers to Canada, China, the European Union, India, the United Kingdom, and the United States. CO_2 = carbon dioxide; G20 = Group of Twenty.

dynamic computable general equilibrium model to a cooperative international pricing scenario, Chateau, Jaumotte, and Schwerhoff (2022) find that the GDP effects are modest, at least if revenues from carbon pricing are used productively and needed energy investments materialize. Thus, cooperation in carbon pricing and equivalent measures can keep global warming within an acceptable range at relatively small macroeconomic costs and is fully compatible with continued, healthy economic development.

Implementing carbon-pricing requirements would mobilize a significant source of new revenue, ranging between 0.7 and 2.9 percent of GDP, depending on the CO_2 price and the CO_2 intensity of GDP. Abatement costs (from reducing emissions) under the illustrative regime vary from 0.2 to 1 percent of GDP for most countries. Costs on average are highest for advanced economies and lowest for low-income countries and emerging market economies, with some exceptions— for example, costs are more than 1 percent of GDP in South Africa, reflecting high emission intensity of the country's GDP. However, the domestic environmental cobenefits of carbon pricing—notably, reductions in mortality from local air pollution—can offset a large portion of these costs and substantially exceed them in several large emerging market economies.

Figure 2.8. CO$_2$ Reduced below Baseline in Selected Countries with a Carbon Price Floor, 2030
(Percent)

Emission reductions are 20–55 percent below baseline.
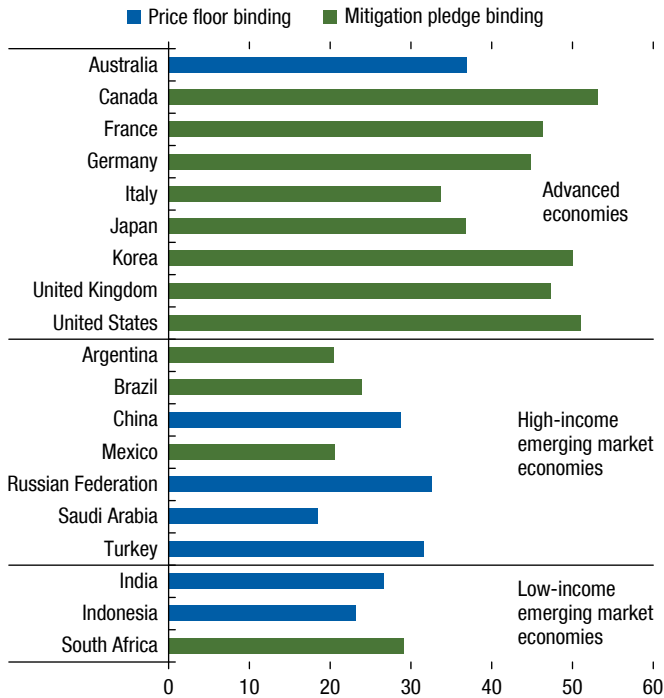
Source: IMF staff analysis.
Note: CO$_2$ reductions shown result from either a country's mitigation pledge or the illustrative carbon price floor, whichever is more stringent. CO$_2$ = carbon dioxide.

Carbon Taxes and Equivalent Measures under a Coordinated Regime

International pricing regimes can readily accommodate both carbon taxes and emissions-trading systems. In the latter, the government sets a cap on allowed emissions, firms obtain permits for their emissions (from the government or through trading with other firms), and market trading ultimately establishes the allowance or emission price. A domestic price floor mechanism or appropriate scaling of the cap can align domestic prices with international requirements.[22] About 30 pricing schemes have been implemented at the European Union and national levels, although coverage rates vary (below 30 percent of greenhouse gases in some cases and above 70 percent in others), as do prices

[22]Canada offers a prototype whereby the federal government sets the needed carbon price, while provinces and territories have the flexibility to meet the price through taxes or emissions-trading systems (ECCC 2020).

(below \$20 per ton in many cases but well above \$50 per ton in others) (Figure 2.9).

Further policy approaches can be accommodated if they yield emission reductions equivalent to those from carbon pricing. Some countries may eschew carbon pricing—perhaps because of opposition to higher energy prices—in favor of other measures. These include renewables policies, emission-rate standards, feebates, clean-technology subsidies, and taxes on individual fuels.

In contrast with carbon pricing, regulatory and fiscal instruments do not trigger the full demand response to promote the full range of mitigation opportunities. For example, adopting a vehicle standard for CO$_2$ per

Figure 2.9. Selected Carbon-Pricing Initiatives, by Coverage of Greenhouse Gas Emissions and Carbon Price
(Percent)

Pricing schemes are proliferating, but coverage rates and prices vary considerably.
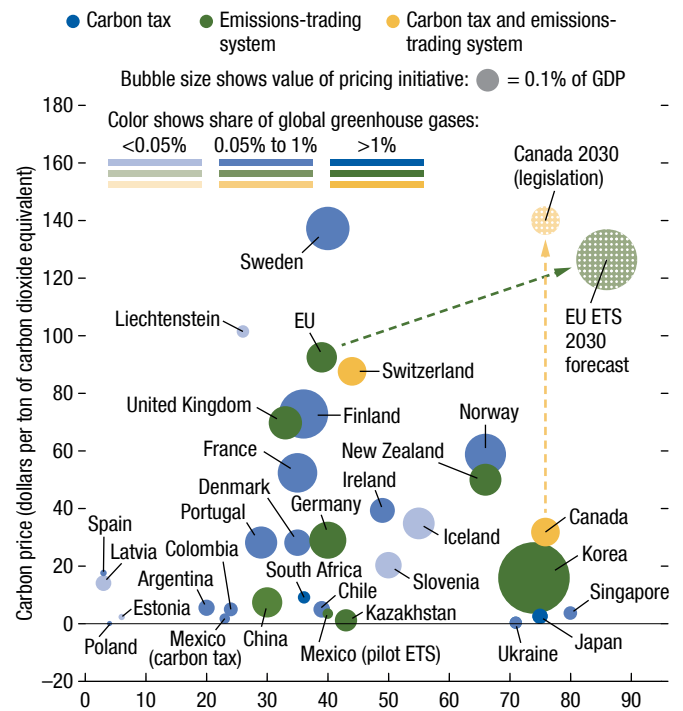
Source: IMF staff update of Parry and others (2021), Figure 1.
Note: Carbon prices are from April 1, 2021, from the World Bank. The EU ETS price is from July 19, 2021, from EMBER. Data on greenhouse gases are from 2018. Values less than 0.005 percent of GDP are of equal size for illustrative purposes. The EU ETS forecast price for 2030 is based on *BloombergNEF* (108 euros per ton CO$_2$ by 2030), and coverage assumes transport and buildings are covered by ETS expansion with a similar price. For EU member states, the size of the bubble reflects the value of national pricing initiatives excluding the EU ETS, which is shown only in the EU bubble. Jointly accounting for EU-wide and national schemes would substantially increase carbon pricing levels in all individual EU countries. For the purposes of this chart, EU includes Iceland, Liechtenstein, and Norway because they participate in the EU ETS scheme. EU ETS = European Union Emissions Trading System.

mile promotes sales of lower-emission vehicles but does not encourage people to drive less. Even so, a combination of policies could be calibrated to achieve economy-wide emission reductions equivalent to those through implementation of a carbon price.[23]

Unilateral Border Carbon Adjustment

Without an international carbon-pricing regime, unilateral border carbon adjustments seem likely to emerge, especially given the recent European Union proposal.[24] A border carbon adjustment imposes charges (or allowance purchase requirements) on imports into a jurisdiction with carbon pricing for "embodied" carbon (that is, the CO_2 emitted in the production of imports).[25] Such an adjustment is motivated by concerns about carbon leakage and competitiveness. Limiting an adjustment's scope to energy-intensive, trade-exposed industries (such as iron, steel, aluminum, petroleum products, and cement) would focus it on sectors in which these concerns are most severe and would limit administrative burdens (in part because reasonably reliable measures of embodied carbon are available for these sectors).

Border carbon adjustments are, however, subject to legal, equity, and effectiveness concerns (Parry and others 2021). Uncertainties surround the compatibility of border carbon adjustments with World Trade Organization rules. Border adjustments may disproportionately affect developing countries' competitiveness, not least because industries in large emerging market economies often have two to four times the embodied carbon of advanced economy industries—a possible response might be to base the adjustment on domestic industry emission rates for all trading partners. And border adjustments would be far less effective at scaling up global mitigation than a more comprehensive carbon-pricing regime, given they price emissions only in traded products, which are typically less than 10 percent of countries' total emissions.

A border carbon adjustment can help create incentives for countries to remain in a pricing regime, rather than leave and subject their exports to the adjustment by those remaining in the regime. For example, if the United States unilaterally withdrew from a carbon-pricing regime in which all other G20 countries participated, then other countries would collect an estimated $13 billion (0.06 percent of GDP) a year on imports from the United States (for a border carbon adjustment based on European Union carbon intensity and a $75 per ton price). If China and India unilaterally withdrew, then revenue collections on their exports would be $62 billion (0.42 percent of GDP) and $9 billion (0.32 percent of GDP), respectively (Figure 2.10).

Aside from complicating negotiations, combining a carbon-pricing regime with a border carbon adjustment would raise two further issues:
- *All participants in the pricing regime would likely need to impose carbon pricing,* at least for domestic emissions from energy-intensive, trade-exposed industries.

Figure 2.10. Penalties from Exiting Illustrative Carbon-Pricing Regime with a Border Carbon Adjustment, 2020
(Percent of country GDP)

Border carbon adjustment penalties create incentives for countries to remain in a carbon-pricing regime.
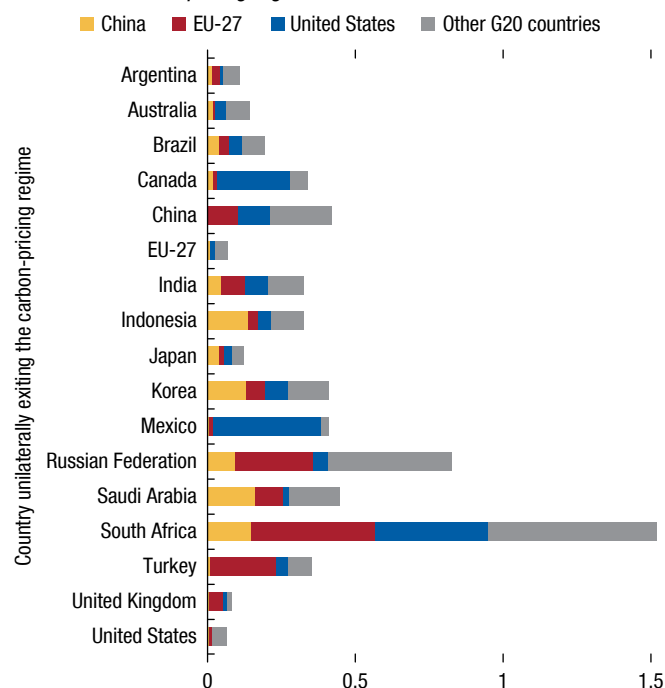
Sources: IMF, Climate Change Indicators Dashboard, 2022; OECD, Bilateral Trade Database by Industry and End-Use, 2022; and IMF staff calculations.
Note: Embodied carbon data are for 2015, and trade flow data are for 2020 (except those for Saudi Arabia, which are for 2018). This figure assumes border carbon adjustment based on country-specific standards and a $75 CO_2 price. EU-27 = 27 countries of the European Union; G20 = Group of Twenty.

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[23]Online Annex 2.5 illustrates potential CO_2 reductions under alternative mitigation policies relative to those under carbon pricing.

[24]The European Council (2022) reached an agreement in March 2022 on "carbon border adjustment mechanisms" to function in parallel with the European Union's Emissions Trading System. The European Parliament is yet to confirm its position.

[25]Rebates might be provided to domestic exporters, perhaps tied to industry-level emission-rate benchmarks to avoid undermining firm-level mitigation incentives.

A country without these emission charges may not be able, under World Trade Organization rules, to impose charges on embodied emissions for imports.

- *A common external border carbon adjustment would need to be agreed upon*, which might limit the scope for varying the pricing of industrial emissions according to development levels.

Despite the recent proliferation of carbon-pricing schemes, such pricing remains difficult domestically in many countries, not least because of opposition to higher energy prices and the contraction of fossil fuel–reliant activities. A comprehensive strategy with supporting elements can enhance prospects for reform and is especially important in light of recent surges in energy prices. Supports might include, for example, reinforcing pricing with sectoral-based regulations and feebates (which have less of an effect on energy prices), the use of carbon-pricing revenues to equitably boost the economy, robust assistance measures for vulnerable groups, and gradual phase-in of reforms in consultation with stakeholders (for case

studies and an analysis of distribution and political economy issues, see IMF 2013; October 2019 *Fiscal Monitor*).

International policy coordination is, however, essential—and urgent—to overcome obstacles to unilateral action. The immediate priority is continued dialogue on, and supporting analysis of, potential coordination regimes. This dialogue could be conducted in parallel through multiple fora, such as the Group of Seven (G7) and G20 (currently under the German and Indonesian presidencies, respectively), the 27th United Nations Conference of the Parties (COP27), and the Coalition of Finance Ministers for Climate Action, as well as through bilateral discussions. Meanwhile, the type of price floor arrangement discussed here might also be implemented at the regional level (for example, several countries in the Latin American region already have carbon taxes, and several countries in the Asia and Pacific region have implemented, or are considering, carbon pricing)—regional price floor arrangements could provide valuable experience for developing a global price floor arrangement.

Box 2.1. The Need for Timely and Accurate Beneficial-Ownership Information

It is pivotal for tax authorities to effectively obtain, verify, and use beneficial-ownership information, which necessitates establishing or accessing *beneficial-ownership registries* (or alternative mechanisms that are just as effective). Owning or controlling a company or trust as a beneficial owner through complicated ownership

structures, using multiple jurisdictions, as well as with no visible or direct ownership stake, allows criminals to hide their identity and the origins of their assets and to commit tax evasion and other crimes. Authorities should assess—and design measures to mitigate—risks from such activities (Table 2.1.1).

Table 2.1.1. What Is Beneficial-Ownership Information and How Can Beneficial-Ownership Measures Be Implemented?

Definition	• *Beneficial owner is the natural person* who ultimately owns or controls a legal entity (such as a company) or legal arrangement (such as a trust).
	• *Always a person at the end of an ownership or control chain*; differs from the concept of legal ownership of an entity (which can be another company or trust that is a shareholder).
	• *The IMF uses the Financial Action Task Force definition of beneficial ownership*, which has also been adopted by the Global Forum.
Implementation	• *Identify beneficial owners* when a company is created, and when changes to ownership and control are made, to prevent misuse and to foster transparency in business dealings.
	• *Centralize verified and up-to-date information into a database*: Establish a beneficial-ownership registry, for example with company registries, financial-intelligence units, and tax authorities.
	• *Provide access to the registry*: If the registry is not public, then at a minimum, government entities (including tax authorities), financial institutions, and gatekeepers (for example, lawyers, accountants, notaries, and trust and company service providers) should all have access.
	• *Use a multipronged approach*: Require companies and trusts to know their own beneficial owners, incorporate beneficial-ownership identification in customer due diligence processes, and use beneficial-ownership information for public procurement.

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ECONOMY ABBREVIATIONS

Code	Name
AFG	Afghanistan
AGO	Angola
ALB	Albania
ARE	United Arab Emirates
ARG	Argentina
ARM	Armenia
ATG	Antigua and Barbuda
AUS	Australia
AUT	Austria
AZE	Azerbaijan
BDI	Burundi
BEL	Belgium
BEN	Benin
BFA	Burkina Faso
BGD	Bangladesh
BGR	Bulgaria
BHR	Bahrain
BHS	Bahamas, The
BIH	Bosnia and Herzegovina
BLR	Belarus
BLZ	Belize
BOL	Bolivia
BRA	Brazil
BRB	Barbados
BRN	Brunei Darussalam
BTN	Bhutan
BWA	Botswana
CAF	Central African Republic
CAN	Canada
CHE	Switzerland
CHL	Chile
CHN	China
CIV	Côte d'Ivoire
CMR	Cameroon
COD	Congo, Democratic Republic of the
COG	Congo, Republic of
COL	Colombia
COM	Comoros
CPV	Cabo Verde
CRI	Costa Rica
CYP	Cyprus
CZE	Czech Republic
DEU	Germany
DJI	Djibouti
DMA	Dominica
DNK	Denmark

Code	Name
DOM	Dominican Republic
DZA	Algeria
ECU	Ecuador
EGY	Egypt
ERI	Eritrea
ESP	Spain
EST	Estonia
ETH	Ethiopia
FIN	Finland
FJI	Fiji
FRA	France
FSM	Micronesia, Federated States of
GAB	Gabon
GBR	United Kingdom
GEO	Georgia
GHA	Ghana
GIN	Guinea
GMB	Gambia, The
GNB	Guinea-Bissau
GNQ	Equatorial Guinea
GRC	Greece
GRD	Grenada
GTM	Guatemala
GUY	Guyana
HKG	Hong Kong Special Administrative Region
HND	Honduras
HRV	Croatia
HTI	Haiti
HUN	Hungary
IDN	Indonesia
IND	India
IRL	Ireland
IRN	Iran
IRQ	Iraq
ISL	Iceland
ISR	Israel
ITA	Italy
JAM	Jamaica
JOR	Jordan
JPN	Japan
KAZ	Kazakhstan
KEN	Kenya
KGZ	Kyrgyz Republic
KHM	Cambodia
KIR	Kiribati
KNA	St. Kitts and Nevis

Code	Name	Code	Name
KOR	Korea	ROU	Romania
KWT	Kuwait	RUS	Russian Federation
LAO	Lao P.D.R.	RWA	Rwanda
LBN	Lebanon	SAU	Saudi Arabia
LBR	Liberia	SDN	Sudan
LBY	Libya	SEN	Senegal
LCA	St. Lucia	SGP	Singapore
LKA	Sri Lanka	SLB	Solomon Islands
LSO	Lesotho	SLE	Sierra Leone
LTU	Lithuania	SLV	El Salvador
LUX	Luxembourg	SMR	San Marino
LVA	Latvia	SOM	Somalia
MAR	Morocco	SRB	Serbia
MDA	Moldova	STP	São Tomé and Príncipe
MDG	Madagascar	SUR	Suriname
MDV	Maldives	SVK	Slovak Republic
MEX	Mexico	SVN	Slovenia
MHL	Marshall Islands	SWE	Sweden
MKD	North Macedonia	SWZ	Eswatini
MLI	Mali	SYC	Seychelles
MLT	Malta	SYR	Syria
MMR	Myanmar	TCD	Chad
MNE	Montenegro	TGO	Togo
MNG	Mongolia	THA	Thailand
MOZ	Mozambique	TJK	Tajikistan
MRT	Mauritania	TKM	Turkmenistan
MUS	Mauritius	TLS	Timor-Leste
MWI	Malawi	TON	Tonga
MYS	Malaysia	TTO	Trinidad and Tobago
NAM	Namibia	TUN	Tunisia
NER	Niger	TUR	Turkey
NGA	Nigeria	TUV	Tuvalu
NIC	Nicaragua	TWN	Taiwan Province of China
NLD	Netherlands, The	TZA	Tanzania
NOR	Norway	UGA	Uganda
NPL	Nepal	UKR	Ukraine
NZL	New Zealand	URY	Uruguay
OMN	Oman	USA	United States
PAK	Pakistan	UZB	Uzbekistan
PAN	Panama	VCT	St. Vincent and the Grenadines
PER	Peru	VEN	Venezuela
PHL	Philippines	VNM	Vietnam
PLW	Palau	VUT	Vanuatu
PNG	Papua New Guinea	WSM	Samoa
POL	Poland	YEM	Yemen
PRT	Portugal	ZAF	South Africa
PRY	Paraguay	ZMB	Zambia
QAT	Qatar	ZWE	Zimbabwe

GLOSSARY

Automatic stabilizers   Revenue and some expenditure items that adjust automatically to cyclical changes in the economy—for example, as output falls, revenue collections decline and unemployment benefits increase, which "automatically" provides demand support.

BEPS   Base erosion and profit shifting (BEPS) refers to tax planning strategies used by multinational enterprises that exploit gaps and mismatches in tax rules to avoid paying tax.

Border carbon adjustment   Levy charged on the unpriced carbon emissions embodied in imports (perhaps with remittances for domestic carbon taxes on exports).

Carbon dioxide (CO_2)   The main greenhouse gas, produced from burning fossil fuels, manufacturing cement, and forest practices. CO_2 has an average atmospheric residence time of 100 years.

Carbon price floor arrangement   A proposal to complement the Paris Agreement with an agreement among large emitting countries to impose a minimum price on carbon emissions. The arrangement could be designed flexibly to accommodate carbon taxes, emission trading systems, or other mitigation approaches and perhaps with differentiated responsibilities to entice participation by emerging market economies.

Carbon tax   A tax imposed on CO_2 releases emitted largely through the combustion of carbon-based fossil fuels. Administratively, the easiest way to implement the tax is through taxing the supply of fossil fuels—coal, oil, and natural gas—in proportion to their carbon content.

Contingent liabilities   Obligations that are not explicitly recorded on government balance sheets and that arise only in the event of a particular discrete situation, such as a crisis.

Countercyclical fiscal policy   Active changes in expenditure and tax policies to smooth the economic cycle (by contrast with the operation of automatic stabilizers); for instance, by cutting taxes or raising expenditures during an economic downturn.

Cyclically adjusted balance (CAB)   Difference between the overall balance and the automatic stabilizers; equivalently, an estimate of the fiscal balance that would apply under current policies if output were equal to potential.

Cyclically adjusted primary balance (CAPB)   Cyclically adjusted balance excluding net interest payments (interest expenditure minus interest revenue).

Economic scarring   Long-lasting economic damage.

Emissions-trading system   A market-based policy to reduce emissions (sometimes referred to as cap-andtrade). Covered sources are required to hold allowances for each ton of their emissions or (in an upstream program) the embodied emissions content in fuels. The total quantity of allowances is fixed, and market trading of allowances establishes a market price for emissions. Auctioning the allowances provides a valuable source of government revenue.

Externality   A cost imposed by the actions of individuals, countries, or firms on other individuals, countries, or firms (possibly in the future, as in the case of climate change) that the former does not consider.

Feebate   This policy would impose a sliding scale of fees on firms with emission rates (for example, CO_2 per kilowatt-hour) above a "pivot point" level and corresponding subsidies for firms with emission rates below the pivot point. Alternatively, the feebate might be applied to energy consumption rates (for example, gasoline per mile driven) rather than emission rates. Feebates can exploit many (but not all) of the mitigation opportunities promoted by carbon taxes but without a large increase in energy prices.

Fiscal buffer   Fiscal space created by saving budgetary resources and reducing public debt in good times.

Fiscal consolidation   Fiscal policy that reduces government deficits and government debt.

Fiscal framework   The set of rules, procedures, and institutions that guide fiscal policy.

Fiscal rules   Lasting constraints on fiscal policy through predetermined numerical limits on aggregate fiscal indicators (such as the budget balance, government expenditure, debt).

Fiscal space   The room for undertaking discretionary fiscal policy (increasing spending or reducing taxes) relative to existing plans without endangering market access and debt sustainability.

General government   All government units and all nonmarket, nonprofit institutions that are controlled and mainly financed by government units comprising the central, state, and local governments; includes social security funds and does not include public corporations or quasi corporations.

Gini   Statistical measure of dispersion. It is used to measure the degree of similarity or the degree of inequality (dispersion) in incomes, consumption, and wealth levels. Its values fall in a range between 0 and 1. A value of 0 is seen when there is perfect equality; a value of 1 is seen when there is very high inequality (for example, only one person owns the totality of the wealth in the economy).

Gini index   Measures the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 1 implies perfect inequality.

Global corporate minimum tax   A global minimum tax on corporate profits is an agreement to limit tax competition among countries by putting a floor on effective tax rates applied to income of large multinational corporations.

Global Forum on Transparency and Exchange of Information for Tax Purposes   An international body working on the implementation of global transparency and exchange of information standards. As of April 2022, it has 163 member countries.

Government financing needs (also ***gross financing needs*)**   Overall new borrowing requirement plus debt maturing during the year.

Greenhouse gas   A gas in the atmosphere that is transparent to incoming solar radiation but traps and absorbs heat radiated from the earth. CO_2 is easily the most predominant greenhouse gas.

Gross debt   All liabilities that require future payment of interest and/or principal by the debtor to the creditor. This includes debt liabilities in the form of special drawing rights, currency, and deposits; debt securities; loans; insurance, pension, and standardized guarantee programs; and other accounts payable. (See the IMF's 2001 *Government Finance Statistics Manual* and *Public Sector Debt Statistics Manual.*) The term "public debt" is used in the *Fiscal Monitor*, for simplicity, as synonymous with gross debt of the general government, unless specified otherwise. (Strictly speaking, public debt refers to the debt of the public sector as a whole, which includes financial and nonfinancial public enterprises and the central bank.)

Gross financing needs   See *Government financing needs*

Headline fiscal balance   See *Overall fiscal balance*

Inclusive Framework   Member countries work together on developing and implementing standards on Base Erosion and Profit Shifting (BEPS). It was established in 2016 for countries to collaborate on implementing the BEPS initiative. As of April 2022, it has 141 member countries and 14 observer organizations.

In-kind benefits/transfers   Government social assistance provided in terms of specific goods (for example, food) or services (for example, healthcare) instead of cash.

Job retention schemes   Government programs that provide payments to employers to retain current employees, either part or full time. The payments typically cover part or all of an employees' hours worked or top up an employees' pay for hours reduced (that is, lost wages).

Net debt   Gross debt minus financial assets corresponding to debt instruments. These financial assets are monetary gold and special drawing rights; currency and deposits; debt securities; loans, insurance, pensions, and standardized guarantee programs; and other accounts receivable. In some countries, the reported net debt can deviate from this definition based on available information and national fiscal accounting practices.

Nonfinancial public sector   General government plus nonfinancial public corporations.

Output gap   Deviation of actual from potential GDP, in percent of potential GDP.

Overall fiscal balance (also "headline fiscal balance")   Net lending and borrowing, defined as the difference between revenue and total expenditure, using the IMF's 2001 *Government Finance Statistics Manual* (GFSM 2001). Does not include policy lending. For some countries, the overall balance is still based on the GFSM 1986, which defines it as total revenue and grants minus total expenditure and net lending.

Pass-through   The act, action, or process of adjusting prices in line with changing costs.

Potential output   Estimate of the level of GDP that can be reached if the economy's resources are fully employed.

Primary balance   Overall balance excluding net interest payments (interest expenditure minus interest revenue).

Procyclical fiscal policy   Fiscal policy is said to be procyclical when it amplifies the economic cycle, for instance, by raising taxes or cutting expenditures during an economic downturn.

Progressive (or regressive) taxes   Taxes that feature an average tax rate that rises (or falls) with income.

Public debt   See *Gross debt*

Public sector   Includes all resident institutional units that are deemed to be controlled by the

government. It includes general government and resident public corporations.

Regressive policy   Imposes a larger burden as a share of consumption on lower-income households than on higher-income households; a progressive policy does the opposite.

Social protection   Comprise social insurance and social safety nets.

Social safety nets   Noncontributory transfer programs financed by general government revenue.

Special drawing rights (SDRs)   An international reserve asset created by the IMF to supplement the official reserves of its member countries. It is not a currency but a potential claim on the freely usable currencies of IMF members. As a claim on currencies, SDRs can provide a country with liquidity.

Structural primary balance   Extension of the cyclically adjusted primary balance that also corrects for other nonrecurrent effects that go beyond the cycle, such as oneoff operations and other factors whose cyclical fluctuations do not coincide with the output cycle (for instance, asset and commodity prices and output composition effects).

Sustainable Development Goals   A collection of 17 goals set by the United Nations General Assembly in 2015 covering global warming, poverty, health, education, gender equality, water, sanitation, energy, urbanization, environment, and social justice. Each goal has a set of targets to achieve, and in total there are 169 targets.

This appendix comprises four sections. "Data and Conventions" describes the data and conventions used to calculate economy group composites. "Fiscal Policy Assumptions" summarizes the country-specific assumptions underlying the estimates and projections for 2022–27. "Definition and Coverage of Fiscal Data" summarizes the classification of countries in the various groups presented in the *Fiscal Monitor* and details the coverage and accounting practices underlying each country's *Fiscal Monitor* data. Statistical tables on key fiscal variables complete the appendix. Data in these tables have been compiled on the basis of information available through April 8, 2022.

Data and Conventions

Country-specific data and projections for key fiscal variables are based on the April 2022 World Economic Outlook database, unless indicated otherwise, and compiled by IMF staff. Historical data and projections are based on the information IMF country desk officers gather in the context of their missions and through their ongoing analysis of the evolving situation in each country; data are updated continually as more information becomes available. Structural breaks in data may be adjusted to produce smooth series through splicing and other techniques. IMF staff estimates serve as proxies when complete information is unavailable. As a result, *Fiscal Monitor* data may differ from official data in other sources, including the IMF's *International Financial Statistics* and the *Government Finance Statistics Manual* (GFSM 2014).

Sources for fiscal data and projections not covered by the World Economic Outlook database are listed in the respective tables and figures.

Country classification in the *Fiscal Monitor* divides the world into three major groups: 39 advanced economies, 96 emerging market and middle-income economies, and 59 low-income developing countries. *Fiscal Monitor* tables display 35 advanced economies, 40 emerging market and middle-income economies, and 40 low-income developing countries. The countries in the tables generally represent the largest countries within each group based on the size of their GDP in current US dollars.

Data for the full list of economies can be found at https://www.imf.org/external/datamapper/datasets/FM. The seven largest advanced economies as measured by GDP (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) constitute the subgroup of major advanced economies, often referred to as the Group of Seven (G7). The members of the euro area are also distinguished as a subgroup. Composite data shown in the tables for the euro area cover the current members for all years, even though membership has increased over time. Data for most European Union (EU) member countries have been revised following their adoption of the updated European System of National and Regional Accounts (ESA 2010). Low-income developing countries are countries that have per capita income levels below a certain threshold (set at $2,700, as of 2016, as measured by the World Bank Atlas method), structural features consistent with limited development and structural transformation, and external financial relationships insufficiently open for the countries to be considered emerging market economies. Emerging market and middle-income economies include those not classified as advanced economies or low-income developing countries. See Table A, Economy Groupings, for more details.

Most fiscal data for advanced economies refer to the general government, whereas data for emerging market and developing economies often refer to only the central government or the budgetary central government (for specific details, see Tables B–D). All fiscal data refer to calendar years, except in the cases of The Bahamas, Bangladesh, Barbados, Bhutan, Botswana, Dominica, Egypt, Eswatini, Ethiopia, Fiji, Haiti, Hong Kong Special Administrative Region, India, the Islamic Republic of Iran, Jamaica, Lesotho, Malawi, the Marshall Islands, Mauritius, Micronesia, Myanmar, Namibia, Nauru, Nepal, Pakistan, Palau, Puerto Rico, Rwanda, Samoa, Singapore, St. Lucia, Thailand, Tonga, and Trinidad and Tobago, for which they refer to the fiscal year. For economies whose fiscal years end before June 30, data are recorded in the previous calendar year. For economies whose fiscal years end on or after June 30, data are recorded in the current calendar year.

Composite data for country groups are weighted averages of individual-country data, unless specified otherwise. Data are weighted by annual nominal GDP converted to US dollars at average market exchange rates as a share of the group GDP.

For the purpose of data reporting in the *Fiscal Monitor*, the Group of Twenty (G20) member aggregate refers to the 19 country members and does not include the European Union.

In most advanced economies, and in some large emerging market and middle-income economies, fiscal data follow the GFSM 2014 or are produced using a national accounts methodology that follows the 2008 System of National Accounts (SNA) or ESA 2010, both broadly aligned with the GFSM 2014. Most other countries follow the GFSM 2001, but some countries, including a significant proportion of low-income developing countries, have fiscal data based on the 1986 GFSM. The overall fiscal balance refers to net lending and borrowing by the general government. In some cases, however, the overall balance refers to total revenue and grants minus total expenditure and net lending.

The fiscal gross and net debt data reported in the *Fiscal Monitor* are drawn from official data sources and IMF staff estimates. Whereas attempts are made to align gross and net debt data with the definitions in the GFSM, data limitations or specific country circumstances can cause these data to deviate from the formal definitions. Although every effort is made to ensure the debt data are relevant and internationally comparable, differences in both sectoral and instrument coverage mean that the data are not universally comparable. As more information becomes available, changes in either data sources or instrument coverage can give rise to data revisions that are sometimes substantial.

As used in the *Fiscal Monitor*, the term "country" does not always refer to a territorial entity that is a state as understood by international law and practice. As used here, "country" also covers some territorial entities that are not states but whose statistical data are maintained separately and independently.

Australia: For cross-economy comparability, gross and net debt levels reported by national statistical agencies for economies that have adopted the 2008 SNA (Australia, Canada, Hong Kong Special Administrative Region, and the United States) are adjusted to exclude the unfunded pension liabilities of government employees defined-benefit pension plans.

Bangladesh: Data are on a fiscal year basis.

Brazil: General government data refer to the nonfinancial public sector—which includes the federal, state, and local governments, as well as public enterprises (excluding Petrobras and Eletrobras)—and are consolidated with data for the sovereign wealth fund. Revenue and expenditures of federal public enterprises are added in full to the respective aggregates. Transfers and withdrawals from the sovereign wealth fund do not affect the primary balance. Disaggregated data on gross interest payments and interest receipts are available only from 2003 onward. Before 2003, total revenue of the general government excludes interest receipts; total expenditure of the general government includes net interest payments. Gross public debt includes the Treasury bills on the central bank's balance sheet, including those not used under repurchase agreements. Net public debt consolidates nonfinancial public sector and central bank debt. The national definition of general government gross debt excludes government securities held by the central bank; except the stock of Treasury securities the central bank uses for monetary policy (those pledged as security reverse repurchase agreement operations). According to this national definition, gross debt amounted to 80.3 percent of GDP at the end of 2021.

Canada: For cross-economy comparability, gross and net debt levels reported by national statistical agencies for economies that have adopted the 2008 SNA (Australia, Canada, Hong Kong Special Administrative Region, and the United States) are adjusted to exclude unfunded pension liabilities of government employees defined-benefit pension plans.

Chile: Cyclically adjusted balances refer to the structural balance, which includes adjustments for output and commodity price developments.

China: Public debt data include central government debt as reported by the Ministry of Finance, explicit local government debt, and shares of contingent liabilities the government may incur, based on estimates from the National Audit Office estimate. IMF staff estimates exclude central government debt issued for China Railway. Relative to the authorities' definition, consolidated general government net borrowing excludes transfers to and from stabilization funds but includes state-administered funds, state-owned enterprise funds, and social security contributions and expenses, as well as some off-budget spending by local governments. Deficit numbers do not include some expenditure items, mostly infrastructure investment financed off budget through land sales and local

government financing vehicles. Fiscal balances are not consistent with reported debt, because no time series of data in line with the National Audit Office debt definition is published officially.

Colombia: Gross public debt refers to the combined public sector, including Ecopetrol and excluding Banco de la República's outstanding external debt.

Dominican Republic: The fiscal series have the following coverage: the public debt, debt service, and cyclically adjusted or structural balances are for the consolidated public sector (which includes the central government, the rest of the nonfinancial public sector, and the central bank). The remaining fiscal series are for the central government.

Egypt: Data are on a fiscal year basis.

Ethiopia: Data are on a fiscal year basis.

Fiji: Data are on a fiscal year basis.

Greece: General government gross debt follows the GFSM 2014 definition and includes the stock of deferred interest.

Haiti: Data are on a fiscal year basis.

Hong Kong Special Administrative Region: Data are on a fiscal year basis. Cyclically adjusted balances include adjustments for land revenue and investment income. For cross-economy comparability, gross and net debt levels reported by national statistical agencies for economies that have adopted the 2008 SNA (Australia, Canada, Hong Kong Special Administrative Region, and the United States) are adjusted to exclude the unfunded pension liabilities of government employees defined-benefit pension plans.

Iceland: Gross debt excludes insurance technical reserves (including pension liabilities) and other accounts payable.

India: Data are on a fiscal year basis.

Iran, Islamic Republic of: Data are on a fiscal year basis.

Ireland: For 2015, if the conversion of the government's remaining preference shares to ordinary shares in one bank is excluded, then the fiscal balance is –1.1 percent of GDP. Cyclically adjusted balances reported in Appendix Tables A3 and A4 exclude financial sector support measures. Ireland's 2015 national accounts were revised as a result of restructuring and relocation of multinational companies, which resulted in a level shift of nominal and real GDP. For more information, see "National Income and Expenditure Annual Results: 2015," http://www.cso.ie/en/releasesandpublications/er/nie/nationalincomeandexpenditureannualresults2015/.

Japan: Gross debt is on an unconsolidated basis.

Latvia: The fiscal deficit includes bank restructuring costs and thus is higher than the deficit in official statistics.

Mexico: General government refers to the central government, social security funds, public enterprises, development banks, the national insurance corporation, and the National Infrastructure Fund, but excludes subnational governments.

Myanmar: Data are on a fiscal year basis.

Nepal: Data are on a fiscal year basis.

Norway: Cyclically adjusted balances correspond to the cyclically adjusted non-oil overall or primary balance. These variables are a percentage of non-oil potential GDP.

Pakistan: Data are on a fiscal year basis.

Peru: Cyclically adjusted balances include adjustments for commodity price developments.

Singapore: Data are on a fiscal year basis.

Spain: Overall and primary balances include financial sector support measures estimated to be 0.3 percent of GDP for 2013, 0.1 percent of GDP for 2014, 0.1 percent of GDP for 2015, and 0.2 percent of GDP for 2016.

Sweden: Cyclically adjusted balances account for output and employment gaps.

Switzerland: Data submissions at the cantonal and commune levels are received with a long and variable lag and are subject to sizable revisions. Cyclically adjusted balances include adjustments for extraordinary operations related to the banking sector.

Thailand: Data are on a fiscal year basis.

Turkey: The fiscal projections assume a more negative primary and overall balance than envisaged in the authorities' New Economic Program 2021–23 (September 2020), partly from deterioration in the growth outlook related to the COVID-19 pandemic and partly from definitional differences. Projections in the *World Economic Outlook* and *Fiscal Monitor* are based on the IMF-defined fiscal balance, which excludes some revenue and expenditure items included in the authorities' headline balance.

Turkmenistan: Staff estimates, and projections of the fiscal balance exclude receipts from domestic bond issuances as well as privatization operations, in line with GFSM 2014. The authorities' official estimates, which are compiled using domestic statistical methodologies, include bond issuance and privatization proceeds as part of government revenues.

United States: For cross-economy comparability, expenditures and fiscal balances 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 SNA adopted by the United States but not for countries that have not adopted the 2008 SNA. Data for the United States may thus differ from data published by the US Bureau of Economic Analysis. In addition, gross and net debt levels reported by the Bureau of Economic Analysis and national statistical agencies for other economies that have adopted the 2008 SNA (Australia, Canada, and Hong Kong Special Administrative Region) are adjusted to exclude the unfunded pension liabilities of government employees defined-benefit pension plans.

Uruguay: Data are for the nonfinancial public sector, which includes the central government, the local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. Because of this narrower coverage, central bank balances are not included in the fiscal data.

Venezuela: Fiscal accounts include the budgetary central government, social security funds, FOGADE (insurance deposit institution), and a sample of public enterprises, including Petróleos de Venezuela, S.A. (PDVSA). Data for 2018–21 are IMF staff estimates.

Fiscal Policy Assumptions

Historical data and projections of key fiscal aggregates are in line with those of the April 2022 *World Economic Outlook*, unless noted otherwise. For underlying assumptions other than on fiscal policy, see the April 2022 World Economic Outlook.

Short-term fiscal policy assumptions are based on officially announced budgets, adjusted for differences between the national authorities and IMF staff regarding macroeconomic assumptions and projected fiscal outturns. Medium-term fiscal projections incorporate policy measures judged likely to be implemented. When IMF staff has insufficient information to assess the authorities' budget intentions and prospects for policy implementation, an unchanged structural primary balance is assumed, unless indicated otherwise.

Afghanistan: All data and projections for 2021-27 are omitted because of an unusually high degree of uncertainty and given that the IMF has paused its engagement with the country due to a lack of clarity within the international community regarding the recognition of a government in Afghanistan.

Argentina: Fiscal projections are based on the available information regarding budget outturn and budget plans for the federal government, on fiscal measures announced by the authorities, and on IMF staff macroeconomic projections.

Australia: Fiscal projections are based on data from the Australian Bureau of Statistics, the FY2022/23 budget published by the Commonwealth Government in March 2022, the FY2021/22 budget published by each state/territory government, the FY2021/22 budget update published by some state governments, and the IMF staff's estimates and projections.

Austria: Fiscal projections are based on the 2022 budget, the Austria Stability Programme, Austria National Reform Programme 2021, the new EU recovery funds, and the latest announcement on fiscal measures.

Belgium: Projections are based on the 2021–24 Stability Program, the Draft Budgetary Plan for 2022, and other available information on the authorities' fiscal plans, with adjustments for the IMF staff's assumptions.

Brazil: Fiscal projections for 2022 reflect policy announcements.

Cambodia: Historical fiscal and monetary data are from the Cambodian authorities. Projections are based on IMF staff's assumptions following discussions with the authorities.

Canada: Projections use the baseline forecasts from the Federal Budget 2022 and the latest provincial budgets. The IMF staff makes some adjustments to these forecasts, including for differences in macroeconomic projections. The IMF staff's forecast also incorporates the most recent data releases from Statistics Canada's National Economic Accounts, including quarterly federal, provincial, and territorial budgetary outturns.

Chile: Projections are based on the authorities' budget projections, adjusted to reflect IMF staff's projections for GDP, copper prices, depreciation, and inflation.

China: After a significant tightening in 2021, the pace of fiscal tightening is projected to slow in 2022 based on Article IV consultation findings and public statements by the authorities.

Colombia: Projections are based on the authorities' policies and projections reflected in the 2022 Financing Plan and the 2021 Medium-Term Fiscal Framework, adjusted to reflect IMF staff macroeconomic assumptions.

Croatia: Projections are based on the macroeconomic framework and the authorities' medium-term fiscal guidelines.

Cyprus: Projections are based on IMF staff assessments of authorities' budget plans and IMF staff macroeconomic assumptions.

Czech Republic: Projections are based on the authorities' latest available convergence program, budget, and medium-term fiscal framework, as well as IMF staff's macroeconomic framework.

Denmark: Estimates for the current year are aligned with the latest official budget numbers, adjusted where appropriate for the IMF staff's macroeconomic assumptions. Beyond the current year, the projections incorporate key features of the medium-term fiscal plan as embodied in the authorities' latest budget. Structural balances are net of temporary fluctuations in some revenues (for example, North Sea revenue, pension yield tax revenue) and one-offs (COVID-19–related one-offs are, however, included).

Ecuador: Fiscal sector projections are excluded from publication for 2022–27 because of ongoing program review discussions. The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.

Egypt: Fiscal projections are based mainly on budget sector operations. Projections are based on the budget for FY2021/22 and IMF staff's macroeconomic outlook.

Estonia: The forecast incorporates the authorities' approved supplementary budget for 2021, and the approved budget for 2022, adjusted for newly available information (e.g., measures to mitigate the impact of higher energy costs; and the impact of the war in Ukraine) for Staff's macroeconomic scenario.

Finland: Projections for 2021 onward are based on the measures of the 2018–21 budget laws and the draft-amending budget law presented in June 2021, adjusted for differences in assumptions on macroeconomic and financial variables and in revenue projections.

France: Projections for 2022 onward are based on the measures of the 2018–22 budget laws adjusted for differences in revenue projections and assumptions on macroeconomic and financial variables.

Germany: IMF staff's projections for 2022 and beyond are based on the provisional 2022 budget, the federal government's medium-term budget plan, and data updates from the national statistical agency (Destatis) and the ministry of finance, adjusted for

differences in the IMF staff's macroeconomic framework and assumptions concerning revenue elasticities. The estimate of gross debt includes portfolios of impaired assets and noncore business transferred to institutions that are winding up as well as other financial sector and EU support operations.

Greece: Data since 2010 reflect adjustments in line with the primary balance definition under the enhanced surveillance framework for Greece.

Hong Kong Special Administrative Region: Projections are based on the authorities' medium-term fiscal projections of expenditures.

Hungary: Fiscal projections include IMF staff projections of the macroeconomic framework and fiscal policy plans announced in the 2020 budget.

India: Projections are based on available information on the authorities' fiscal plans, with adjustments for the IMF staff's assumptions. Subnational data are incorporated with a lag of up to one year; general government data are thus finalized well after central government data. IMF and Indian presentations differ, particularly regarding disinvestment and license-auction proceeds, net versus gross recording of revenues in certain minor categories, and some public sector lending. Starting in FY2020/21 expenditure also includes the off-budget component of food subsidies consistent with the revised treatment of food subsidies in the budget. The IMF staff adjusts expenditure to take out payments for previous years' food subsidies, which are included as expenditure in budget estimates for FY2020/21.

Indonesia: The IMF staff's projections are based on moderate tax policy and administration reforms, some expenditure realization, and a gradual increase in capital spending over the medium term in line with fiscal space.

Ireland: Fiscal projections are based on the country's Budget 2022.

Israel: Projections differ from the authorities' medium-term budget targets and assume more modest spending cuts.

Italy: The IMF staff's estimates and projections are informed by the fiscal plans included in the government's 2022 budget and the April 2022 Document on the Economy and Finance. The stock of maturing postal bonds is included in the debt projections.

Japan: The projections reflect fiscal measures already announced by the government, with adjustments for the IMF staff's assumptions.

Kazakhstan: Fiscal projections are based on the budget code and IMF staff projections.

Korea: The forecast incorporates the overall fiscal balance in the 2022 annual budget and supplementary budget, the medium-term fiscal plan announced with the 2022 budget, and the IMF staff's adjustments.

Lebanon: All projections for 2021–27 is omitted due to an unusually high degree of uncertainty.

Libya: Staff judgement based on 2021 fiscal accounts.

Malaysia: Fiscal projections are based on budget numbers, discussions with the authorities, and IMF staff estimates.

Malta: Projections are based on the authorities' budget documents and the latest Stability Programme, as well as on other recently adopted fiscal measures, adjusted for staff's macroeconomic and other assumptions.

Mexico: The 2020 public sector borrowing requirements estimated by the IMF staff adjusts for some statistical discrepancies between above-the-line and below-the-line numbers. Fiscal projections for 2022 are informed by the estimates in the 2022 budget proposal; projections for 2023 onward assume continued compliance with rules established in the Fiscal Responsibility Law.

Moldova: Fiscal projections are based on various bases and growth rates for GDP, consumption, imports, wages, and energy prices and on demographic changes.

Myanmar: Fiscal projections are based on budget numbers and the changed macro environment.

The Netherlands: Fiscal projections for 2021–27 are based on the IMF staff's forecast framework and are also informed by the authorities' draft budget plan and Bureau for Economic Policy Analysis projections.

New Zealand: Fiscal projections are based on the Half Year Economic and Fiscal Update 2021 and the IMF staff estimates.

Nigeria: Fiscal projections assume unchanged policies and differ from the authorities' active policy scenario.

Norway: Fiscal projections are based on the 2021 budget and subsequent ad hoc updates.

Philippines: Revenue projections reflect IMF staff's macroeconomic assumptions. Expenditure projections are based on budgeted figures, institutional arrangements, and current data in each year.

Poland: Data are based on the ESA 95 for 2004 and earlier. Data are based on the ESA 2010 beginning in 2005 on an accrual basis. Data for 2021 are estimates based on the 2021 budget and estimated

COVID-19–related expenditures for the year. Projections begin in 2022, based on the 2022 budget and subsequent temporary tax relief measures known as the Anti-Inflation Shield.

Portugal: The projections for the current year are based on the authorities' approved budget, adjusted to reflect the IMF staff's macroeconomic forecast. Projections thereafter are based on the assumption of unchanged policies.

Romania: Fiscal projections reflect legislated changes up to the end of 2021. Medium-term projections include a gradual implementation of measures supported through the EU's Recovery and Resilience Facility (Next Generation EU).

Russian Federation: The fiscal rule has been suspended by the government in response to the sanctions imposed after the invasion of Ukraine. The projection assumes an increase in discretionary spending as well as discretionary tax reductions which, combined, equal to the oil and gas revenues that would have been saved under the fiscal rule. The remaining decline in tax revenues is due to the projected deep recession.

Saudi Arabia: The IMF staff's baseline fiscal projections are primarily based on its understanding of government policies as outlined in the 2022 budget. Export oil revenues are based on WEO baseline oil price assumptions and the IMF staff's understanding of current oil policy under the OPEC+ (Organization of the Petroleum Exporting Countries, including Russian Federation and other non-OPEC oil exporters) agreement.

Singapore: FY2020 figures are based on budget execution. FY2021 projections are based on revised figures based on budget execution through end-2021. FY 2022 projections are based on the initial budget of February 18, 2022. The IMF staff assumes gradual withdrawal of remaining pandemic-related measures and the implementation of various revenue measures announced in the FY2022 budget for the remainder of the projection period. These include (i) the increase of the Good and Services Tax (GST) from seven percent to eight percent on January 1, 2023, and to nine percent on January 1, 2024; (ii) the increase of the property tax in 2023 for non-owner-occupied properties (from 10-20 percent to 12-36 percent) and owner-occupied properties with an annual value in excess of $30,000 (from 4-16 percent to 6-32 percent); and (iii) the increase of the carbon tax from S$5 per tonne to S$25 per tonne in 2024 and 2025 and $45 per tonne in 2026 and 2027.

Slovak Republic: The fiscal projection is based on the 2022 budget but considers available data for 2021.

Spain: Fiscal projections from 2022 onwards assume no policy changes beyond the temporary support package announced in 2022.

Sri Lanka: Fiscal projections are based on IMF staff assessments.

Sweden: Fiscal estimates for 2021 are based on preliminary information on the fall 2020 budget bill. The impact of cyclical developments on the fiscal accounts is calculated using the 2014 Organisation for Economic Co-operation and Development elasticity[1] to take into account output and employment gaps.

Switzerland: The authorities' announced discretionary stimulus—as reflected in the fiscal projections for 2021 and 2022—is permitted within the context of the debt brake rule in the event of "exceptional circumstances."

Tunisia: Projections are excluded from publication for 2023–27 because of ongoing technical discussions pending potential program negotiations.

Turkey: The basis for the projections in the WEO and *Fiscal Monitor* is the IMF-defined fiscal balance, which excludes some revenue and expenditure items that are included in the authorities' headline balance.

Ukraine: Projections for 2022–27 are omitted due to an unusually high degree of uncertainty.

United Kingdom: Fiscal projections are based on the latest GDP data published by the Office of National Statistics on March 31, 2022, and forecasts by the Office for Budget Responsibility from March 23, 2022. Revenue projections are adjusted for differences between the IMF staff's forecasts of macroeconomic variables (such as GDP growth and inflation) and the forecasts of these variables assumed in the authorities' fiscal projections. Projections include the fiscal

[1] Robert Price, Thai-Thanh Dang, and Yvan Guillemette. 2014. "New Tax and Expenditure Elasticity Estimates for EU Budget Surveillance," OECD Economics Department Working Paper 1174. OECD Publishing, Paris.

policy measures included in the Spring Statement 2022 published by the Treasury on March 23, 2022. The IMF staff's data exclude public sector banks. Real government consumption and investment are part of the real GDP path, which, according to the IMF staff, may or may not be the same as projected by the UK Office for Budget Responsibility. Data are presented on a calendar year basis.

United States: Fiscal projections are based on the July 2021 Congressional Budget Office baseline, adjusted for the IMF staff's policy and macroeconomic assumptions. Projections incorporate the effects of the legislated Bipartisan Infrastructure Investment and Jobs Act; the American Rescue Plan; the Coronavirus Preparedness and Response Supplemental Appropriations Act; the Families First Coronavirus Response Act; the Coronavirus Aid, Relief, and Economic Security Act; and the Paycheck Protection Program and Health Care Enhancement Act. Finally, fiscal projections are adjusted to reflect the IMF staff's forecasts for key macroeconomic and financial variables and different accounting treatment of financial sector support and of defined-benefit pension plans, and are converted to a general government basis.

Venezuela: Projections for 2022–27 are omitted due to an unusual high degree of uncertainty.

Vietnam: Projections starting 2021 use authorities' 2021 budget numbers and staff own projections.

Yemen: Hydrocarbon revenue projections are based on World Economic Outlook assumptions for hydrocarbon prices and authorities' projections for oil and gas production. Nonhydrocarbon revenues largely reflect authorities' projections and the evolution of other key indicators. Over the medium term, we assume conflict resolution, a recovery in economic activity, and additional expenditures associated with reconstruction costs.

Zambia: General government net and gross debt projections for 2022–27 are omitted due to ongoing debt restructuring.

Definition and Coverage of Fiscal Data

Table A. Economy Groupings

The following groupings of economies are used in the *Fiscal Monitor*. Data for all the economies can be found here: https://www.imf.org/external/datamapper/datasets/FM

Advanced Economies	Emerging Market Economies	Low-Income Developing Countries	G7	G20[1]	Advanced G20[1]	Emerging G20
Andorra	Albania	Afghanistan	Canada	Argentina	Australia	Argentina
Australia	Algeria	Bangladesh	France	Australia	Canada	Brazil
Austria	Angola	Benin	Germany	Brazil	France	China
Belgium	Antigua and	Bhutan	Italy	Canada	Germany	India
Canada	Barbuda	Burkina Faso	Japan	China	Italy	Indonesia
Cyprus	Argentina	Burundi	United	France	Japan	Mexico
Czech Republic	Armenia	Cambodia	Kingdom	Germany	Korea	Russia
Denmark	Aruba	Cameroon	United States	India	United	Saudi Arabia
Estonia	Azerbaijan	Central African		Indonesia	Kingdom	South Africa
Finland	Bahrain	Republic		Italy	United States	Turkey
France	Barbados	Chad		Japan		
Germany	Belarus	Comoros		Korea		
Greece	Belize	Congo, Democratic		Mexico		
Hong Kong SAR	Bolivia	Republic of the		Russia		
Iceland	Bosnia and	Congo, Republic of		Saudi Arabia		
Ireland	Herzegovina	Côte d'Ivoire		South Africa		
Israel	Botswana	Djibouti		Turkey		
Italy	Brazil	Eritrea		United		
Japan	Brunei Darussalam	Ethiopia		Kingdom		
Korea	Bulgaria	Gambia, The		United States		
Latvia	Cabo Verde	Ghana				
Lithuania	Chile	Guinea				
Luxembourg	China	Guinea-Bissau				
Macao SAR	Colombia	Haiti				
Malta	Costa Rica	Honduras				
Netherlands	Croatia	Kenya				
New Zealand	Dominica	Kiribati				
Norway	Dominican	Kyrgyz Republic				
Portugal	Republic	Lao P.D.R.				
Puerto Rico	Ecuador	Lesotho				
San Marino	Egypt	Liberia				
Singapore	El Salvador	Madagascar				
Slovak Republic	Equatorial Guinea	Malawi				
Slovenia	Eswatini	Mali				
Spain	Fiji	Mauritania				
Sweden	Gabon	Moldova				
Switzerland	Georgia	Mozambique				
Taiwan Province	Grenada	Myanmar				
of China	Guatemala	Nepal				
United Kingdom	Guyana	Nicaragua				
United States	Hungary	Niger				
	India	Nigeria				
	Indonesia	Papua New Guinea				
	Iran	Rwanda				
	Iraq	São Tomé and				
	Jamaica	Príncipe				
	Jordan	Senegal				
	Kazakhstan	Sierra Leone				
	Kosovo	Solomon Islands				
	Kuwait	South Sudan				
	Lebanon	Somalia				
	Libya	Sudan				
	Malaysia	Tajikistan				
	Maldives	Tanzania				

Table A. Economy Groupings *(continued)*

Advanced Economies	Emerging Market Economies	Low-Income Developing Countries	G7	G20[1]	Advanced G20[1]	Emerging G20
	Marshall Islands	Timor-Leste				
	Mauritius	Togo				
	Mexico	Uganda				
	Micronesia	Uzbekistan				
	Mongolia	Vietnam				
	Montenegro	Yemen				
	Morocco	Zambia				
	Namibia	Zimbabwe				
	Nauru					
	North Macedonia					
	Oman					
	Pakistan					
	Palau					
	Panama					
	Paraguay					
	Peru					
	Philippines					
	Poland					
	Qatar					
	Romania					
	Russia					
	Samoa					
	Saudi Arabia					
	Serbia					
	Seychelles					
	South Africa					
	Sri Lanka					
	St. Kitts and Nevis					
	St. Lucia					
	St. Vincent and the Grenadines					
	Suriname					
	Syria					
	Thailand					
	The Bahamas					
	Tonga					
	Trinidad and Tobago					
	Tunisia					
	Turkey					
	Turkmenistan					
	Tuvalu					
	Ukraine					
	United Arab Emirates					
	Uruguay					
	Vanuatu					
	Venezuela					

Note: G7 = Group of Seven; G20 = Group of Twenty.
[1] Does not include European Union aggregate.

Table A. Economy Groupings *(continued)*

Euro Area	Emerging Market and Middle-Income Asia	Emerging Market and Middle-Income Europe	Emerging Market and Middle-Income Latin America	Emerging Market and Middle-Income Middle East, North Africa, and Pakistan	Emerging Market and Middle-Income Africa
Austria	Brunei Darussalam	Albania	Antigua and Barbuda	Algeria	Angola
Belgium	China	Azerbaijan	Argentina	Bahrain	South Africa
Cyprus	Fiji	Belarus	Aruba	Egypt	
Estonia	India	Bosnia and Herzegovina	Bahamas, The	Iran	
Finland	Indonesia	Bulgaria	Barbados	Iraq	
France	Malaysia	Croatia	Belize	Jordan	
Germany	Maldives	Hungary	Bolivia	Kuwait	
Greece	Marshall Islands	Kazakhstan	Brazil	Lebanon	
Ireland	Micronesia	Kosovo	Chile	Libya	
Italy	Mongolia	Montenegro	Colombia	Morocco	
Latvia	Nauru	North Macedonia	Costa Rica	Oman	
Lithuania	Palau	Poland	Dominica	Pakistan	
Luxembourg	Philippines	Romania	Dominican Republic	Qatar	
Malta	Samoa	Russia	Ecuador	Saudi Arabia	
Netherlands	Sri Lanka	Serbia	El Salvador	Syria	
Portugal	Thailand	Turkey	Grenada	Tunisia	
Slovak Republic	Tonga	Ukraine	Guatemala	United Arab Emirates	
Slovenia	Tuvalu		Guyana		
Spain	Vanuatu		Jamaica		
			Mexico		
			Panama		
			Paraguay		
			Peru		
			St. Kitts and Nevis		
			St. Lucia		
			St. Vincent and the Grenadines		
			Suriname		
			Trinidad and Tobago		
			Uruguay		
			Venezuela		

Table A. Economy Groupings *(continued)*

Low-Income Developing Asia	Low-Income Developing Latin America	Low-Income Developing Sub-Saharan Africa	Low-Income Developing Others	Low-Income Oil Producers	Oil Producers
Bangladesh	Haiti	Benin	Afghanistan	Chad	Algeria
Bhutan	Honduras	Burkina Faso	Djibouti	Congo, Rep of.	Angola
Cambodia	Nicaragua	Burundi	Kyrgyz Republic	Nigeria	Azerbaijan
Kiribati		Cameroon	Mauritania	Timor-Leste	Bahrain
Lao P.D.R.		Central African	Moldova	Yemen	Brunei Darussalam
Myanmar		Republic	Somalia		Canada
Nepal		Chad	Sudan		Congo, Rep of.
Papua New		Comoros	Tajikistan		Chad
Guinea		Congo, Dem.	Uzbekistan		Ecuador
Solomon Islands		Rep. of the	Yemen		Equatorial Guinea
Timor-Leste		Congo, Rep. of			Gabon
Vietnam		Côte d'Ivoire			Iran
		Eritrea			Iraq
		Ethiopia			Kazakhstan
		Gambia, The			Kuwait
		Ghana			Libya
		Guinea			Nigeria
		Guinea-Bissau			Norway
		Kenya			Oman
		Lesotho			Qatar
		Liberia			Russia
		Madagascar			Saudi Arabia
		Malawi			Timor Leste
		Mali			Trinidad and Tobago
		Mozambique			United Arab Emirates
		Niger			Venezuela
		Nigeria			Yemen
		Rwanda			
		São Tomé and			
		Príncipe			
		Senegal			
		Sierra Leone			
		South Sudan			
		Tanzania			
		Togo			
		Uganda			
		Zambia			
		Zimbabwe			

Table B. Advanced Economies: Definition and Coverage of *Fiscal Monitor* Data

| | Overall Fiscal Balance[1] | | | Cyclically Adjusted Balance | | | Gross Debt | | |
| | Coverage | | Accounting Practice | Coverage | | Accounting Practice | Coverage | | Valuation of Debt[2] |
	Aggregate	Subsectors		Aggregate	Subsectors		Aggregate	Subsectors	
Australia	GG	CG,SG,LG,TG	A	GG	CG,SG,LG,TG	A	GG	CG,SG,LG,TG	Current market
Austria	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	Face
Belgium	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	Face
Canada	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	Face
Cyprus	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Czech Republic	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Denmark	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Estonia	GG	CG,LG,SS	C	...	...	...	GG	CG,LG,SS	Nominal
Finland	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
France	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Germany	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	Face
Greece	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Hong Kong SAR	GG	CG	C	GG	CG	C	GG	CG	Face
Iceland	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Ireland	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Israel	GG	CG,LG,SS	Mixed	GG	CG,LG,SS	Mixed	GG	CG,LG,SS	Nominal
Italy	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Japan	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Current market
Korea	CG	CG,SS	C	CG	CG,SS	C	CG	CG,SS	Nominal
Latvia	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
Lithuania	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Luxembourg	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Malta	GG	CG,SS	A	GG	CG,SS	A	GG	CG,SS	Nominal
The Netherlands	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
New Zealand	GG	CG,LG	A	GG	CG,LG	A	GG	CG,LG	Current market
Norway	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Current market
Portugal	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Singapore	GG	CG	C	GG	CG	C	GG	CG	Nominal
Slovak Republic	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Slovenia	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Spain	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	Nominal
Sweden	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Switzerland	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	A	GG	CG,SG,LG,SS	Nominal
United Kingdom	GG	CG,LG	A	GG	CG,LG	A	GG	CG,LG	Nominal
United States	GG	CG,SG,LG	A	GG	CG,SG,LG	A	GG	CG,SG,LG	Nominal

Note: Coverage: CG = central government; GG = general government; LG = local governments; SG = state governments; SS = social security funds; TG = territorial governments. Accounting practice: A = accrual; C = cash; Mixed = combination of accrual and cash accounting.

[1] In many economies, fiscal data follow the IMF's *Government Finance Statistics Manual 2014*. The concept of overall fiscal balance refers to net lending and borrowing of the general government. In some cases, however, the overall balance refers to total revenue and grants minus total expenditure and net lending.

[2] "Nominal" refers to debt securities that are valued at their nominal values, that is, the nominal value of a debt instrument at any moment in time is the amount that the debtor owes to the creditor. "Face" refers to the undiscounted amount of principal to be repaid at (or before) maturity. The use of face value as a proxy for nominal value in measuring the gross debt position can result in an inconsistent approach across all instruments and is not recommended, unless nominal and market values are not available. "Current market" refers to debt securities that are valued at market prices; insurance, pension, and standardized guarantee schemes are valued according to principles that are equivalent to market valuation; and all other debt instruments are valued at nominal prices, which are considered to be the best generally available proxies for their market prices.

Table C. Emerging Market and Middle-Income Economies: Definition and Coverage of *Fiscal Monitor* Data

	Overall Fiscal Balance[1]			Cyclically Adjusted Balance			Gross Debt		
	Coverage		Accounting Practice	Coverage		Accounting Practice	Coverage		Valuation of Debt[2]
	Aggregate	Subsectors		Aggregate	Subsectors		Aggregate	Subsectors	
Algeria	CG	CG	C	…	…	…	CG	CG	Face
Angola	GG	CG,LG	Mixed	…	…	…	GG	CG,LG	Nominal
Argentina	GG	CG,SG,SS	C	CG	CG	C	CG	CG	Nominal
Belarus[3]	GG	CG,LG,SS	C	…	…	…	GG	CG,LG,SS	Nominal
Brazil[4]	NFPS	CG,SG,LG,SS,NFPC	C	NFPS	CG,SG,LG,SS,NFPC	C	NFPS	CG,SG,LG,SS,NFPC	Nominal
Bulgaria	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
Chile	GG	CG,LG	A	CG	CG	A	GG	CG,LG	Face
China	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Face
Colombia[5]	GG	CG,SG,LG,SS	Mixed	GG	CG,SG,LG,SS	Mixed	GG	CG,SG,LG,SS	Face
Croatia	GG	CG,LG	A	GG	CG,LG	A	GG	CG,LG	Nominal
Dominican Republic	CG	CG,LG,SS,NMPC	Mixed	PS	CG,LG,SS,NMPC	Mixed	PS	CG,LG,SS,NMPC	Face
Ecuador	NFPS	CG,SG,LG,SS,NFPC	Mixed	NFPS	CG,SG,LG,SS,NFPC	Mixed	NFPS	CG,SG,LG,SS,NFPC	Nominal
Egypt	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
Hungary	GG	CG,LG,SS,NMPC	A	GG	CG,LG,SS,NMPC	A	GG	CG,LG,SS,NMPC	Face
India	GG	CG,SG	C	GG	CG,SG	C	GG	CG,SG	Nominal
Indonesia	GG	CG,LG	C	GG	CG,LG	C	GG	CG,LG	Face
Iran	CG	CG	C	…	…	…	NFPS	CG,NFPC	Nominal
Kazakhstan	GG	CG,LG	C	…	…	…	GG	CG,LG	Nominal
Kuwait	GG	CG,SS	Mixed	…	…	…	GG	CG,SS	Nominal
Lebanon	CG	CG	Mixed	CG	CG	Mixed	CG	CG	Nominal
Malaysia	GG	CG,SG,LG	C	GG	CG,SG,LG	C	GG	CG,SG,LG	Nominal
Mexico	PS	CG,SS,NMPC,NFPC	C	PS	CG,SS,NMPC,NFPC	C	PS	CG,SS,NMPC,NFPC	Face
Morocco	CG	CG	A	…	…	…	CG	CG	Face
Oman	CG	CG	C	…	…	…	CG	CG	Nominal
Pakistan	GG	CG,SG,LG	C	…	…	…	GG	CG,SG,LG	Nominal
Peru	GG	CG,SG,LG,SS	C	GG	CG,SG,LG,SS	C	NFPS	CG,SG,LG,SS,NFPC	Face
Philippines	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
Poland	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Qatar	CG	CG	C	…	…	…	CG	CG	Nominal
Romania	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Face
Russia	GG	CG,SG,SS	Mixed	GG	CG,SG,SS	Mixed	GG	CG,SG,SS	Current market
Saudi Arabia	CG	CG	C	…	…	…	CG	CG	Nominal
South Africa[6]	GG	CG,SG,SS	C	GG	CG,SG,SS	C	GG	CG,SG,SS	Nominal
Sri Lanka	CG	CG	C	…	…	…	CG	CG	Nominal
Thailand[7]	PS	CG,BCG,LG,SS	A	PS	CG,BCG,LG,SS	A	PS	CG,BCG,LG,SS	Nominal
Turkey	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Ukraine	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
United Arab Emirates[8]	GG	CG,BCG,SG,SS	Mixed	…	…	…	GG	CG,BCG,SG,SS	Nominal
Uruguay[9]	NFPS	CG,LG,SS,NMPC,NFPC	A	…	…	…	NFPS	CG,LG,SS,NMPC,NFPC	Face
Venezuela[9]	GG	BCG,NFPC	C	GG	BCG,NFPC	C	GG	BCG,NFPC	Nominal

Note: Coverage: BCG = budgetary central government; CG = central government; GG = general government; LG = local governments; NFPC = nonfinancial public corporations; NFPS = nonfinancial public sector; NMPC = nonmonetary financial public corporations; PS = public sector; SG = state governments; SS = social security funds. Accounting standard: A = accrual; C = cash; Mixed = combination of accrual and cash accounting.

[1] In many countries, fiscal data follow the IMF's *Government Finance Statistics Manual 2014*. The concept of overall fiscal balance refers to net lending and borrowing of the general government. In some cases, however, the overall balance refers to total revenue and grants minus total expenditure and net lending.

[2] "Nominal" refers to debt securities that are valued at their nominal values, that is, the nominal value of a debt instrument at any moment in time is the amount that the debtor owes to the creditor. "Face" refers to the undiscounted amount of principal to be repaid at (or before) maturity. The use of face value as a proxy for nominal value in measuring the gross debt position can result in an inconsistent approach across all instruments and is not recommended, unless nominal and market values are not available. "Current market" refers to debt securities that are valued at market prices; insurance, pension, and standardized guarantee schemes are valued according to principles that are equivalent to market valuation; and all other debt instruments are valued at nominal prices, which are considered to be the best generally available proxies of their market prices.

[3] Gross debt refers to general government public debt, including publicly guaranteed debt.

[4] 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. The overall balance combines the cash primary balance of the nonfinancial public sector and the net interest of the public sector on an accrual basis.

[5] Revenue is recorded on a cash basis and expenditure on an accrual basis.

[6] Coverage for South Africa is the consolidated government, which serves as a good proxy for the general government. It includes the national and provincial governments and certain public entities, while local governments are only partly covered. The subnational government debt is estimated to be limited given the available data from the South African Reserve Bank.

[7] Data for Thailand do not include the debt of specialized financial institutions (SFIs/NMPC) without a government guarantee.

[8] Gross debt covers banking system claims only.

[9] The fiscal accounts include the budgetary central government, social security, FOGADE (an insurance deposit institution), and a sample of public enterprises, including Petróleos de Venezuela, S.A. (PDVSA). Data for 2018–21 are IMF staff estimates.

Table D. Low-Income Developing Countries: Definition and Coverage of *Fiscal Monitor* Data

| | Overall Fiscal Balance[1] | | | Cyclically Adjusted Balance | | | Gross Debt | | |
| | Coverage | | Accounting Practice | Coverage | | Accounting Practice | Coverage | | Valuation of Debt[2] |
	Aggregate	Subsectors		Aggregate	Subsectors		Aggregate	Subsectors	
Afghanistan	CG	CG	C	...	...	...	CG	CG	Nominal
Bangladesh	CG	CG	C	CG	CG	C	CG	CG	Nominal
Benin	CG	CG	C	...	...	...	CG	CG	Nominal
Burkina Faso	CG	CG	CB	...	...	...	CG	CG	Face
Cambodia	CG	CG,LG	C	...	...	...	CG	CG,LG	Face
Cameroon	CG	CG	C	...	...	...	CG	CG	Nominal
Chad	NFPS	CG,NFPC	C	...	...	...	NFPS	CG,NFPC	Face
Democratic Republic of the Congo	CG	CG,LG	A	...	...	...	CG	CG,LG,NFPC	Nominal
Republic of Congo	CG	CG	A	...	...	...	CG	CG	Nominal
Côte d'Ivoire	CG	CG,SS	A	...	...	...	CG	CG	Nominal
Ethiopia	GG	CG,SG,LG	C	...	...	...	NFPS	CG,SG,LG,NFPC	Nominal
Ghana	CG	CG	C	...	...	...	CG	CG	Face
Guinea	CG	CG	C	...	...	...	CG	CG	Nominal
Haiti[3]	CG	CG	C	...	...	...	CG	CG	Nominal
Honduras	GG	CG,LG,SS	Mixed	GG	CG,LG,SS	Mixed	GG	CG,LG,SS	Nominal
Kenya	CG	CG	C	...	...	...	CG	CG	Current market
Kyrgyz Republic	GG	CG,LG,SS	C	...	...	...	GG	CG,LG,SS	Face
Lao P.D.R.[4]	CG	CG	C	CG	CG	C	CG	CG	Nominal
Madagascar	CG	CG,LG	CB	...	...	...	NFPS	CG,LG,NFPC	Nominal
Malawi	CG	CG	C	...	...	...	CG	CG	...
Mali	CG	CG	A	...	...	...	CG	CG	Nominal
Moldova	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
Mozambique	CG	CG,SG	Mixed	CG	CG,SG	Mixed	CG	CG,SG	Nominal
Myanmar[5]	NFPS	CG,NFPC	C	...	...	...	NFPS	CG,NFPC	Face
Nepal	CG	CG	C	CG	CG	C	CG	CG	Face
Nicaragua	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
Niger	CG	CG	A	...	...	...	CG	CG	Nominal
Nigeria	GG	CG,SG,LG	C	...	...	...	GG	CG,SG,LG	Current market
Papua New Guinea	CG	CG	C	...	...	...	CG	CG	Face
Rwanda	GG	CG,LG	Mixed	...	...	...	GG	CG,LG	Nominal
Senegal	CG	CG	C	...	...	...	NFPS	CG,LG,SS,NFPC	Nominal
Sudan	CG	CG	Mixed	...	...	...	CG	CG	Nominal
Tajikistan	GG	CG,LG,SS	C	...	...	...	GG	CG,LG,SS	Nominal
Tanzania	CG	CG,LG	C	...	...	...	CG	CG,LG	Nominal
Uganda	CG	CG	C	...	...	...	CG	CG	Nominal
Uzbekistan[6]	GG	CG,SG,LG,SS	C	...	...	...	GG	CG,SG,LG,SS	Nominal
Vietnam	GG	CG,SG,LG	C	GG	CG,SG,LG	C	GG	CG,SG,LG	Nominal
Yemen	GG	CG,LG	C	...	...	...	GG	CG,LG	Nominal
Zambia	CG	CG	C	...	...	...	CG	CG	Nominal
Zimbabwe	CG	CG	C	...	...	...	CG	CG	Nominal

Note: Coverage: CG = central government; GG = general government; LG = local governments; NFPC = nonfinancial public corporations; NFPS = nonfinancial public sector; SG = state governments; SS = social security funds. Accounting standard: A = accrual; C = cash; CB = commitments based; Mixed = combination of accrual and cash accounting.

[1]In many countries, fiscal data follow the IMF's *Government Finance Statistics Manual 2014*. The concept of overall fiscal balance refers to net lending and borrowing of the general government. In some cases, however, the overall balance refers to total revenue and grants minus total expenditure and net lending.

[2]"Nominal" refers to debt securities that are valued at their nominal values, that is, the nominal value of a debt instrument at any moment in time is the amount that the debtor owes to the creditor. "Face" refers to the undiscounted amount of principal to be repaid at (or before) maturity. The use of face value as a proxy for nominal value in measuring the gross debt position can result in an inconsistent approach across all instruments and is not recommended, unless nominal and market values are not available. "Current market" refers to debt securities that are valued at market prices; insurance, pension, and standardized guarantee schemes are valued according to principles that are equivalent to market valuation; and all other debt instruments are valued at nominal prices, which are considered to be the best generally available proxies of their market prices.

[3]Haiti's fiscal balance and debt data cover the central government, special funds and programs (Fonds d'Entretien Routier and Programme de Scolarisation Universelle, Gratuite, et Obligatoire), and the state-owned electricity company EDH.

[4]Lao P.D.R.'s fiscal spending includes capital spending by local governments financed by loans provided by the central bank.

[5]Overall and primary balances in 2012 are based on monetary statistics and are different from the balances calculated from expenditure and revenue data.

[6]Uzbekistan's listing includes the Fund for Reconstruction and Development.

Table A1. Advanced Economies: General Government Overall Balance, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−3.7	−3.1	−2.6	−2.6	−2.4	−2.5	−3.0	−10.5	−7.3	−4.3	−2.9	−2.8	−3.0	−3.0	−3.0
Euro Area	−3.0	−2.5	−2.0	−1.5	−0.9	−0.4	−0.6	−7.2	−5.5	−4.3	−2.5	−2.0	−1.8	−1.7	−1.7
G7	−4.3	−3.6	−3.0	−3.3	−3.2	−3.4	−3.8	−11.9	−8.4	−4.9	−3.3	−3.3	−3.6	−3.6	−3.6
G20 Advanced	−4.0	−3.4	−2.9	−3.1	−3.0	−3.1	−3.6	−11.4	−8.1	−4.8	−3.3	−3.2	−3.4	−3.4	−3.4
Australia	−2.8	−2.9	−2.8	−2.4	−1.7	−1.3	−4.4	−8.6	−7.7	−5.2	−3.4	−2.2	−1.6	−1.2	−0.8
Austria	−2.0	−2.7	−1.0	−1.5	−0.8	0.2	0.6	−8.3	−5.8	−3.9	−2.4	−0.7	−0.7	−0.8	−0.6
Belgium	−3.1	−3.1	−2.4	−2.4	−0.7	−0.8	−1.9	−9.1	−6.0	−5.1	−4.4	−4.8	−4.8	−5.0	−5.4
Canada	−1.5	0.2	−0.1	−0.5	−0.1	0.4	0.0	−11.4	−4.7	−2.2	−0.8	−0.7	−0.5	−0.4	−0.3
Cyprus[1]	−5.2	−0.2	0.2	0.2	2.0	−3.5	1.3	−5.7	−1.7	−1.3	−0.3	0.2	0.6	1.0	1.2
Czech Republic	−1.3	−2.1	−0.6	0.7	1.5	0.9	0.3	−5.6	−6.1	−3.5	−3.0	−2.4	−1.8	−1.3	−0.8
Denmark	−1.2	1.1	−1.3	−0.1	1.8	0.8	4.1	−0.2	−0.3	0.8	0.6	0.3	0.0	0.0	0.0
Estonia	0.2	0.7	0.1	−0.4	−0.7	−0.6	0.1	−5.6	−2.4	−3.8	−3.6	−3.0	−2.5	−2.0	−1.5
Finland	−2.5	−3.0	−2.4	−1.7	−0.7	−0.9	−0.9	−5.4	−2.8	−2.5	−1.6	−1.4	−1.2	−1.2	−1.2
France	−4.1	−3.9	−3.6	−3.6	−3.0	−2.3	−3.1	−9.1	−7.0	−5.6	−3.8	−3.4	−3.3	−3.3	−3.3
Germany	0.0	0.6	1.0	1.2	1.3	1.9	1.5	−4.3	−3.7	−3.3	−0.7	−0.1	0.3	0.4	0.4
Greece	−3.8	−4.1	−3.0	0.3	0.9	0.8	0.2	−10.9	−8.7	−4.8	−1.8	−1.3	−1.1	−1.1	−0.9
Hong Kong SAR	1.0	3.6	0.6	4.4	5.5	2.3	−0.6	−9.2	−0.2	−3.2	−0.8	−0.4	0.6	0.7	0.7
Iceland	−1.2	0.3	−0.4	12.5	1.0	0.9	−1.5	−8.7	−8.9	−5.1	−3.3	−2.2	−1.5	−1.0	−0.7
Ireland[1]	−6.4	−3.6	−2.0	−0.8	−0.3	0.1	0.5	−4.9	−2.0	−1.4	−0.6	−0.4	0.0	0.0	0.0
Israel	−4.0	−2.3	−1.2	−1.7	−1.1	−3.6	−3.9	−10.8	−4.2	−3.3	−3.1	−3.1	−3.0	−3.0	−3.0
Italy	−2.9	−3.0	−2.6	−2.4	−2.4	−2.2	−1.5	−9.6	−7.2	−6.0	−3.9	−3.3	−3.0	−2.8	−2.5
Japan	−7.6	−5.6	−3.7	−3.6	−3.1	−2.5	−3.0	−9.0	−7.6	−7.8	−3.5	−2.5	−2.5	−2.6	−2.8
Korea	0.8	0.6	0.5	1.6	2.2	2.6	0.4	−2.2	−0.6	−1.6	−1.1	−1.1	−1.2	−1.1	−1.2
Latvia	−0.6	−1.7	−1.5	−0.4	−0.8	−0.7	−0.4	−3.9	−5.5	−6.4	−1.2	−0.9	−0.7	−0.6	−0.4
Lithuania	−2.6	−0.7	−0.2	0.3	0.5	0.6	0.3	−7.3	−3.0	−3.6	−2.6	−2.5	−2.4	−2.0	−2.0
Luxembourg	0.8	1.3	1.3	1.9	1.3	3.0	2.4	−3.8	0.6	−0.4	−0.1	0.1	0.1	0.0	−0.1
Malta	−2.3	−1.7	−1.0	0.9	3.1	1.9	0.4	−9.9	−9.3	−7.4	−4.3	−3.0	−2.7	−2.3	−2.1
Netherlands, The	−3.0	−2.3	−2.1	0.0	1.3	1.4	2.3	−4.4	−5.6	−2.6	−2.2	−2.1	−1.7	−1.5	−0.8
New Zealand	−1.3	−0.4	0.3	0.9	1.3	1.3	−2.5	−4.0	−4.9	−4.9	−1.8	−1.2	−0.4	0.1	0.1
Norway	10.7	8.6	6.0	4.1	5.0	7.9	6.6	−2.8	0.9	5.9	5.6	4.4	3.4	2.7	2.1
Portugal	−5.1	−7.3	−4.4	−1.9	−3.0	−0.3	0.1	−5.8	−2.8	−2.4	−1.6	−1.1	−0.9	−0.8	−0.9
Singapore	6.0	4.6	2.9	3.7	5.3	3.7	3.9	−5.9	−0.2	1.4	2.0	2.5	2.7	2.8	2.9
Slovak Republic	−2.9	−3.1	−2.7	−2.6	−1.0	−1.0	−1.3	−5.5	−6.5	−5.4	−3.1	−2.5	−2.3	−2.4	−2.5
Slovenia	−14.6	−5.5	−2.8	−1.9	−0.1	0.7	0.4	−7.8	−5.2	−4.8	−4.2	−3.4	−2.9	−2.7	−2.7
Spain[1]	−7.0	−5.9	−5.2	−4.3	−3.0	−2.5	−2.9	−11.0	−7.0	−5.3	−4.3	−3.9	−3.9	−3.9	−3.9
Sweden	−1.5	−1.5	0.0	1.0	1.4	0.8	0.6	−2.8	−1.0	−0.7	0.0	0.3	0.3	0.3	0.3
Switzerland	−0.4	−0.2	0.5	0.2	1.1	1.3	1.3	−2.8	−1.9	−0.9	−0.3	−0.1	0.0	0.0	0.0
United Kingdom	−5.5	−5.5	−4.5	−3.3	−2.4	−2.2	−2.2	−12.8	−8.0	−4.3	−2.3	−1.5	−1.4	−1.3	−1.0
United States[2]	−4.5	−4.0	−3.5	−4.3	−4.6	−5.4	−5.7	−14.5	−10.2	−4.8	−4.0	−4.4	−5.2	−5.1	−5.2

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table B.

[1] Data include financial sector support. For Cyprus, 2014 and 2015 balances exclude financial sector support.

[2] For cross-economy comparison, the expenditures 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 economies that have not yet adopted the 2008 SNA. Data for the United States in this table may therefore differ from data published by the US Bureau of Economic Analysis.

Table A2. Advanced Economies: General Government Primary Balance, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−2.1	−1.5	−1.1	−1.1	−0.9	−1.0	−1.5	−9.2	−6.2	−3.4	−1.8	−1.5	−1.5	−1.3	−1.1
Euro Area	−0.6	−0.2	0.1	0.4	0.8	1.2	0.8	−5.9	−4.2	−3.2	−1.4	−1.0	−0.8	−0.7	−0.6
G7	−2.4	−1.8	−1.3	−1.6	−1.5	−1.6	−2.1	−10.3	−7.1	−3.7	−2.0	−1.7	−1.7	−1.4	−1.3
G20 Advanced	−2.3	−1.7	−1.3	−1.5	−1.4	−1.5	−2.0	−9.9	−6.8	−3.6	−2.0	−1.6	−1.6	−1.4	−1.2
Australia	−2.1	−2.1	−1.9	−1.5	−0.8	−0.4	−3.6	−7.6	−6.7	−3.9	−1.8	−0.6	0.1	0.4	0.8
Austria	0.2	−0.7	0.9	0.1	0.6	1.4	1.6	−7.4	−5.0	−3.4	−1.9	−0.2	−0.2	−0.3	−0.1
Belgium	−0.2	−0.2	0.2	0.0	1.4	1.0	−0.2	−7.4	−4.7	−4.0	−3.4	−3.8	−3.8	−4.0	−4.3
Canada	−1.0	0.5	0.6	0.1	0.1	0.4	0.1	−10.9	−5.3	−2.9	−1.1	−0.7	−0.4	−0.2	−0.2
Cyprus[1]	−1.9	2.8	3.1	2.7	4.3	−1.3	3.4	−3.7	0.0	0.3	1.1	1.4	1.7	1.8	2.1
Czech Republic	−0.2	−1.0	0.3	1.5	2.1	1.5	0.8	−5.0	−5.4	−2.6	−2.0	−1.5	−0.9	−0.4	0.1
Denmark	−0.8	1.6	−0.6	0.4	1.7	0.4	3.8	−0.5	−0.5	0.6	0.3	0.2	−0.1	−0.1	−0.1
Estonia	0.1	0.7	0.1	−0.5	−0.8	−0.6	0.1	−5.6	−2.4	−3.8	−3.6	−2.9	−2.5	−2.0	−1.5
Finland	−2.4	−2.8	−2.3	−1.4	−0.4	−0.7	−0.8	−5.3	−2.7	−2.5	−1.7	−1.6	−1.4	−1.3	−1.2
France	−1.9	−1.8	−1.8	−1.9	−1.3	−0.7	−1.7	−7.9	−5.8	−4.6	−2.9	−2.5	−2.4	−2.3	−2.3
Germany	1.5	1.8	2.0	2.1	2.2	2.6	2.0	−3.9	−3.3	−2.9	−0.3	0.3	0.7	0.8	0.8
Greece	0.3	−0.2	0.5	3.5	4.1	4.2	3.2	−7.9	−5.9	−1.9	1.1	1.5	1.8	1.9	2.0
Hong Kong SAR	−0.7	3.6	0.6	3.6	4.7	1.0	−2.2	−11.1	−2.9	−6.8	−2.9	−2.2	−1.3	−0.9	−0.8
Iceland	1.9	3.8	3.2	15.5	3.9	3.1	0.5	−6.4	−6.6	−1.9	−0.3	−0.4	0.3	0.9	1.0
Ireland[1]	−2.9	−0.3	0.3	1.5	1.6	1.7	1.8	−3.9	−1.2	−0.7	0.1	0.3	0.6	0.5	0.5
Israel	−1.1	−0.3	0.6	0.1	0.8	−1.4	−2.0	−9.0	−2.0	−1.0	−0.7	−0.7	−0.6	−0.6	−0.6
Italy	1.8	1.4	1.4	1.3	1.2	1.3	1.7	−6.3	−3.8	−3.0	−1.0	−0.6	−0.4	−0.3	−0.1
Japan	−6.5	−4.5	−2.6	−2.5	−2.2	−1.7	−2.4	−8.3	−7.0	−7.4	−3.3	−2.3	−2.3	−2.4	−2.4
Korea	0.4	0.2	0.2	1.4	1.8	2.1	−0.1	−2.7	−1.0	−1.9	−1.3	−1.2	−1.2	−1.0	−1.1
Latvia	0.9	−0.2	0.3	0.8	0.3	0.2	0.5	−3.0	−4.8	−5.8	−0.6	−0.3	−0.1	−0.1	0.1
Lithuania	−0.9	1.0	1.3	1.6	1.6	1.5	1.1	−6.7	−2.9	−3.2	−2.3	−2.2	−2.1	−1.8	−1.8
Luxembourg	0.7	1.1	1.1	1.6	1.1	2.8	2.2	−4.1	0.5	−0.7	−0.9	−0.7	−0.8	−0.9	−1.0
Malta	0.4	0.9	1.2	3.0	4.9	3.4	1.7	−8.6	−8.0	−6.2	−3.1	−1.9	−1.5	−1.1	−0.9
Netherlands, The	−1.6	−0.9	−0.9	1.1	2.3	2.3	3.0	−4.0	−5.4	−2.3	−2.0	−1.8	−1.5	−1.2	−0.5
New Zealand	−0.6	0.3	1.0	1.6	1.9	1.9	−1.8	−3.4	−4.2	−4.0	−0.8	−0.1	0.6	1.0	1.1
Norway	8.8	6.3	3.5	1.5	2.6	5.7	4.5	−4.9	−1.6	3.4	3.1	1.9	0.9	0.2	−0.4
Portugal	−0.9	−3.0	−0.1	1.9	0.7	2.9	2.9	−3.1	−0.5	−0.3	0.5	0.8	0.8	0.8	0.8
Singapore	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Slovak Republic	−1.2	−1.4	−1.2	−1.2	0.2	0.1	−0.3	−4.5	−5.5	−4.6	−2.4	−1.7	−1.4	−1.5	−1.7
Slovenia	−12.6	−2.7	0.0	0.7	2.1	2.5	1.9	−6.4	−4.1	−4.0	−3.5	−2.7	−2.4	−2.3	−2.3
Spain[1]	−4.1	−3.0	−2.6	−1.9	−0.8	−0.3	−0.8	−8.9	−5.1	−3.4	−2.4	−1.9	−2.0	−1.9	−1.9
Sweden	−1.2	−1.4	0.0	1.0	1.4	0.8	0.5	−2.9	−1.1	−0.8	−0.1	0.2	0.2	0.2	0.2
Switzerland	−0.2	0.0	0.8	0.4	1.3	1.4	1.4	−2.8	−1.8	−0.8	−0.1	0.0	0.1	0.1	0.1
United Kingdom	−4.1	−3.7	−3.1	−1.7	−0.6	−0.5	−0.8	−11.7	−5.9	−1.7	−0.7	−0.2	−0.1	−0.1	0.1
United States[2]	−2.6	−2.1	−1.7	−2.3	−2.6	−3.2	−3.5	−12.4	−8.5	−3.4	−2.3	−2.2	−2.4	−1.9	−1.7

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: "Primary balance" is defined as the overall balance, excluding net interest payments. For country-specific details, see "Data and Conventions" in text and Table B.

[1] Data include financial sector support. For Cyprus, 2014 and 2015 balances exclude financial sector support.

[2] For cross-economy comparison, the expenditures 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 economies that have not yet adopted the 2008 SNA. Data for the United States in this table may therefore differ from data published by the US Bureau of Economic Analysis.

Table A3. Advanced Economies: General Government Cyclically Adjusted Balance, 2013–27
(Percent of potential GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−2.7	−2.2	−2.0	−2.2	−2.3	−2.6	−3.2	−7.8	−6.0	−4.5	−3.2	−2.9	−3.1	−3.1	−3.0
Euro Area	−1.1	−0.9	−0.7	−0.6	−0.6	−0.4	−0.7	−4.7	−4.1	−3.7	−2.3	−2.0	−1.8	−1.8	−1.7
G7	−3.1	−2.5	−2.3	−2.7	−3.0	−3.3	−3.9	−8.8	−6.8	−5.1	−3.6	−3.3	−3.6	−3.6	−3.5
G20 Advanced	−3.0	−2.4	−2.2	−2.6	−2.7	−3.0	−3.8	−8.5	−6.6	−4.9	−3.5	−3.2	−3.5	−3.4	−3.4
Australia[1]	−2.8	−2.8	−2.6	−2.3	−1.6	−1.2	−4.1	−7.8	−7.7	−5.4	−3.6	−2.4	−1.7	−1.2	−0.8
Austria	−1.7	−2.2	−0.5	−1.2	−0.9	−0.8	−0.6	−5.7	−4.9	−2.9	−2.1	−0.6	−0.7	−0.8	−0.6
Belgium	−2.1	−2.1	−1.7	−1.6	−0.1	−0.5	−2.0	−7.4	−5.7	−5.0	−4.3	−4.7	−4.7	−5.0	−5.4
Canada	−1.5	−0.2	0.0	−0.1	−0.3	0.1	−0.1	−9.6	−4.0	−2.3	−1.1	−0.8	−0.5	−0.4	−0.3
Cyprus	−2.0	2.3	2.3	1.2	1.7	2.5	0.4	−3.9	−1.3	−0.8	−0.2	0.1	0.4	0.7	0.9
Czech Republic	0.3	−0.6	−0.4	0.7	0.8	0.2	−0.8	−5.0	−6.2	−3.3	−2.8	−2.3	−1.8	−1.3	−0.8
Denmark	0.4	2.5	−0.5	−0.4	0.7	−0.4	2.7	1.2	−0.6	0.3	0.1	0.1	0.0	0.0	0.0
Estonia	0.9	1.2	0.8	0.1	−1.1	−1.2	−0.6	−4.5	−2.8	−3.6	−3.4	−2.9	−2.4	−2.0	−1.5
Finland	−0.9	−0.7	0.1	−0.3	−0.9	−0.9	−1.0	−3.0	−2.4	−1.9	−1.4	−1.3	−1.2	−1.2	−1.2
France	−2.8	−2.5	−2.2	−2.1	−2.0	−1.8	−3.1	−5.9	−5.9	−5.3	−3.4	−3.2	−3.2	−3.2	−3.3
Germany	0.5	0.8	1.1	1.1	0.8	1.5	1.2	−3.1	−2.6	−2.8	−0.5	0.0	0.3	0.4	0.4
Greece	5.1	3.1	3.0	5.5	4.7	3.7	2.6	−4.0	−6.7	−2.5	−1.7	−1.6	−1.5	−1.5	−1.3
Hong Kong SAR	1.0	3.6	0.7	4.7	5.5	2.3	0.3	−5.2	0.8	−1.6	−0.3	−0.1	0.8	0.9	0.9
Iceland	−1.2	1.2	0.2	12.1	0.3	−0.8	−3.6	−7.0	−8.5	−5.5	−3.5	−2.4	−1.6	−1.0	−0.7
Ireland[2]	−4.9	−3.1	−1.4	−1.4	−0.8	−0.3	0.4	−4.2	−2.3	−1.5	−0.6	−0.4	0.0	0.0	0.0
Israel	−4.2	−2.6	−0.8	−1.6	−1.2	−3.9	−4.3	−9.5	−4.2	−3.6	−3.3	−3.2	−3.0	−3.0	−3.0
Italy	−0.7	−0.8	−0.8	−1.1	−1.6	−1.6	−1.0	−6.1	−4.6	−5.2	−3.7	−3.4	−3.4	−3.2	−2.7
Japan	−7.1	−5.4	−4.2	−4.1	−3.3	−2.5	−2.5	−8.1	−6.9	−7.3	−3.3	−2.4	−2.5	−2.6	−2.8
Korea	0.9	0.7	0.7	1.8	2.3	2.6	0.5	−1.5	−0.3	−1.3	−1.0	−1.1	−1.2	−1.1	−1.2
Latvia	−0.8	−1.1	−1.1	−0.3	−1.2	−1.5	−1.1	−2.9	−5.6	−5.7	−0.4	−0.4	−0.4	−0.5	−0.4
Lithuania	−2.1	−0.5	−0.1	0.4	0.3	0.4	0.1	−7.0	−3.3	−3.3	−2.1	−2.2	−2.2	−1.9	−2.0
Luxembourg	0.9	1.3	1.5	1.1	1.1	3.0	2.0	−2.3	0.4	0.0	0.0	0.1	0.1	0.0	−0.1
Malta	−1.1	−1.3	−2.1	0.6	3.0	1.3	0.1	−6.9	−8.2	−6.9	−4.2	−3.0	−2.7	−2.3	−2.1
Netherlands, The	−1.2	−0.6	−0.9	0.8	1.3	0.9	1.7	−3.3	−4.7	−2.1	−1.9	−1.9	−1.5	−1.4	−0.8
New Zealand	−0.3	0.4	0.6	1.0	1.1	0.9	−2.0	−3.6	−5.1	−4.8	−2.0	−1.0	−0.1	0.3	0.5
Norway[2]	−5.1	−6.0	−7.0	−8.0	−8.1	−7.3	−8.7	−12.3	−12.9	−12.1	−10.2	−10.1	−10.0	−9.9	−9.9
Portugal	0.1	−2.7	−1.1	0.2	−2.3	−0.5	−0.7	−1.4	−0.1	−0.6	−0.7	−0.8	−0.8	−0.8	−0.9
Singapore	1.5	1.0	−0.7	1.2	1.8	0.7	1.8	−6.9	−2.3	−0.6	0.0	0.6	0.8	0.9	1.1
Slovak Republic	−1.7	−2.5	−3.2	−3.1	−1.5	−1.7	−1.8	−3.6	−5.4	−4.5	−2.9	−2.4	−2.3	−2.4	−2.5
Slovenia	−12.8	−4.4	−1.9	−1.8	0.0	0.6	0.1	−6.4	−6.0	−5.5	−4.5	−3.6	−3.0	−2.8	−2.7
Spain[2]	−1.7	−1.2	−2.1	−2.5	−2.4	−2.2	−3.1	−5.3	−3.6	−4.1	−4.1	−3.9	−4.0	−3.9	−3.9
Sweden[2]	−0.9	−0.9	−0.7	0.7	0.9	0.4	−0.1	−1.2	−0.5	−0.3	−0.1	0.5	0.4	0.3	0.3
Switzerland[2]	−0.3	−0.2	0.5	0.3	1.1	1.0	1.1	−2.2	−1.6	−0.7	−0.2	−0.1	0.0	0.0	0.0
United Kingdom[2]	−3.2	−3.9	−3.6	−2.8	−2.3	−2.4	−2.7	−10.7	−7.1	−4.4	−2.0	−0.9	−1.1	−1.3	−1.1
United States[2,3]	−3.2	−2.7	−2.5	−3.5	−4.2	−5.2	−6.1	−10.4	−8.0	−5.3	−4.6	−4.7	−5.2	−5.1	−5.1

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table B.

[1] Data are based on the fiscal-year based potential GDP.

[2] Data for these economies include adjustments beyond the output cycle.

[3] For cross-economy comparison, the expenditures 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 economies that have not yet adopted the 2008 SNA. Data for the United States in this table may therefore differ from data published by the US Bureau of Economic Analysis.

Table A4. Advanced Economies: General Government Cyclically Adjusted Primary Balance, 2013–27
(Percent of potential GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−1.1	−0.6	−0.5	−0.7	−0.8	−1.1	−1.8	−6.6	−4.9	−3.5	−2.1	−1.6	−1.6	−1.3	−1.1
Euro Area	1.3	1.3	1.3	1.3	1.1	1.3	0.7	−3.4	−2.8	−2.6	−1.2	−0.9	−0.8	−0.8	−0.7
G7	−1.3	−0.8	−0.6	−1.0	−1.3	−1.5	−2.2	−7.3	−5.4	−3.8	−2.3	−1.7	−1.7	−1.5	−1.3
G20 Advanced	−1.3	−0.8	−0.6	−0.9	−1.1	−1.3	−2.2	−7.1	−5.3	−3.8	−2.2	−1.7	−1.7	−1.4	−1.2
Australia[1]	−2.0	−1.9	−1.7	−1.4	−0.7	−0.3	−3.3	−6.9	−6.6	−4.2	−2.1	−0.7	0.0	0.4	0.8
Austria	0.4	−0.2	1.4	0.4	0.5	0.4	0.4	−4.8	−4.1	−2.4	−1.6	−0.1	−0.2	−0.3	−0.1
Belgium	0.7	0.7	0.8	0.7	2.0	1.4	−0.3	−5.8	−4.3	−3.9	−3.3	−3.7	−3.7	−4.0	−4.3
Canada	−1.0	0.1	0.6	0.5	−0.1	0.2	0.0	−9.2	−4.6	−3.0	−1.4	−0.8	−0.4	−0.2	−0.2
Cyprus	0.4	4.4	4.3	3.0	3.4	4.2	2.0	−2.4	0.1	0.4	0.9	1.0	1.2	1.4	1.6
Czech Republic	1.4	0.4	0.5	1.5	1.5	0.8	−0.2	−4.4	−5.5	−2.4	−1.9	−1.4	−0.9	−0.4	0.1
Denmark	0.8	3.0	0.2	0.1	0.6	−0.8	2.3	0.8	−0.8	0.1	−0.2	0.0	−0.1	−0.1	−0.1
Estonia	0.9	1.2	0.8	0.0	−1.1	−1.3	−0.6	−4.5	−2.8	−3.6	−3.4	−2.9	−2.4	−1.9	−1.5
Finland	−0.8	−0.5	0.3	−0.1	−0.6	−0.7	−0.8	−2.9	−2.4	−2.0	−1.6	−1.5	−1.3	−1.2	−1.2
France	−0.7	−0.5	−0.3	−0.4	−0.4	−0.2	−1.7	−4.7	−4.7	−4.3	−2.6	−2.3	−2.2	−2.3	−2.3
Germany	1.9	2.0	2.2	2.0	1.6	2.2	1.8	−2.7	−2.2	−2.3	−0.1	0.4	0.7	0.8	0.8
Greece	8.6	6.6	6.1	8.3	7.6	6.9	5.5	−1.4	−3.9	0.4	1.4	1.6	1.8	1.8	2.1
Hong Kong SAR	−0.7	3.6	0.7	3.8	4.7	0.9	−1.3	−7.0	−1.8	−5.1	−2.4	−1.9	−1.0	−0.7	−0.7
Iceland	1.9	4.6	3.8	15.0	3.3	1.4	−1.5	−4.8	−6.2	−2.3	−0.5	−0.6	0.2	0.9	1.1
Ireland[2]	−1.4	0.2	1.0	0.8	1.2	1.3	1.7	−3.2	−1.5	−0.8	0.1	0.3	0.6	0.5	0.5
Israel	−1.2	−0.5	1.0	0.3	0.7	−1.7	−2.4	−7.7	−1.9	−1.3	−0.9	−0.8	−0.6	−0.6	−0.6
Italy	3.7	3.4	3.0	2.6	1.9	1.8	2.2	−3.0	−1.4	−2.2	−0.9	−0.7	−0.8	−0.7	−0.3
Japan	−6.0	−4.3	−3.1	−3.0	−2.4	−1.7	−1.9	−7.5	−6.4	−6.9	−3.2	−2.2	−2.3	−2.4	−2.4
Korea	0.5	0.3	0.4	1.5	2.0	2.2	0.0	−2.0	−0.6	−1.6	−1.2	−1.2	−1.2	−1.1	−1.1
Latvia	0.6	0.4	0.6	0.9	−0.1	−0.5	−0.2	−2.1	−4.8	−5.1	0.2	0.2	0.2	0.1	0.1
Lithuania	−0.4	1.1	1.4	1.8	1.5	1.3	0.9	−6.4	−3.2	−3.0	−1.8	−1.8	−1.9	−1.7	−1.8
Luxembourg	0.7	1.1	1.2	0.9	0.9	2.8	1.8	−2.5	0.3	−0.3	−0.8	−0.7	−0.7	−0.8	−0.9
Malta	1.6	1.3	0.2	2.7	4.7	2.8	1.4	−5.7	−7.0	−5.7	−3.0	−1.9	−1.5	−1.1	−0.9
Netherlands, The	0.2	0.7	0.3	1.9	2.3	1.7	2.4	−2.9	−4.5	−1.9	−1.6	−1.6	−1.3	−1.1	−0.5
New Zealand	0.5	1.0	1.3	1.6	1.7	1.5	−1.4	−2.9	−4.4	−3.9	−1.0	0.0	0.9	1.3	1.5
Norway[2]	−7.3	−8.6	−10.0	−11.0	−11.0	−9.9	−11.1	−14.5	−16.0	−15.7	−13.5	−13.3	−13.1	−12.9	−12.9
Portugal	3.9	1.4	2.9	3.9	1.3	2.7	2.2	1.2	2.1	1.5	1.4	1.1	0.9	0.8	0.8
Singapore	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Slovak Republic	0.0	−0.8	−1.7	−1.7	−0.3	−0.5	−0.8	−2.6	−4.5	−3.7	−2.2	−1.6	−1.4	−1.6	−1.7
Slovenia	−10.9	−1.6	0.8	0.8	2.1	2.4	1.6	−5.0	−4.9	−4.6	−3.8	−3.0	−2.5	−2.4	−2.3
Spain[2]	1.0	1.5	0.4	−0.1	−0.1	0.0	−1.0	−3.4	−1.8	−2.3	−2.1	−2.0	−2.0	−1.9	−1.9
Sweden[2]	−0.7	−0.8	−0.7	0.7	0.9	0.3	−0.2	−1.3	−0.6	−0.4	−0.2	0.3	0.3	0.3	0.2
Switzerland[2]	−0.1	0.0	0.8	0.5	1.3	1.1	1.2	−2.2	−1.5	−0.6	0.0	0.0	0.1	0.1	0.1
United Kingdom[2]	−2.0	−2.2	−2.2	−1.2	−0.6	−0.7	−1.3	−9.7	−5.1	−1.9	−0.4	0.3	0.2	0.0	0.1
United States[2,3]	−1.3	−0.8	−0.7	−1.6	−2.2	−3.0	−3.9	−8.3	−6.4	−3.9	−2.9	−2.4	−2.5	−1.9	−1.6

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: "Cyclically adjusted primary balance" is defined as the cyclically adjusted balance plus net interest payable/paid (interest expense minus interest revenue) following the *World Economic Outlook* convention. For economy-specific details, see "Data and Conventions" in text and Table B.

[1] Data are based on the fiscal-year based potential GDP.

[2] The data for these economies include adjustments beyond the output cycle.

[3] For cross-economy comparison, expenditures 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 economies that have not yet adopted the 2008 SNA. Data for the United States in this table may therefore differ from data published by the US Bureau of Economic Analysis.

Table A5. Advanced Economies: General Government Revenue, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	36.5	36.5	36.1	36.0	35.9	35.9	35.6	36.1	36.6	36.4	36.5	36.3	36.2	36.2	36.3
Euro Area	46.8	46.8	46.4	46.2	46.1	46.4	46.2	46.3	47.1	46.4	46.3	46.1	45.9	45.7	45.6
G7	36.2	36.4	36.3	36.0	35.9	35.8	35.5	36.1	36.6	36.6	36.7	36.5	36.4	36.5	36.6
G20 Advanced	35.6	35.7	35.6	35.4	35.3	35.2	35.0	35.6	36.1	36.1	36.1	36.0	35.9	35.9	36.1
Australia	33.7	33.9	34.6	34.9	35.1	35.7	34.6	36.1	35.1	33.8	34.5	34.9	35.1	35.2	35.2
Austria	49.7	49.6	50.0	48.5	48.5	48.9	49.2	48.7	49.8	48.8	48.2	48.0	48.0	48.0	48.1
Belgium	53.0	52.5	51.3	50.8	51.3	51.4	49.9	50.1	49.5	49.0	49.3	49.5	49.5	49.5	49.3
Canada	38.5	38.5	40.0	40.3	40.3	41.0	40.7	41.6	41.0	41.2	41.2	41.2	41.3	41.3	41.3
Cyprus	37.0	40.2	39.7	37.7	38.5	39.2	39.7	39.3	42.3	40.4	41.1	41.5	41.4	40.9	40.8
Czech Republic	41.4	40.5	41.3	40.5	40.5	41.5	41.4	41.6	40.9	41.5	41.5	41.0	40.6	40.6	40.6
Denmark	54.6	56.4	53.2	52.4	52.3	51.3	53.6	53.3	52.5	50.9	50.7	50.2	49.6	49.6	49.6
Estonia	38.6	38.5	39.7	39.0	38.5	38.9	39.6	40.3	40.4	39.5	39.1	39.3	39.7	39.8	40.0
Finland	54.3	54.3	54.1	53.9	53.0	52.5	52.3	51.5	52.6	51.5	51.1	50.8	50.6	50.5	50.4
France	53.1	53.3	53.2	53.0	53.5	53.4	52.3	52.6	52.8	51.4	51.2	51.2	50.9	50.8	50.7
Germany	45.0	44.9	45.1	45.5	45.5	46.2	46.5	46.5	47.8	47.2	47.2	47.2	47.3	47.4	47.3
Greece	48.2	46.6	48.1	50.3	49.4	49.3	48.0	48.9	49.1	48.3	47.6	47.4	46.8	45.9	44.8
Hong Kong SAR	21.0	20.8	18.6	22.6	22.9	20.7	20.4	20.7	23.8	24.3	23.6	23.5	24.2	23.9	23.9
Iceland	44.7	46.1	43.1	59.0	45.4	44.8	41.9	42.1	40.4	41.9	42.2	41.7	41.9	41.7	41.5
Ireland	34.2	33.9	27.0	27.3	25.9	25.5	24.7	22.4	22.8	22.1	22.1	22.1	22.2	22.0	21.9
Israel	36.2	36.5	36.8	36.5	37.5	35.8	35.0	34.5	37.1	35.1	34.9	34.8	34.8	34.8	34.8
Italy	48.1	47.9	47.8	46.7	46.3	46.2	46.9	47.4	48.3	48.3	48.4	48.0	47.9	47.5	47.2
Japan	31.2	32.8	33.6	33.6	33.6	34.3	34.2	35.6	35.5	35.0	35.0	35.0	34.9	34.9	34.9
Korea	20.7	20.4	20.3	21.1	21.8	22.9	22.9	23.0	25.7	24.6	24.1	24.1	24.0	24.0	24.0
Latvia	36.8	36.1	35.9	35.7	35.7	37.3	37.2	38.4	38.2	36.9	37.9	36.8	36.1	36.0	36.0
Lithuania	32.0	33.4	34.2	33.6	32.9	33.7	34.1	34.9	36.4	37.5	35.6	34.0	33.8	33.4	32.9
Luxembourg	42.1	41.9	41.7	41.9	42.6	45.1	45.3	43.9	43.1	43.2	43.8	43.4	43.6	43.7	43.8
Malta	38.0	38.2	37.2	37.0	37.2	37.2	36.0	35.8	36.3	36.4	36.2	36.1	35.9	35.9	36.0
Netherlands, The	42.8	42.8	41.8	42.8	42.9	42.9	43.6	41.1	41.5	41.9	42.0	41.9	42.1	42.3	42.3
New Zealand	37.3	37.3	37.6	37.4	37.0	37.3	36.3	37.6	37.6	37.1	37.1	37.3	37.4	37.3	36.6
Norway	54.4	54.2	54.5	54.8	54.6	55.9	57.3	54.5	50.0	50.4	50.3	50.2	50.2	50.4	50.2
Portugal	44.8	44.4	43.8	42.9	42.4	42.9	42.6	43.5	45.3	44.5	44.3	43.8	43.3	42.7	42.3
Singapore	16.9	17.2	17.3	18.9	18.9	17.6	17.9	17.9	18.5	17.8	17.4	18.0	18.1	18.2	18.4
Slovak Republic	39.6	40.2	43.1	40.1	38.6	38.8	39.3	40.1	42.3	41.9	41.8	39.9	40.0	39.6	39.2
Slovenia	45.7	45.3	45.9	44.2	44.0	44.2	43.8	43.5	43.9	43.2	42.3	42.1	41.9	41.9	41.8
Spain	38.8	39.2	38.7	38.1	38.2	39.2	39.2	41.5	43.1	42.3	41.9	41.2	39.7	39.5	39.5
Sweden	49.1	48.1	48.4	49.8	49.7	49.6	48.6	48.6	49.6	48.7	48.7	48.5	48.2	48.1	48.1
Switzerland	31.8	31.6	32.6	32.3	33.1	32.6	32.8	33.7	33.2	33.0	33.0	32.7	32.7	32.7	32.7
United Kingdom	36.2	35.4	35.5	35.9	36.4	36.3	36.0	36.2	36.9	37.3	37.5	37.6	37.4	35.8	36.5
United States	31.3	31.4	31.7	31.2	30.8	30.1	30.1	30.8	31.2	32.0	32.1	31.8	31.6	31.9	32.2

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).
Note: For economy-specific details, see "Data and Conventions" in text and Table B.

Table A6. Advanced Economies: General Government Expenditure, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	40.1	39.6	38.7	38.6	38.3	38.3	38.6	46.5	43.9	40.8	39.4	39.1	39.2	39.2	39.2
Euro Area	49.8	49.2	48.4	47.7	47.1	46.8	46.9	53.5	52.6	50.7	48.8	48.1	47.7	47.5	47.3
G7	40.5	40.0	39.3	39.3	39.1	39.2	39.3	48.0	45.0	41.5	40.0	39.8	40.0	40.0	40.2
G20 Advanced	39.6	39.1	38.4	38.5	38.3	38.3	38.6	47.0	44.2	40.9	39.4	39.2	39.3	39.3	39.5
Australia	36.5	36.9	37.4	37.4	36.9	37.0	39.0	44.7	42.8	39.0	37.8	37.2	36.7	36.4	36.0
Austria	51.6	52.3	51.0	50.1	49.3	48.7	48.6	57.1	55.6	52.7	50.6	48.7	48.7	48.8	48.7
Belgium	56.1	55.6	53.7	53.1	52.0	52.2	51.8	59.2	55.5	54.1	53.7	54.2	54.2	54.5	54.8
Canada	40.0	38.4	40.0	40.8	40.5	40.7	40.7	53.0	45.7	43.4	42.0	41.8	41.8	41.7	41.6
Cyprus	42.2	40.4	39.5	37.5	36.5	42.7	38.4	45.0	44.0	41.8	41.4	41.3	40.8	39.9	39.5
Czech Republic	42.7	42.6	41.9	39.8	39.0	40.6	41.1	47.2	47.0	45.1	44.4	43.4	42.5	41.9	41.4
Denmark	55.8	55.2	54.5	52.5	50.5	50.5	49.5	53.4	52.8	50.1	50.1	49.9	49.6	49.6	49.6
Estonia	38.4	37.8	39.5	39.4	39.2	39.4	39.4	45.9	42.8	43.2	42.7	42.3	42.2	41.7	41.5
Finland	56.8	57.3	56.5	55.6	53.6	53.3	53.3	56.9	55.4	53.9	52.7	52.2	51.8	51.7	51.6
France	57.2	57.2	56.8	56.7	56.5	55.6	55.3	61.7	59.9	57.0	55.0	54.6	54.2	54.1	54.0
Germany	44.9	44.3	44.1	44.4	44.2	44.3	45.0	50.8	51.5	50.5	47.9	47.3	47.1	47.0	47.0
Greece	52.0	50.7	51.2	49.9	48.5	48.5	47.8	59.8	57.9	53.1	49.4	48.8	47.9	46.9	45.7
Hong Kong SAR	20.0	17.3	18.0	18.3	17.4	18.4	21.0	29.9	24.0	27.5	24.3	24.0	23.6	23.2	23.2
Iceland	46.0	45.8	43.5	46.4	44.4	43.8	43.4	50.7	49.3	47.0	45.5	43.9	43.4	42.7	42.2
Ireland	40.6	37.6	29.1	28.1	26.2	25.3	24.2	27.4	24.9	23.5	22.8	22.4	22.2	22.0	21.9
Israel	40.3	38.8	37.9	38.2	38.6	39.4	38.9	45.4	41.4	38.4	38.1	37.9	37.8	37.8	37.8
Italy	51.0	50.9	50.3	49.1	48.8	48.4	48.5	57.0	55.4	54.3	52.2	51.4	50.9	50.3	49.7
Japan	38.8	38.4	37.3	37.2	36.7	36.8	37.2	44.5	43.2	42.8	38.5	37.5	37.5	37.6	37.7
Korea	19.9	19.8	19.7	19.5	19.6	20.4	22.6	25.2	26.3	26.2	25.2	25.2	25.1	25.1	25.1
Latvia	37.3	37.8	37.4	36.1	36.5	38.1	37.6	42.3	43.7	43.3	39.1	37.7	36.8	36.7	36.4
Lithuania	34.6	34.0	34.4	33.3	32.4	33.2	33.8	42.2	39.4	41.0	38.2	36.5	36.2	35.4	34.9
Luxembourg	41.2	40.6	40.4	40.0	41.3	42.1	42.9	47.7	42.5	43.6	43.8	43.3	43.5	43.7	43.9
Malta	40.4	39.9	38.2	36.0	34.1	35.4	35.6	45.7	45.6	43.8	40.5	39.1	38.7	38.2	38.1
Netherlands, The	45.8	45.0	43.9	42.8	41.6	41.4	41.2	45.5	47.1	44.5	44.2	44.0	43.9	43.8	43.1
New Zealand	38.6	37.7	37.2	36.5	35.6	36.1	38.8	41.7	42.6	41.9	38.9	38.4	37.9	37.3	36.5
Norway	43.7	45.5	48.5	50.7	49.6	48.0	50.7	57.3	49.1	44.5	44.7	45.8	46.8	47.7	48.1
Portugal	49.9	51.7	48.2	44.8	45.4	43.2	42.5	49.3	48.1	46.9	45.9	44.9	44.2	43.6	43.2
Singapore	10.9	12.6	14.4	15.2	13.6	13.9	14.0	23.7	18.7	16.4	15.4	15.4	15.4	15.4	15.4
Slovak Republic	42.5	43.3	45.8	42.7	39.6	39.8	40.7	45.6	48.8	47.2	44.9	42.4	42.3	42.0	41.7
Slovenia	60.3	50.8	48.7	46.2	44.1	43.5	43.3	51.3	49.1	48.0	46.4	45.5	44.8	44.6	44.5
Spain	45.8	45.1	43.9	42.4	41.2	41.7	42.1	52.4	50.1	47.7	46.3	45.1	43.6	43.5	43.5
Sweden	50.6	49.7	48.4	48.7	48.2	48.8	48.1	51.4	50.6	49.4	48.7	48.2	47.8	47.8	47.8
Switzerland	32.2	31.8	32.1	32.1	32.0	31.3	31.5	36.5	35.1	33.9	33.3	32.8	32.7	32.7	32.7
United Kingdom	41.7	40.9	40.0	39.2	38.8	38.4	38.2	48.9	44.9	41.7	39.8	39.1	38.8	37.1	37.5
United States[1]	35.8	35.4	35.2	35.6	35.5	35.6	35.8	45.3	41.4	36.8	36.1	36.2	36.8	37.1	37.4

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For economy-specific details, see "Data and Conventions" in text and Table B.

[1] For cross-economy comparison, expenditures 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 economies that have not yet adopted the 2008 SNA. Data for the United States in this table may therefore differ from data published by the US Bureau of Economic Analysis.

Table A7. Advanced Economies: General Government Gross Debt, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	104.0	103.6	103.2	105.6	103.2	102.7	103.8	123.2	119.8	115.5	113.7	113.1	113.0	112.9	112.7
Euro Area	92.5	92.7	90.8	90.0	87.5	85.5	83.5	97.3	96.0	95.2	93.4	92.1	91.0	90.0	88.9
G7	118.4	117.3	116.4	119.5	117.4	117.1	118.1	140.8	137.3	131.6	129.3	128.8	128.9	129.0	129.1
G20 Advanced	112.0	111.3	110.8	113.9	111.6	111.4	112.8	134.5	131.1	126.1	124.1	123.7	123.8	123.9	123.9
Australia[1]	30.5	34.0	37.8	40.6	41.2	41.8	46.8	57.8	59.8	60.1	62.6	62.7	61.8	60.3	58.5
Austria	81.0	83.8	84.4	82.5	78.6	74.0	70.6	83.2	83.1	80.7	76.6	74.6	73.0	72.4	70.4
Belgium	105.5	107.0	105.2	105.0	102.0	99.9	97.7	112.8	108.3	107.5	108.9	111.0	113.3	115.6	118.3
Canada[1]	86.1	85.6	91.2	91.8	88.9	88.9	87.2	117.8	112.1	101.8	98.5	96.2	93.4	90.5	87.7
Cyprus	102.9	109.1	107.2	103.1	92.9	98.4	91.1	115.0	103.9	97.2	93.4	86.9	83.4	77.2	72.7
Czech Republic	44.4	41.9	39.7	36.6	34.2	32.1	30.0	37.7	41.8	43.3	43.9	44.1	43.7	43.0	42.0
Denmark	44.0	44.3	39.8	37.2	35.9	34.0	33.6	42.1	37.3	33.7	34.3	34.0	33.8	33.7	33.7
Estonia	10.2	10.6	10.1	10.0	9.1	8.2	8.6	19.0	18.1	20.9	23.8	25.6	26.8	27.5	27.7
Finland	56.2	59.8	63.6	63.2	61.2	59.8	59.6	69.0	66.7	67.1	67.2	68.0	69.0	69.8	70.5
France	93.4	94.9	95.6	98.0	98.1	97.8	97.4	115.2	112.3	112.6	112.9	113.1	113.3	113.6	114.0
Germany	78.3	75.3	72.0	69.0	64.7	61.3	58.9	68.7	70.2	70.9	67.7	65.5	63.2	60.9	58.7
Greece	178.7	181.7	178.7	183.1	182.7	190.1	185.1	211.9	198.9	185.4	178.7	172.6	168.2	165.1	160.7
Hong Kong SAR[1]	0.5	0.1	0.1	0.1	0.1	0.1	0.3	1.0	2.1	3.3	4.3	4.6	4.7	4.7	5.3
Iceland	122.0	115.2	97.2	82.4	71.6	63.1	66.2	77.4	75.0	68.8	64.5	61.9	59.2	59.6	53.1
Ireland	120.0	104.3	76.7	74.3	67.8	63.1	57.2	58.4	55.3	53.3	50.3	47.9	45.7	43.6	41.3
Israel	66.8	65.6	63.8	62.0	60.2	60.4	59.5	71.7	68.9	67.1	66.4	65.7	65.1	64.6	64.1
Italy	132.5	135.4	135.3	134.8	134.2	134.4	134.1	155.3	150.9	150.6	148.7	147.2	145.7	144.3	142.9
Japan	229.6	233.5	228.4	232.5	231.4	232.5	236.1	259.0	263.1	262.5	258.3	258.7	259.4	260.5	261.8
Korea	37.7	39.7	40.8	41.2	40.1	40.0	42.1	48.9	49.8	52.0	53.3	55.1	56.8	58.3	59.8
Latvia	40.4	41.6	37.1	40.4	39.0	37.1	36.7	43.3	45.6	47.3	45.4	42.8	40.5	38.4	37.4
Lithuania	38.7	40.5	42.7	39.9	39.3	33.7	35.9	46.6	43.0	40.1	39.3	38.7	38.3	37.8	37.2
Luxembourg	22.4	21.9	21.1	19.6	21.8	20.8	22.3	24.8	25.1	25.7	26.1	25.9	26.0	26.1	26.3
Malta	65.8	61.6	55.9	54.5	47.5	43.5	40.6	53.3	57.4	61.0	61.9	61.9	61.4	60.7	59.7
Netherlands, The	67.8	68.0	64.6	61.9	56.9	52.4	47.6	52.8	56.7	55.3	54.8	54.7	54.5	54.1	53.1
New Zealand	34.6	34.2	34.2	33.4	31.1	28.1	31.8	43.1	49.1	51.2	51.4	50.5	48.6	46.3	44.1
Norway	31.6	29.9	34.5	38.1	38.6	39.7	40.9	46.8	48.1	47.8	47.2	46.4	45.9	45.5	45.1
Portugal	131.4	132.9	131.2	131.5	126.1	121.5	116.6	135.2	127.5	121.6	117.9	114.0	110.5	107.3	104.5
Singapore	98.2	97.7	102.2	106.6	107.7	109.4	128.2	152.0	132.8	130.9	129.7	129.7	130.4	131.0	131.5
Slovak Republic	54.7	53.6	51.9	52.4	51.6	49.6	48.1	59.7	60.4	61.4	58.1	56.4	55.6	55.4	55.2
Slovenia	70.0	80.3	82.6	78.5	74.2	70.3	65.6	79.8	74.7	71.4	70.1	68.9	67.8	66.9	66.3
Spain	95.8	100.7	99.3	99.2	98.6	97.5	95.5	120.0	118.7	116.4	115.9	114.7	114.5	114.5	114.6
Sweden	40.2	44.9	43.7	42.3	40.7	38.9	34.9	39.6	37.3	35.1	33.3	31.7	30.2	28.7	27.3
Switzerland	41.6	41.6	41.7	40.5	41.2	39.2	39.8	42.4	42.2	41.5	40.6	39.6	38.8	37.7	36.9
United Kingdom	83.6	85.5	86.0	85.8	85.1	84.5	83.9	102.6	95.3	87.8	82.7	79.6	76.3	73.4	70.7
United States[1]	104.6	104.6	105.1	107.2	106.2	107.5	108.8	134.2	132.6	125.6	123.7	124.0	125.1	126.2	127.4

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For economy-specific details, see "Data and Conventions" in text and Table B.

[1] For cross-economy comparison, gross debt levels reported by national statistical agencies for economies 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.

Table A8. Advanced Economies: General Government Net Debt, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	74.9	75.1	75.2	76.8	74.5	74.4	75.2	87.5	87.3	84.8	83.8	83.9	84.9	85.8	86.7
Euro Area	75.9	76.1	75.0	74.5	72.4	70.6	69.1	79.6	79.2	79.2	78.1	77.3	76.5	75.9	75.1
G7	86.8	86.7	86.2	88.1	85.9	86.1	86.8	100.8	101.2	97.5	96.2	96.5	97.8	99.2	100.5
G20 Advanced	81.1	81.2	81.1	82.9	80.7	80.9	82.0	95.4	95.6	92.6	91.5	91.8	93.1	94.3	95.6
Australia[1]	16.0	19.1	22.1	23.4	23.3	24.1	28.0	34.6	35.7	37.5	40.7	41.3	40.7	39.4	37.9
Austria	60.4	59.1	58.3	56.9	55.9	50.7	47.9	59.5	60.8	59.9	57.0	55.9	55.0	55.1	53.7
Belgium[2]	92.5	93.4	92.0	91.2	88.3	86.4	84.8	98.0	95.0	95.0	96.9	99.4	101.9	104.6	107.6
Canada[1]	29.7	28.5	28.6	28.5	25.8	25.7	23.1	33.6	33.2	32.1	31.6	31.3	30.8	29.1	27.6
Cyprus	78.9	90.6	90.9	86.1	78.6	52.5	46.8	56.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Czech Republic	29.0	29.4	28.1	25.0	21.5	19.6	18.1	23.6	28.3	29.8	30.6	30.7	30.2	29.7	28.5
Denmark	18.3	18.1	16.2	17.5	15.8	13.4	12.3	14.8	14.2	12.6	11.5	10.8	10.4	10.0	9.6
Estonia	−4.4	−3.8	−2.0	−1.9	−1.8	−1.8	−2.2	3.0	4.6	8.5	12.1	14.7	16.7	18.0	18.8
Finland[3]	12.9	17.2	18.4	21.2	21.8	24.4	27.0	33.3	34.1	35.1	35.2	35.6	35.8	35.9	36.0
France	83.0	85.5	86.3	89.2	89.4	89.2	88.8	102.6	99.8	100.1	100.4	100.6	100.7	101.0	101.4
Germany	58.4	54.9	52.2	49.3	45.4	42.6	40.5	46.3	49.0	51.1	49.0	47.5	45.7	43.9	42.2
Greece	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Hong Kong SAR[1]	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Iceland[4]	99.2	88.1	78.0	67.6	60.2	50.7	54.1	60.8	59.9	55.6	52.1	50.2	48.0	45.5	42.7
Ireland[5]	90.1	85.9	65.7	65.4	58.9	54.3	49.0	52.4	49.9	48.3	45.8	43.7	41.7	39.8	37.7
Israel	62.9	62.5	60.6	59.0	57.5	58.1	57.9	68.4	66.0	64.4	63.8	63.3	62.8	62.4	62.0
Italy	119.2	121.4	122.2	121.6	121.3	121.8	121.7	141.8	138.3	138.5	137.1	136.0	134.8	133.7	132.6
Japan	142.9	145.1	144.6	149.6	148.1	151.1	151.4	162.4	168.9	172.1	171.0	171.4	172.1	173.2	174.5
Korea	5.8	7.5	9.5	9.7	9.6	9.6	11.7	18.4	19.3	21.6	22.9	24.7	26.3	27.8	29.3
Latvia	30.6	30.3	31.4	31.2	30.5	28.8	28.2	33.4	38.0	40.4	38.8	36.7	34.7	32.9	32.2
Lithuania	34.1	32.5	35.4	32.9	32.9	27.7	30.3	41.1	38.1	35.8	35.3	34.9	34.8	34.4	34.1
Luxembourg	−9.0	−10.9	−12.1	−11.7	−11.4	−11.2	−8.5	−5.4	−1.3	0.6	2.1	3.1	4.2	5.3	6.4
Malta	56.7	52.2	47.5	41.7	35.4	32.5	29.5	43.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Netherlands, The	54.0	55.2	53.3	51.5	46.6	42.9	41.9	43.2	46.5	45.3	44.8	44.8	44.6	44.3	43.5
New Zealand	8.6	7.9	7.3	6.6	5.6	4.7	6.9	10.2	15.0	20.0	21.3	21.1	19.9	18.0	16.4
Norway[6]	−60.1	−74.6	−85.6	−84.2	−79.3	−71.4	−74.9	−80.2	−77.0	−67.0	−75.8	−80.9	−85.3	−89.0	−91.0
Portugal	118.9	120.6	121.0	119.4	116.0	113.4	109.8	123.2	119.5	114.2	110.7	107.2	103.9	101.0	98.4
Singapore	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Slovak Republic	47.8	49.6	47.5	47.1	45.9	43.6	43.3	49.6	54.3	55.4	53.4	52.6	52.0	51.9	51.9
Slovenia	45.2	46.5	50.3	52.2	51.9	45.8	42.7	49.5	48.6	46.4	45.6	44.8	44.1	43.5	43.1
Spain	80.8	85.2	84.9	86.1	85.1	83.7	82.3	103.0	103.0	101.6	101.8	101.2	101.5	101.9	102.5
Sweden	11.4	11.2	11.1	8.9	6.2	5.9	4.3	8.7	8.6	8.6	8.2	7.5	6.9	6.3	5.8
Switzerland	20.5	20.5	20.7	21.4	20.5	18.5	17.7	19.9	21.9	21.1	20.3	19.3	18.4	17.3	16.5
United Kingdom	75.4	77.3	77.6	76.9	75.7	74.8	74.1	90.2	84.3	76.1	71.3	68.0	64.8	61.9	59.2
United States[1]	80.4	81.1	80.9	81.9	80.3	81.2	83.0	98.7	101.3	95.8	94.9	96.1	99.2	102.4	105.6

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For economy-specific details, see "Data and Conventions" in text, and Table B.

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

[2] Belgium's net debt series has been revised to ensure consistency between liabilities and assets. "Net debt" is defined as gross debt (Maastricht definition) minus assets in the form of currency and deposits, loans, and debt securities.

[3] Net debt figures were revised to only include categories of assets corresponding to the liabilities covered by the Maastricht definition of "gross debt."

[4] "Net debt" for Iceland is defined as gross debt minus currency and deposits.

[5] "Net debt" for Ireland is defined as gross general debt minus debt instrument assets, namely, currency and deposits, debt securities, and loans. Net debt was previously defined as general government debt less currency and deposits.

[6] Norway's net debt series has been revised because of a change in the net debt calculation, which excludes the equity and shares from financial assets and includes accounts receivable in the financial assets, following the *Government Finance Statistics Manual 2014* and the Maastricht definition.

Table A9. Emerging Market and Middle-Income Economies: General Government Overall Balance, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−1.6	−2.4	−4.2	−4.6	−3.9	−3.6	−4.6	−9.3	−5.3	−5.7	−5.5	−5.4	−5.3	−5.3	−5.2
Asia	−1.8	−1.7	−3.1	−3.7	−3.6	−4.2	−5.8	−10.4	−6.6	−7.7	−6.9	−6.8	−6.6	−6.6	−6.5
Europe	−1.6	−1.6	−2.7	−2.8	−1.8	0.3	−0.6	−5.6	−1.9	−4.6	−4.8	−4.6	−4.3	−3.9	−3.5
Latin America	−3.1	−4.9	−6.6	−6.0	−5.4	−5.0	−4.1	−8.8	−4.5	−4.7	−4.2	−3.4	−3.0	−2.8	−2.7
MENA	3.0	−1.7	−7.7	−9.2	−5.4	−1.9	−2.9	−8.0	−3.1	1.5	0.1	−1.0	−1.6	−1.9	−2.2
G20 Emerging	−1.8	−2.5	−4.3	−4.6	−4.1	−4.1	−5.2	−10.0	−5.6	−6.8	−6.5	−6.3	−6.1	−6.0	−5.9
Algeria	−0.4	−7.3	−15.3	−13.1	−6.5	−4.4	−5.6	−6.7	−3.8	−5.0	−5.6	−6.4	−6.8	−7.6	−8.3
Angola	−0.3	−5.7	−2.9	−4.5	−6.6	2.3	0.8	−1.9	2.8	3.1	1.6	0.7	−0.5	−0.9	−1.2
Argentina	−3.3	−4.3	−6.0	−6.7	−6.7	−5.4	−4.4	−8.6	−4.6	−3.8	−3.2	−3.1	−2.6	−1.9	−1.4
Belarus	−1.0	0.1	−3.0	−1.7	−0.3	1.8	0.9	−2.9	−1.7	−4.4	−1.3	−0.1	0.9	1.0	1.2
Brazil	−3.0	−6.0	−10.2	−9.0	−7.8	−7.0	−5.9	−13.3	−4.4	−7.6	−7.4	−5.6	−4.9	−4.4	−4.5
Bulgaria	−1.8	−3.7	−2.8	1.5	0.8	0.1	−1.0	−2.9	−2.9	−2.8	−1.5	−1.0	0.0	0.2	0.3
Chile	−0.5	−1.5	−2.1	−2.7	−2.6	−1.5	−2.7	−7.2	−7.5	−1.5	−0.6	−0.3	−0.2	−0.3	−0.2
China	−0.8	−0.7	−2.5	−3.4	−3.4	−4.3	−6.1	−10.7	−6.0	−7.7	−7.1	−7.0	−6.9	−6.9	−6.8
Colombia	−1.0	−1.7	−3.5	−2.3	−2.5	−4.7	−3.5	−7.0	−6.8	−4.6	−2.2	−1.4	−0.9	−1.0	−1.1
Croatia	−5.4	−5.3	−3.4	−0.9	0.8	0.2	0.2	−7.4	−3.7	−2.9	−2.2	−1.9	−1.6	−1.5	−1.4
Dominican Republic	−3.5	−2.8	0.0	−3.1	−3.1	−2.2	−2.2	−7.9	−2.9	−2.7	−2.8	−2.8	−2.4	−2.4	−2.4
Ecuador[1]	−4.6	−5.2	−6.1	−8.2	−4.5	−2.1	−2.7	−6.1	−1.5	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[2]	−12.9	−11.3	−10.9	−12.5	−10.4	−9.4	−8.0	−7.8	−7.3	−6.8	−6.1	−7.1	−6.7	−6.1	−5.6
Hungary	−2.6	−2.8	−2.0	−1.8	−2.4	−2.1	−2.1	−8.1	−6.8	−5.4	−3.9	−2.9	−2.1	−0.9	0.8
India	−7.0	−7.1	−7.2	−7.1	−6.2	−6.4	−7.5	−12.8	−10.4	−9.9	−9.1	−8.5	−8.0	−7.7	−7.5
Indonesia	−2.2	−2.1	−2.6	−2.5	−2.5	−1.8	−2.2	−6.1	−4.6	−4.0	−2.9	−2.9	−2.6	−2.4	−2.2
Iran	−0.8	−1.0	−1.5	−1.8	−1.6	−1.6	−4.5	−5.1	−4.5	−4.0	−6.8	−7.5	−7.9	−8.1	−8.4
Kazakhstan	4.9	2.5	−6.3	−4.5	−4.3	2.6	−0.6	−7.0	−4.1	−0.5	−0.5	−0.4	−0.3	−0.7	−1.0
Kuwait	33.8	21.5	4.5	0.8	2.4	7.3	3.1	−12.8	−0.5	16.6	18.3	14.6	12.0	9.0	6.6
Lebanon	−8.8	−6.2	−7.5	−8.8	−8.6	−11.2	−10.3	−5.8	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia[3]	−3.5	−2.6	−2.5	−2.6	−2.4	−2.6	−2.0	−4.6	−5.5	−4.9	−3.3	−3.0	−2.9	−2.9	−2.9
Mexico	−3.7	−4.5	−4.0	−2.8	−1.1	−2.2	−2.3	−4.4	−3.8	−3.2	−3.2	−2.9	−2.8	−2.8	−2.8
Morocco	−5.1	−5.2	−4.9	−4.8	−3.5	−3.7	−3.8	−7.6	−6.5	−6.3	−6.2	−5.3	−4.4	−3.7	−3.4
Oman	3.2	−1.8	−15.6	−22.5	−12.0	−7.7	−5.6	−16.5	−2.5	5.6	6.3	5.4	4.4	3.9	3.5
Pakistan	−7.4	−4.3	−4.7	−3.9	−5.2	−5.7	−7.8	−7.0	−6.1	−5.8	−4.2	−4.2	−3.9	−3.6	−3.4
Peru	0.7	−0.2	−2.1	−2.3	−2.9	−2.0	−1.4	−8.3	−2.6	−2.4	−2.0	−1.4	−0.8	−0.6	−0.3
Philippines	0.2	0.8	0.6	−0.4	−0.4	−1.6	−1.7	−5.7	−6.5	−5.5	−4.6	−3.6	−3.0	−2.2	−1.6
Poland	−4.2	−3.6	−2.6	−2.4	−1.5	−0.2	−0.7	−7.1	−2.5	−4.1	−2.9	−3.5	−3.5	−3.4	−3.4
Qatar	21.5	15.4	21.4	−5.2	−2.9	5.6	4.6	1.0	4.1	8.5	11.8	9.6	7.9	7.9	9.9
Romania	−2.6	−2.1	−1.5	−2.5	−3.0	−2.9	−4.9	−9.8	−6.9	−8.0	−6.8	−6.6	−6.5	−6.3	−5.9
Russia	−1.2	−1.1	−3.4	−3.7	−1.5	2.9	1.9	−4.0	0.7	−4.0	−5.3	−4.8	−4.1	−3.0	−1.9
Saudi Arabia	5.6	−3.5	−15.8	−14.1	−9.2	−5.7	−4.4	−11.3	−2.4	5.5	4.7	4.4	4.3	4.5	4.6
South Africa	−3.9	−3.9	−4.4	−3.7	−4.0	−3.7	−4.7	−9.7	−6.4	−5.8	−6.1	−6.6	−7.0	−7.5	−7.9
Sri Lanka	−5.2	−6.2	−7.0	−5.3	−5.5	−5.3	−8.0	−12.8	−12.6	−9.4	−10.5	−10.4	−10.4	−10.4	−10.3
Thailand	0.5	−0.8	0.1	0.6	−0.4	0.1	−0.8	−4.7	−7.8	−6.1	−3.0	−3.2	−3.4	−3.4	−3.7
Turkey	−1.5	−1.4	−1.3	−2.3	−2.2	−3.7	−4.7	−5.1	−3.5	−6.9	−7.5	−6.6	−6.6	−6.8	−6.7
Ukraine	−4.8	−4.5	−1.2	−2.2	−2.3	−2.1	−2.0	−6.0	−4.0	−17.8	−13.1	−11.9	−10.9	−10.8	−9.3
United Arab Emirates	8.4	1.9	−3.4	−2.8	−1.7	1.1	0.4	−5.2	0.3	8.1	6.9	5.8	4.9	4.3	4.1
Uruguay[4]	−1.7	−2.6	−1.9	−2.7	−2.5	−1.9	−2.8	−4.7	−2.6	−2.5	−2.1	−1.8	−1.8	−1.7	−1.6
Venezuela	−11.3	−15.6	−10.7	−10.8	−23.0	−31.0	−10.0	−5.0	−4.5	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] The data for Ecuador reflect net lending/borrowing for the nonfinancial public sector. Ecuadorian authorities, in the context of the Extended Fund Facility approved in March of 2019 and with technical support from IMF staff, are revising the historical fiscal data for the net lending/borrowing of the nonfinancial public sector to correct recently identified statistical errors, mostly in the recording of revenues and expenditures of local governments. Fiscal data reported in the table for 2018 and 2019 reflect the corrected series, while data for earlier years are still being revised and will be corrected in subsequent *World Economic Outlook* releases as far back as 2012. The authorities are also working on reconciling historical revenue and expenditure data with financing data.

[2] These numbers are based on the nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[3] The general government overall balance in 2019 includes a one-off refund of tax arrears in 2019 of 2.4 percent of GDP.

[4] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly. Starting in October 2018, the public pension system has been receiving transfers in the context of a new law that compensates persons affected by the creation of the mixed pension system. These funds are recorded as revenues, consistent with the IMF's methodology. Therefore, data and projections for 2018–21 have been affected by these transfers, which amounted to 1.2 percent of GDP in 2018 and 1.1 percent of GDP in 2019, and are projected to be 0.6 percent of GDP in 2020, 0.2 percent of GDP in 2021, and zero thereafter. See IMF country report No. 19/64 for further details. The disclaimer about the public pension system applies only to the revenues and net lending/borrowing series.

Table A10. Emerging Market and Middle-Income Economies: General Government Primary Balance, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	0.0	−0.8	−2.5	−2.9	−2.1	−1.8	−2.8	−7.5	−3.5	−3.8	−3.4	−3.3	−3.2	−3.1	−3.0
Asia	−0.6	−0.5	−1.9	−2.4	−2.2	−2.8	−4.3	−8.8	−5.0	−6.0	−5.2	−5.0	−4.9	−4.7	−4.6
Europe	−0.3	−0.4	−1.5	−1.6	−0.7	1.4	0.4	−4.5	−1.0	−3.5	−3.3	−2.9	−2.6	−2.1	−1.7
Latin America	−0.1	−1.6	−2.4	−2.3	−1.6	−1.4	−0.5	−5.5	−1.0	−0.3	0.0	0.4	0.8	1.0	1.2
MENA	3.5	−1.2	−7.4	−8.9	−5.1	−1.1	−1.9	−7.2	−2.0	2.5	1.9	1.3	0.9	0.6	0.5
G20 Emerging	−0.2	−0.8	−2.5	−2.9	−2.2	−2.3	−3.4	−8.3	−3.8	−4.8	−4.4	−4.2	−4.0	−3.9	−3.7
Algeria	−0.5	−7.4	−15.8	−13.1	−6.2	−4.6	−6.2	−6.4	−3.6	−4.9	−5.8	−5.5	−5.3	−5.6	−5.7
Angola	0.4	−4.7	−1.1	−1.7	−3.0	7.0	6.4	4.9	8.0	7.2	5.0	3.9	3.0	2.3	1.8
Argentina	−2.6	−3.5	−4.4	−4.8	−4.2	−2.2	−0.4	−6.2	−2.8	−2.1	−1.5	−0.5	0.5	1.5	2.0
Belarus	0.0	1.1	−1.3	0.3	1.6	3.8	2.6	−1.2	−0.2	−2.4	0.6	1.7	2.7	2.7	2.7
Brazil	1.7	−0.6	−1.9	−2.5	−1.8	−1.6	−0.9	−9.1	0.8	−0.4	−0.5	−0.1	0.3	0.6	1.0
Bulgaria	−1.3	−3.4	−2.4	1.8	1.2	0.3	−0.8	−2.8	−2.9	−2.7	−1.4	−0.8	0.2	0.4	0.4
Chile	−0.4	−1.4	−1.9	−2.4	−2.3	−1.1	−2.4	−6.6	−6.9	−1.1	−0.2	0.1	0.2	0.1	0.4
China	−0.3	−0.1	−2.0	−2.7	−2.6	−3.5	−5.2	−9.7	−5.1	−6.7	−6.0	−5.9	−5.8	−5.7	−5.6
Colombia	0.9	−0.2	−1.7	−0.4	−0.5	−2.5	−1.0	−4.4	−3.9	−1.7	0.7	1.4	1.9	1.9	1.6
Croatia	−2.7	−2.4	−0.3	1.9	3.2	2.3	2.2	−5.6	−2.4	−1.7	−1.0	−0.8	−0.6	−0.7	−0.6
Dominican Republic	−1.2	−0.4	2.3	−0.6	−0.5	0.4	0.6	−4.7	0.2	0.2	0.3	0.4	0.8	0.8	0.8
Ecuador[1]	−3.5	−4.2	−4.7	−6.7	−2.3	0.4	0.0	−3.3	−0.2	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[2]	−5.9	−4.2	−4.1	−4.3	−2.5	−0.4	1.4	1.2	1.2	1.3	1.9	1.8	1.7	1.6	1.5
Hungary	1.7	1.0	1.3	1.2	0.2	0.2	0.1	−5.8	−4.9	−3.9	−2.4	−1.2	0.0	1.3	2.9
India	−2.4	−2.6	−2.7	−2.5	−1.5	−1.7	−2.8	−7.6	−5.2	−4.6	−3.6	−3.0	−2.4	−2.2	−1.9
Indonesia	−1.0	−0.9	−1.2	−1.0	−0.9	0.0	−0.5	−4.1	−2.6	−1.4	−0.5	−0.6	−0.5	−0.4	−0.3
Iran	−0.8	−1.0	−1.4	−1.3	−0.9	−1.0	−4.0	−4.6	−3.9	−3.3	−3.7	−3.7	−3.6	−3.5	−3.4
Kazakhstan	4.4	2.0	−5.9	−4.3	−5.2	1.8	−0.8	−7.7	−4.5	−0.7	−0.5	−0.3	−0.3	−0.6	−0.7
Kuwait[3]	25.8	12.7	−7.5	−14.2	−9.4	−3.8	−7.9	−27.5	−14.1	5.5	6.6	2.4	−0.5	−3.6	−6.1
Lebanon	−0.7	2.5	1.4	0.4	0.8	−1.4	−0.3	−0.8	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia	−2.1	−0.9	−0.9	−0.8	−0.6	−0.8	0.0	−2.9	−3.3	−2.7	−1.0	−0.5	−0.2	−0.1	0.0
Mexico	−0.9	−1.7	−1.2	0.4	2.6	1.6	1.4	−0.5	0.0	1.3	1.0	1.3	1.5	1.5	1.5
Morocco	−2.5	−2.4	−2.2	−2.1	−0.9	−1.3	−1.5	−4.9	−4.2	−3.9	−3.9	−3.0	−2.2	−1.5	−1.1
Oman	2.6	−2.1	−16.1	−23.0	−12.7	−6.0	−5.3	−13.7	−1.2	7.2	7.6	6.6	5.4	4.8	4.2
Pakistan	−3.5	−0.3	−0.4	−0.1	−1.4	−1.8	−3.0	−1.5	−1.1	−1.0	0.5	0.4	0.6	0.7	0.6
Peru	1.7	0.7	−1.2	−1.3	−1.9	−0.9	−0.2	−6.9	−1.3	−1.1	−1.0	−0.3	0.1	0.3	0.3
Philippines	2.6	3.0	2.5	1.4	1.3	0.1	−0.1	−3.9	−4.6	−3.4	−2.6	−1.5	−0.9	−0.2	0.4
Poland	−1.7	−1.7	−0.8	−0.7	0.1	1.2	0.6	−5.8	−1.4	−2.8	−1.5	−2.0	−1.9	−1.8	−1.8
Qatar	22.8	16.6	22.9	−3.7	−1.5	7.1	6.3	3.4	5.9	9.9	13.2	10.9	9.2	9.1	11.0
Romania	−0.9	−0.6	−0.3	−1.2	−1.9	−1.6	−3.8	−8.5	−5.4	−6.4	−5.0	−4.6	−4.3	−4.1	−3.6
Russia	−0.8	−0.7	−3.1	−3.2	−1.0	3.4	2.2	−3.8	0.9	−3.8	−5.0	−4.6	−3.9	−2.7	−1.9
Saudi Arabia	5.2	−4.2	−17.9	−17.1	−11.7	−6.3	−4.4	−13.1	−2.2	5.9	5.1	4.7	4.6	4.8	4.9
South Africa	−1.2	−1.2	−1.4	−0.6	−0.8	−0.4	−1.1	−5.6	−2.2	−1.0	−0.9	−0.9	−0.6	−0.3	0.0
Sri Lanka	−0.6	−2.0	−2.2	−0.2	0.0	0.6	−2.0	−6.2	−6.2	−2.7	−2.5	−2.2	−2.1	−1.9	−1.8
Thailand	1.3	−0.1	0.7	1.0	0.1	0.6	−0.3	−4.2	−7.1	−5.1	−1.6	−1.4	−1.5	−1.4	−1.5
Turkey	0.8	0.5	0.6	−1.0	−0.9	−2.2	−2.9	−3.2	−1.8	−3.9	−3.7	−2.5	−2.5	−2.5	−2.5
Ukraine	−2.3	−1.2	3.0	1.9	1.5	1.1	1.1	−3.0	−1.1	−13.4	−7.3	−5.8	−4.9	−5.2	−4.1
United Arab Emirates	8.8	2.2	−3.2	−2.7	−1.5	1.4	0.7	−4.9	0.8	8.8	8.0	7.0	6.1	5.3	5.1
Uruguay[4]	0.4	−0.5	0.2	−0.2	−0.1	0.6	−0.5	−2.1	−0.6	−0.1	0.2	0.7	0.7	0.8	0.9
Venezuela	−8.1	−11.9	−9.0	−10.6	−23.0	−31.0	−10.0	−5.0	−4.4	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: "Primary balance" is defined as the overall balance, excluding net interest payments. For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] The data for Ecuador reflect net lending/borrowing for the nonfinancial public sector. Ecuadorian authorities, in the context of the Extended Fund Facility approved in March of 2019 and with technical support from IMF Staff, are revising historical fiscal data for the net lending/borrowing of the nonfinancial public sector to correct recently identified statistical errors, mostly in the recording of revenues and expenditures of local governments. Fiscal data reported in the table for 2018 and 2019 reflect the corrected series, while data for earlier years are still being revisited and will be corrected in subsequent *World Economic Outlook* releases as far back as 2012. The authorities are also reconciling historical revenue and expenditure data with financing data.

[2] The numbers are based on nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[3] Interest revenue is proxied by IMF staff estimates of investment income. The country team does not have the breakdown of investment income between interest revenue and dividends.

[4] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly. Starting in October 2018, the public pension system has been receiving transfers in the context of a new law that compensates persons affected by the creation of the mixed pension system. These funds are recorded as revenues, consistent with the IMF's methodology. Therefore, data and projections for 2018–21 have been affected by these transfers, which amounted to 1.2 percent of GDP in 2018 and 1.1 percent of GDP in 2019, and are projected to be 0.6 percent of GDP in 2020, 0.2 percent of GDP in 2021, and zero thereafter. See IMF country report No. 19/64 for further details. The disclaimer about the public pension system applies only to the revenues and net lending/borrowing series.

Table A11. Emerging Market and Middle-Income Economies: General Government Cyclically Adjusted Balance, 2013–27
(Percent of potential GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−2.5	−2.6	−3.6	−3.9	−3.6	−3.7	−4.6	−7.7	−5.1	−6.3	−5.9	−5.8	−5.7	−5.7	−5.6
Asia	−1.8	−1.7	−2.8	−3.5	−3.5	−4.2	−5.5	−8.4	−5.8	−6.9	−6.4	−6.4	−6.4	−6.4	−6.4
Europe	−2.1	−1.2	−2.2	−2.3	−1.6	−0.1	−0.9	−4.9	−2.1	−4.9	−4.9	−4.9	−4.5	−4.1	−3.6
Latin America	−3.6	−5.2	−6.4	−5.3	−4.8	−4.3	−3.5	−6.8	−4.1	−4.4	−4.1	−3.3	−3.0	−2.8	−2.8
MENA	−7.9	−9.4	−10.7	−10.5	−8.3	−7.6	−8.3	−8.4	−8.4	−7.8	−7.2	−7.3	−6.6	−5.7	−5.2
G20 Emerging	−2.4	−2.5	−3.8	−4.1	−3.8	−3.9	−4.9	−8.2	−5.1	−6.5	−6.3	−6.2	−6.2	−6.1	−6.1
Algeria	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Angola	−3.5	−6.4	0.3	−1.7	−3.7	3.7	2.1	0.8	2.9	2.1	1.0	0.4	−0.6	−0.8	−1.0
Argentina	−3.6	−3.4	−6.2	−6.0	−7.2	−5.0	−3.4	−5.5	−3.2	−3.2	−2.9	−3.1	−2.6	−1.9	−1.4
Belarus	−1.5	−0.8	−2.2	0.0	0.4	1.5	0.3	−3.1	−2.7	−2.8	0.2	0.8	1.7	1.7	1.8
Brazil	−4.6	−7.8	−10.3	−7.7	−6.8	−6.3	−5.4	−11.7	−4.0	−7.2	−7.2	−5.5	−4.8	−4.4	−4.5
Bulgaria	−1.3	−3.1	−2.7	1.4	0.7	0.1	−1.0	−1.9	−2.2	−2.1	−1.3	−1.1	0.0	0.2	0.3
Chile[1]	−0.5	−0.5	0.5	−1.0	−2.0	−1.5	−1.7	−2.2	−11.8	−4.5	−2.2	−1.2	−0.7	−0.4	−0.4
China	−0.9	−0.7	−2.2	−3.1	−3.2	−4.1	−5.7	−9.0	−5.4	−7.0	−6.5	−6.6	−6.7	−6.7	−6.8
Colombia	−1.5	−2.4	−3.9	−2.6	−2.3	−4.1	−2.0	−4.7	−6.5	−4.9	−2.4	−1.5	−1.0	−1.2	−1.3
Croatia	−6.4	−5.2	−3.0	−1.0	0.8	0.4	−0.9	−5.2	−3.7	−2.8	−2.3	−1.9	−1.7	−1.5	−1.4
Dominican Republic	−3.1	−4.3	−4.2	−3.8	−3.7	−3.3	−3.2	−7.6	−3.6	−3.4	−3.5	−3.6	−3.3	−2.9	−2.8
Ecuador[2]	−6.0	−6.5	−6.8	−7.6	−3.9	−2.6	−2.9	−4.3	−1.3	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[3]	−13.2	−11.6	−11.4	−12.0	−10.7	−9.5	−7.7	−7.0	−7.5	−6.8	−6.1	−7.0	−6.6	−6.0	−5.6
Hungary	−0.4	−1.7	−1.4	−1.2	−2.5	−3.0	−3.4	−7.5	−7.3	−5.9	−4.4	−3.3	−2.4	−1.0	1.2
India	−6.5	−6.6	−7.0	−7.4	−6.2	−6.8	−7.4	−8.7	−8.8	−8.9	−8.6	−8.2	−7.9	−7.7	−7.5
Indonesia	−2.5	−2.3	−2.7	−2.5	−2.4	−1.7	−2.2	−5.0	−3.6	−3.3	−2.6	−2.7	−2.5	−2.3	−2.2
Iran	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Kazakhstan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Kuwait	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Lebanon	−13.5	−13.5	−11.6	−11.5	−13.7	−12.5	−17.7	−10.7	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia	−3.2	−2.5	−2.7	−2.7	−2.6	−3.6	−1.6	−3.5	−4.6	−4.1	−2.8	−2.7	−2.9	−3.0	−2.9
Mexico	−3.6	−4.5	−4.2	−4.1	−2.6	−2.4	−2.1	−3.1	−2.7	−2.1	−2.4	−2.3	−2.4	−2.7	−2.8
Morocco	−5.9	−6.3	−4.6	−4.8	−4.2	−4.2	−4.1	−5.8	−6.3	−5.8	−5.4	−5.4	−4.5	−3.9	−3.5
Oman	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Pakistan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Peru	0.1	−0.1	−1.6	−1.8	−2.1	−1.6	−0.6	−5.9	−3.6	−3.1	−2.7	−2.1	−1.5	−1.4	−1.4
Philippines	0.2	0.7	0.6	−0.4	−0.5	−1.6	−1.6	−3.5	−5.8	−5.4	−4.7	−3.6	−3.0	−2.3	−1.7
Poland	−3.5	−3.0	−2.3	−1.8	−1.6	−1.2	−2.3	−5.5	−2.5	−4.5	−3.1	−3.7	−3.6	−3.4	−3.4
Qatar	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Romania	−1.6	−1.0	−0.5	−1.9	−3.4	−3.7	−5.6	−8.7	−6.6	−7.6	−6.5	−6.4	−6.3	−6.2	−5.8
Russia	−1.6	−0.1	−3.1	−3.2	−1.0	2.9	2.0	−4.4	0.4	−3.2	−4.3	−4.5	−3.9	−2.8	−1.9
Saudi Arabia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
South Africa	−4.0	−4.0	−4.1	−3.5	−3.7	−3.5	−3.8	−4.8	−3.9	−4.7	−5.3	−5.7	−6.3	−7.0	−7.6
Sri Lanka	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Thailand	0.3	−0.4	0.5	0.9	−0.3	0.1	−0.7	−2.8	−5.5	−4.1	−1.9	−1.7	−1.9	−2.3	−2.8
Turkey	−2.0	−1.6	−1.6	−2.1	−2.9	−4.1	−4.1	−3.8	−4.2	−7.2	−7.6	−6.8	−6.6	−6.8	−6.7
Ukraine	−4.6	−3.3	0.9	−1.2	−1.2	−1.9	−1.6	−4.4	−3.6	−14.4	−11.2	−10.2	−9.5	−9.6	−8.2
United Arab Emirates	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Uruguay[4]	−2.7	−3.4	−1.9	−2.6	−2.5	−1.9	−2.3	−3.3	−1.8	−2.2	−2.0	−1.8	−1.8	−1.7	−1.6
Venezuela	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] Data for these countries include adjustments beyond the output cycle.

[2] The data for Ecuador reflect net lending/borrowing for the nonfinancial public sector. Ecuadorian authorities, in the context of the Extended Fund Facility approved in March of 2019 and with technical support from IMF staff, are revising the historical fiscal data for the net lending/borrowing of the nonfinancial public sector to correct recently identified statistical errors, mostly in the recording of revenues and expenditures of local governments. Fiscal data reported in the table for 2018 and 2019 reflect the corrected series, while data for earlier years are still being revisited and will be corrected in subsequent *World Economic Outlook* releases as far back as 2012. The authorities are also reconciling historical revenue and expenditure data with financing data.

[3] These numbers are based on the nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[4] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly. Starting in October 2018, the public pension system has been receiving transfers in the context of a new law that compensates persons affected by the creation of the mixed pension system. These funds are recorded as revenues, consistent with the IMF's methodology. Therefore, data and projections for 2018–21 have been affected by these transfers, which amounted to 1.2 percent of GDP in 2018 and 1.1 percent of GDP in 2019, and are projected to be 0.6 percent of GDP in 2020, 0.2 percent of GDP in 2021, and zero thereafter. See IMF country report No. 19/64 for further details.

Table A12. Emerging Market and Middle-Income Economies: General Government Cyclically Adjusted Primary Balance, 2013–27
(Percent of potential GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−0.7	−0.8	−1.7	−2.0	−1.6	−1.8	−2.6	−5.8	−3.2	−4.2	−3.8	−3.7	−3.6	−3.5	−3.4
Asia	−0.6	−0.4	−1.6	−2.2	−2.0	−2.7	−4.0	−6.9	−4.2	−5.3	−4.7	−4.7	−4.7	−4.6	−4.6
Europe	−0.7	0.1	−1.0	−1.1	−0.5	1.0	0.2	−3.8	−1.1	−3.7	−3.4	−3.1	−2.7	−2.2	−1.8
Latin America	−0.5	−1.8	−2.0	−1.5	−0.9	−0.5	0.1	−3.6	−0.7	0.0	0.1	0.5	0.8	1.0	1.2
MENA	−3.6	−5.0	−6.2	−5.2	−3.6	−2.5	−2.9	−2.9	−3.2	−2.7	−2.3	−1.6	−1.0	−0.3	0.1
G20 Emerging	−0.7	−0.7	−1.9	−2.2	−1.8	−2.0	−3.0	−6.4	−3.2	−4.5	−4.2	−4.1	−4.1	−4.0	−3.9
Algeria	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Angola	−2.6	−5.3	1.8	0.7	−0.6	8.0	7.2	6.5	8.1	6.5	4.6	3.7	2.9	2.4	1.9
Argentina	−3.0	−2.7	−4.6	−4.1	−4.7	−1.8	0.5	−3.3	−1.5	−1.5	−1.3	−0.5	0.5	1.5	2.0
Belarus	−0.5	0.2	−0.6	1.9	2.4	3.5	2.0	−1.5	−1.1	−0.9	2.1	2.6	3.4	3.4	3.3
Brazil	0.3	−2.1	−2.0	−1.4	−0.9	−1.0	−0.5	−7.7	1.1	−0.1	−0.3	0.1	0.3	0.6	1.0
Bulgaria	−0.8	−2.9	−2.3	1.7	1.0	0.3	−0.8	−1.7	−2.2	−2.0	−1.2	−0.9	0.2	0.4	0.4
Chile[1]	−0.4	−0.4	0.7	−0.7	−1.6	−1.1	−1.3	−1.7	−11.2	−4.1	−1.8	−0.8	−0.3	0.0	0.2
China	−0.4	−0.2	−1.7	−2.4	−2.4	−3.3	−4.9	−8.1	−4.5	−6.1	−5.5	−5.6	−5.6	−5.6	−5.6
Colombia	0.5	−0.8	−2.1	−0.6	−0.3	−1.9	0.4	−2.3	−3.6	−1.8	0.8	1.5	2.3	2.3	1.8
Croatia	−3.6	−2.3	0.1	1.9	3.3	2.5	1.2	−3.5	−2.4	−1.5	−1.2	−0.9	−0.6	−0.7	−0.6
Dominican Republic	−0.9	−2.0	−1.9	−1.3	−1.2	−0.7	−0.5	−4.6	−0.6	−0.5	−0.4	−0.4	0.0	0.3	0.4
Ecuador[2]	−5.0	−5.4	−5.4	−6.1	−1.8	−0.1	−0.2	−1.5	0.0	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[3]	−6.1	−4.5	−4.6	−3.9	−2.7	−0.5	1.6	2.1	1.1	1.3	1.9	1.8	1.7	1.7	1.6
Hungary	3.7	2.0	1.9	1.7	0.0	−0.7	−1.1	−5.2	−5.2	−4.0	−2.4	−1.1	0.2	1.9	3.9
India	−2.0	−2.2	−2.5	−2.8	−1.4	−2.0	−2.7	−3.9	−3.8	−3.6	−3.2	−2.8	−2.4	−2.2	−1.9
Indonesia	−1.3	−1.1	−1.3	−1.0	−0.8	0.0	−0.4	−3.0	−1.7	−0.8	−0.2	−0.4	−0.4	−0.4	−0.3
Iran	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Kazakhstan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Kuwait	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Lebanon	−5.5	−4.9	−2.8	−2.1	−3.9	−2.0	−7.1	−6.1	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia	−1.9	−0.8	−1.1	−0.9	−0.8	−1.7	0.4	−1.8	−2.5	−2.0	−0.5	−0.2	−0.2	−0.2	0.0
Mexico	−0.9	−1.7	−1.4	−0.9	1.1	1.4	1.6	0.6	0.9	2.2	1.6	1.8	1.8	1.6	1.6
Morocco	−3.3	−3.6	−1.9	−2.2	−1.7	−1.7	−1.8	−3.3	−3.1	−3.5	−3.1	−3.2	−2.3	−1.6	−1.3
Oman	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Pakistan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Peru[1]	1.1	0.8	−0.6	−0.9	−1.1	−0.5	0.6	−4.6	−2.3	−1.8	−1.6	−1.0	−0.6	−0.6	−0.7
Philippines	2.6	2.8	2.6	1.4	1.2	0.1	−0.1	−1.8	−3.9	−3.3	−2.6	−1.5	−1.0	−0.2	0.4
Poland	−1.0	−1.0	−0.5	−0.2	−0.1	0.3	−0.9	−4.3	−1.3	−3.2	−1.7	−2.2	−2.0	−1.8	−1.8
Qatar	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Romania	0.0	0.5	0.7	−0.7	−2.3	−2.3	−4.4	−7.4	−5.1	−6.0	−4.7	−4.5	−4.2	−4.0	−3.5
Russia	−1.2	0.3	−2.8	−2.8	−0.5	3.4	2.3	−4.1	0.7	−3.0	−4.1	−4.2	−3.7	−2.6	−1.8
Saudi Arabia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
South Africa	−1.4	−1.2	−1.2	−0.4	−0.5	−0.1	−0.3	−1.1	0.0	−0.1	−0.2	−0.1	0.0	0.2	0.4
Sri Lanka	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Thailand	1.1	0.3	1.1	1.3	0.2	0.6	−0.2	−2.4	−4.8	−3.2	−0.6	−0.1	−0.1	−0.3	−0.6
Turkey	0.3	0.4	0.3	−0.7	−1.5	−2.6	−2.3	−2.0	−2.5	−4.2	−3.9	−2.7	−2.6	−2.5	−2.5
Ukraine	−2.2	0.0	4.8	2.8	2.4	1.3	1.4	−1.6	−0.8	−10.8	−6.2	−4.8	−4.1	−4.5	−3.5
United Arab Emirates	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Uruguay[4]	−0.4	−1.2	0.2	−0.2	−0.2	0.6	−0.1	−0.9	0.2	0.1	0.3	0.7	0.7	0.8	0.9
Venezuela	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: "Cyclically adjusted primary balance" is defined as the cyclically adjusted balance plus net interest payable/paid (interest expense minus interest revenue) following the *World Economic Outlook* convention. For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] Data for these countries include adjustments beyond the output cycle. For country-specific details, see "Data and Conventions" in text and Table C.

[2] The data for Ecuador reflect net lending/borrowing for the nonfinancial public sector. Ecuadorian authorities, in the context of the Extended Fund Facility approved in March of 2019 and with technical support from IMF staff, are revising the historical fiscal data for the net lending/borrowing of the nonfinancial public sector to correct recently identified statistical errors, mostly in the recording of revenues and expenditures of local governments. Fiscal data reported in the table for 2018 and 2019 reflect the corrected series, while data for earlier years are still being revised and will be corrected in subsequent *World Economic Outlook* releases as far back as 2012. The authorities are also reconciling historical revenue and expenditure data with financing data.

[3] These numbers are based on the nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[4] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly. Starting in October 2018, the public pension system has been receiving transfers in the context of a new law that compensates persons affected by the creation of the mixed pension system. These funds are recorded as revenues, consistent with the IMF's methodology. Therefore, data and projections for 2018–21 have been affected by these transfers, which amounted to 1.2 percent of GDP in 2018 and 1.1 percent of GDP in 2019, and are projected to be 0.6 percent of GDP in 2020, 0.2 percent of GDP in 2021, and zero thereafter. See IMF Country Report No. 19/64 for further details.

Table A13. Emerging Market and Middle-Income Economies: General Government Revenue, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	29.0	28.4	27.3	26.8	27.2	27.7	27.1	25.1	26.1	25.7	25.6	25.6	25.6	25.5	25.5
Asia	25.4	25.6	26.3	26.1	26.2	26.3	25.6	23.6	24.9	24.1	24.1	24.2	24.3	24.4	24.5
Europe	34.4	34.4	33.4	33.8	33.8	35.2	35.2	34.6	35.3	34.4	34.4	34.4	34.5	34.3	34.2
Latin America	29.8	28.9	26.4	26.8	27.2	27.1	27.2	25.9	27.0	27.3	27.3	27.2	27.1	27.1	26.9
MENA	36.5	33.4	28.2	24.5	26.4	29.2	27.8	23.1	23.3	26.0	25.6	24.8	24.2	23.7	23.4
G20 Emerging	28.6	28.2	27.5	27.5	27.7	27.8	27.3	25.4	26.7	25.9	25.8	25.8	25.9	25.9	25.9
Algeria	35.8	33.3	30.5	28.6	32.0	33.4	32.3	30.1	29.6	30.6	28.8	28.1	27.6	27.5	27.3
Angola	36.7	30.7	24.1	17.5	17.5	22.9	21.2	20.9	22.1	21.3	19.3	18.1	17.2	16.6	16.0
Argentina	34.3	34.6	35.4	34.9	34.4	33.5	33.3	33.5	33.5	34.1	34.8	35.7	36.4	36.8	37.1
Belarus	39.8	38.9	38.8	39.0	38.7	39.6	38.3	35.2	35.4	33.7	35.1	35.6	36.6	36.7	36.8
Brazil	34.5	32.5	28.2	30.7	30.5	30.7	31.5	29.5	31.5	30.9	30.8	30.3	30.1	30.1	29.6
Bulgaria	33.7	33.4	34.5	34.2	32.8	34.4	34.9	35.0	37.5	36.6	37.3	37.3	37.5	37.0	36.6
Chile	22.6	22.4	22.9	22.7	22.9	24.1	23.7	22.1	25.9	25.4	25.7	25.8	25.5	25.4	25.2
China	27.7	28.2	29.0	28.9	29.2	29.0	28.1	25.7	27.0	26.0	26.0	26.1	26.1	26.2	26.3
Colombia	29.0	29.5	27.8	27.7	26.8	30.0	29.4	26.6	27.7	29.8	31.8	31.4	30.8	30.1	29.8
Croatia	42.2	42.8	44.6	45.9	45.5	45.7	46.3	47.1	47.3	48.4	47.6	45.9	47.0	45.5	43.5
Dominican Republic	14.2	14.2	16.6	13.9	14.0	14.2	14.4	14.2	15.6	14.6	14.4	14.4	14.4	14.4	14.4
Ecuador[1]	39.2	38.4	33.6	30.3	32.0	35.6	33.7	29.6	34.0	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[2]	21.7	24.4	22.0	20.3	21.8	20.7	20.3	19.2	20.0	21.4	21.4	21.5	21.4	21.3	21.1
Hungary	47.6	47.4	48.4	45.0	44.0	43.7	43.6	43.3	40.2	41.1	41.8	42.2	42.6	42.8	43.6
India	19.6	19.1	19.9	20.1	20.0	20.0	19.9	18.3	19.7	18.9	19.1	19.4	19.7	19.9	20.1
Indonesia	16.9	16.5	14.9	14.3	14.1	14.9	14.2	12.5	13.6	13.5	13.4	13.5	13.9	14.1	14.2
Iran	12.5	13.1	14.8	15.3	15.5	13.7	9.3	7.9	8.2	8.9	8.8	8.9	9.0	9.0	9.2
Kazakhstan	24.8	23.7	16.6	17.0	19.8	21.4	19.7	17.5	18.7	21.7	20.6	20.4	20.3	20.1	19.9
Kuwait	72.0	65.8	58.9	54.5	53.8	58.2	55.2	52.8	51.9	55.0	58.9	57.2	55.4	53.1	51.2
Lebanon	20.1	22.6	19.1	19.3	21.8	20.9	20.7	13.8	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia	24.3	23.3	22.2	20.3	19.6	20.2	21.6	20.6	18.3	17.4	16.9	16.9	16.8	16.7	16.7
Mexico	24.1	23.4	23.5	24.6	24.6	23.5	23.6	24.2	23.3	24.4	23.3	23.5	23.5	23.5	23.6
Morocco	27.8	28.0	26.1	26.1	26.6	26.1	25.6	28.6	26.3	27.7	27.3	27.8	28.1	28.5	28.5
Oman	48.0	45.5	35.2	28.7	33.2	36.2	39.2	30.4	34.8	35.5	35.1	34.3	33.0	32.1	31.0
Pakistan	12.0	13.5	12.9	13.8	14.0	13.4	11.3	13.3	12.5	12.6	12.9	12.9	13.1	13.2	13.2
Peru	22.3	22.4	20.3	18.8	18.3	19.4	19.9	17.9	21.1	20.5	20.5	20.5	20.6	20.6	20.7
Philippines	18.0	18.1	18.5	18.3	18.7	19.3	20.0	20.6	20.4	20.7	20.6	21.2	21.3	21.6	21.9
Poland	38.8	39.0	39.1	38.7	39.8	41.3	41.0	41.5	42.0	39.4	40.5	40.1	39.8	39.4	38.9
Qatar	49.8	47.7	60.0	34.9	31.8	34.5	37.0	35.7	33.5	37.2	40.2	37.7	35.6	35.1	35.7
Romania	31.6	31.7	32.8	28.9	28.0	29.2	28.9	28.8	30.7	30.9	30.4	31.3	32.0	30.9	30.9
Russia	33.5	33.9	31.9	32.9	33.4	35.5	35.7	35.3	37.0	34.9	34.9	35.0	35.3	35.3	35.6
Saudi Arabia	41.2	36.7	25.0	21.5	24.1	29.6	30.8	29.5	30.8	31.5	31.5	31.5	31.6	31.7	31.6
South Africa	25.0	25.4	25.8	26.2	25.8	26.4	26.8	25.1	26.7	27.5	27.1	26.6	26.6	26.6	26.7
Sri Lanka	12.0	11.6	13.3	14.1	13.8	13.5	12.6	9.2	8.9	10.8	10.8	11.0	11.0	11.1	11.2
Thailand	22.2	21.4	22.3	21.9	21.1	21.4	21.0	20.7	20.3	20.1	20.7	20.8	20.8	20.8	20.8
Turkey	32.5	31.6	31.9	32.5	31.2	30.8	30.9	28.9	28.0	28.5	28.6	29.3	29.4	29.5	29.6
Ukraine	43.3	40.3	41.9	38.3	39.3	39.6	39.4	40.0	36.6	27.8	29.7	29.9	30.1	30.2	30.4
United Arab Emirates	38.7	35.0	29.0	28.9	28.6	30.0	30.7	27.9	31.7	37.9	37.6	36.3	34.9	33.5	32.7
Uruguay[3]	27.2	26.6	26.6	27.1	27.5	28.8	28.3	28.1	28.3	26.5	26.7	27.0	27.0	27.1	27.2
Venezuela	28.4	34.6	19.7	14.3	14.7	17.4	11.4	5.9	5.6	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] The data for Ecuador reflect net lending/borrowing for the nonfinancial public sector. Ecuadorian authorities, in the context of the Extended Fund Facility approved in March of 2019 and with technical support from IMF staff, are revising the historical fiscal data for the net lending/borrowing of the nonfinancial public sector to correct recently identified statistical errors, mostly in the recording of revenues and expenditures of local governments. Fiscal data reported in the table for 2018 and 2019 reflect the corrected series, while data for earlier years are still being revised and will be corrected in subsequent *World Economic Outlook* releases as far back as 2012. The authorities are also reconciling historical revenue and expenditure data with financing data.

[2] These numbers are based on the nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[3] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly. Starting in October 2018, the public pension system has been receiving transfers in the context of a new law that compensates persons affected by the creation of the mixed pension system. These funds are recorded as revenues, consistent with the IMF's methodology. Therefore, data and projections for 2018–21 have been affected by these transfers, which amounted to 1.2 percent of GDP in 2018 and 1.1 percent of GDP in 2019, and are projected to be 0.6 percent of GDP in 2020, 0.2 percent of GDP in 2021, and zero thereafter. See IMF Country Report No. 19/64 for further details. The disclaimer about the public pension system applies only to the revenues and net lending/borrowing series.

Table A14. Emerging Market and Middle-Income Economies: General Government Expenditure, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	30.6	30.8	31.4	31.4	31.1	31.2	31.6	34.4	31.4	31.5	31.1	31.0	30.9	30.8	30.7
Asia	27.1	27.4	29.4	29.8	29.9	30.6	31.3	34.0	31.5	31.8	31.1	31.0	31.0	31.0	31.0
Europe	36.0	35.9	36.1	36.5	35.5	34.9	35.8	40.1	37.2	39.0	39.2	39.0	38.8	38.2	37.7
Latin America	32.9	33.9	32.9	32.8	32.6	32.1	31.3	34.6	31.5	32.0	31.5	30.6	30.1	29.8	29.6
MENA	33.5	35.2	35.9	33.7	31.7	31.2	30.7	31.1	26.4	24.5	25.5	25.8	25.7	25.7	25.6
G20 Emerging	30.4	30.6	31.8	32.1	31.7	31.9	32.5	35.4	32.3	32.7	32.2	32.1	31.9	31.9	31.8
Algeria	36.2	40.6	45.8	41.7	38.6	37.8	37.9	36.9	33.4	35.6	34.4	34.5	34.4	35.0	35.6
Angola	37.0	36.5	27.1	22.0	24.1	20.6	20.4	22.8	19.3	18.2	17.7	17.4	17.7	17.5	17.2
Argentina	37.6	38.9	41.4	41.5	41.1	38.9	37.7	42.1	38.1	37.9	38.0	38.7	39.0	38.8	38.5
Belarus	40.8	38.8	41.8	40.7	39.0	37.8	37.4	38.0	37.1	38.1	36.4	35.7	35.6	35.7	35.6
Brazil	37.4	38.5	38.5	39.6	38.3	37.7	37.4	42.9	35.9	38.5	38.2	35.9	35.0	34.5	34.1
Bulgaria	35.5	37.1	37.3	32.7	32.0	34.3	35.9	38.0	40.4	39.4	38.8	38.3	37.5	36.8	36.4
Chile	23.1	23.9	25.0	25.4	25.5	25.6	26.5	29.3	33.4	26.8	26.2	26.1	25.7	25.6	25.4
China	28.6	28.9	31.6	32.3	32.6	33.3	34.2	36.4	33.0	33.7	33.1	33.1	33.1	33.1	33.1
Colombia	30.0	31.3	31.3	30.0	29.3	34.7	32.9	33.6	34.5	34.4	34.0	32.8	31.6	31.1	30.9
Croatia	47.6	48.2	48.0	46.8	44.7	45.4	46.0	54.5	51.0	51.4	49.8	47.8	48.6	47.0	44.9
Dominican Republic	17.7	17.0	16.7	17.0	17.1	16.4	16.6	22.1	18.5	17.3	17.2	17.2	16.9	16.8	16.8
Ecuador[1]	43.7	43.6	39.7	38.6	36.5	37.7	36.4	35.7	35.5	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[2]	34.6	35.7	33.0	32.7	32.2	30.1	28.3	27.0	27.3	28.2	27.6	28.6	28.1	27.4	26.7
Hungary	50.2	50.1	50.4	46.8	46.4	45.8	45.7	51.4	47.0	46.6	45.7	45.2	44.6	43.7	42.8
India	26.6	26.2	27.1	27.2	26.2	26.3	27.4	31.1	30.1	28.8	28.2	27.9	27.7	27.6	27.6
Indonesia	19.1	18.6	17.5	16.8	16.6	16.6	16.4	18.6	18.2	17.5	16.4	16.4	16.5	16.5	16.5
Iran	13.3	14.2	16.3	17.0	17.1	15.3	13.8	13.0	12.7	12.8	15.6	16.4	16.8	17.2	17.6
Kazakhstan	19.8	21.3	22.9	21.5	24.1	18.8	20.2	24.5	22.8	22.2	21.1	20.8	20.7	20.7	20.9
Kuwait	38.1	44.3	54.4	53.8	51.4	51.0	52.2	65.5	52.4	38.5	40.6	42.5	43.4	44.0	44.5
Lebanon	28.9	28.8	26.6	28.2	30.4	32.1	30.9	19.6	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia	27.8	26.0	24.7	22.9	22.0	22.8	23.6	25.3	23.8	22.2	20.3	20.0	19.7	19.6	19.6
Mexico	27.8	28.0	27.5	27.4	25.7	25.7	26.0	28.7	27.1	27.6	26.5	26.4	26.3	26.3	26.4
Morocco	32.9	33.2	31.0	30.8	30.1	29.8	29.4	36.1	32.7	33.9	33.5	33.1	32.5	32.2	31.9
Oman	44.9	47.4	50.9	51.2	45.2	43.9	44.7	46.9	37.4	29.8	28.8	28.9	28.6	28.1	27.5
Pakistan	19.4	17.9	17.6	17.7	19.1	19.1	19.1	20.3	18.6	18.4	17.1	17.2	17.0	16.8	16.6
Peru	21.6	22.6	22.4	21.1	21.2	21.4	21.3	26.2	23.7	23.0	22.5	21.9	21.4	21.2	21.1
Philippines	17.9	17.3	17.9	18.7	19.1	20.9	21.7	26.4	26.8	26.2	25.3	24.7	24.2	23.8	23.6
Poland	43.0	42.6	41.7	41.1	41.3	41.5	41.8	48.7	44.5	43.6	43.4	43.6	43.2	42.8	42.3
Qatar	28.3	32.3	38.6	40.1	34.7	28.9	32.5	34.7	29.4	28.6	28.4	28.2	27.7	27.2	25.8
Romania	34.1	33.9	34.3	31.3	30.9	32.2	33.8	38.6	37.6	38.9	37.2	37.9	38.5	37.3	36.8
Russia	34.7	34.9	35.3	36.6	34.8	32.6	33.8	39.3	36.3	38.9	40.2	39.8	39.4	38.3	37.6
Saudi Arabia	35.5	40.2	40.8	35.6	33.3	35.2	35.1	40.8	33.2	26.0	26.8	27.1	27.3	27.2	27.1
South Africa	28.9	29.3	30.2	29.9	29.9	30.2	31.5	34.9	33.2	33.3	33.2	33.2	33.6	34.1	34.6
Sri Lanka	17.2	17.9	20.4	19.5	19.3	18.8	20.6	21.9	21.5	20.1	21.3	21.3	21.4	21.5	21.5
Thailand	21.6	22.2	22.2	21.3	21.5	21.4	21.8	25.4	28.1	26.2	23.7	24.0	24.2	24.3	24.5
Turkey	33.9	33.1	33.2	34.8	33.3	34.6	35.7	34.0	31.5	35.3	36.1	35.9	36.0	36.3	36.3
Ukraine	48.1	44.8	43.0	40.6	41.6	41.7	41.3	45.9	40.6	45.6	42.8	41.8	41.1	41.1	39.7
United Arab Emirates	30.3	33.1	32.4	31.7	30.2	28.9	30.3	33.1	31.4	29.9	30.7	30.5	30.0	29.2	28.6
Uruguay[3]	28.9	29.2	28.5	29.8	30.1	30.7	31.1	32.8	30.9	29.0	28.8	28.8	28.8	28.8	28.8
Venezuela	39.7	50.1	30.3	25.2	37.7	48.4	21.4	10.9	10.1	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] The data for Ecuador reflect net lending/borrowing for the nonfinancial public sector. Ecuadorian authorities, in the context of the Extended Fund Facility approved in March of 2019 and with technical support from IMF staff, are revising the historical fiscal data for the net lending/borrowing of the nonfinancial public sector to correct recently identified statistical errors, mostly in the recording of revenues and expenditures of local governments. Fiscal data reported in the table for 2018 and 2019 reflect the corrected series, while data for earlier years are still being revised and will be corrected in subsequent *World Economic Outlook* releases as far back as 2012. The authorities are also reconciling historical revenue and expenditure data with financing data.

[2] These numbers are based on the nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[3] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly.

Table A15. Emerging Market and Middle-Income Economies: General Government Gross Debt, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	38.3	40.3	43.8	48.4	50.5	52.3	54.6	64.9	66.1	67.4	69.8	72.1	74.2	75.9	77.2
Asia	41.3	43.4	45.0	50.0	52.8	54.5	57.6	68.9	72.9	76.5	79.5	82.6	85.4	87.7	89.6
Europe	26.6	28.9	31.1	31.9	30.0	29.7	29.2	37.9	36.3	37.1	38.6	40.1	41.6	42.9	43.5
Latin America	47.4	49.6	53.1	56.5	61.1	67.5	68.4	77.8	72.4	71.7	71.9	71.8	71.5	71.0	70.2
MENA	24.0	24.0	34.8	43.1	43.2	41.0	44.4	53.8	52.6	43.1	42.9	43.3	43.5	43.5	43.6
G20 Emerging	38.5	40.9	44.0	48.8	51.4	53.1	55.9	66.5	68.3	71.3	74.6	77.5	80.2	82.4	84.2
Algeria	7.1	7.7	8.7	20.4	26.8	38.3	46.2	51.3	62.5	56.6	61.6	66.3	70.1	73.7	78.0
Angola	33.1	39.8	57.1	75.7	69.3	93.0	113.6	136.8	86.3	57.9	54.6	49.9	44.2	40.2	36.1
Argentina	43.5	44.7	52.6	53.1	57.0	85.2	88.8	102.8	80.6	74.4	74.3	73.4	70.3	66.6	63.0
Belarus	36.9	38.8	53.0	53.5	53.2	47.5	41.0	47.5	41.2	51.0	49.1	46.8	44.9	42.9	40.8
Brazil[1]	60.2	62.3	72.6	78.3	83.6	85.6	87.9	98.7	93.0	91.9	92.8	93.4	94.2	94.9	94.3
Bulgaria	17.2	26.3	25.4	27.0	22.9	20.1	18.3	23.3	23.8	23.1	25.1	26.9	25.6	24.1	22.6
Chile	12.8	15.0	17.4	21.1	23.7	25.8	28.3	32.6	36.3	38.3	38.4	37.6	37.8	37.9	37.9
China	37.0	40.0	41.5	48.2	51.7	53.8	57.2	68.1	73.3	77.8	81.8	85.8	89.6	92.8	95.4
Colombia	37.6	43.3	50.4	49.8	49.4	53.6	52.4	65.7	64.6	60.6	59.2	57.5	56.3	54.5	52.9
Croatia	80.0	83.7	83.3	79.7	76.5	73.2	71.1	87.3	80.9	78.1	74.7	72.8	70.8	69.0	67.2
Dominican Republic	46.7	44.9	44.9	46.6	48.9	50.5	53.6	71.5	63.0	59.4	57.8	56.9	55.9	54.6	53.2
Ecuador[2]	20.0	28.0	35.2	44.6	47.0	49.1	51.4	60.9	62.2	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[3]	84.0	85.1	88.3	96.8	103.0	92.5	84.2	89.6	93.5	94.0	89.6	88.2	86.1	83.6	80.7
Hungary	77.4	76.7	75.8	74.8	72.1	69.1	65.5	80.0	78.1	75.9	73.5	72.3	69.7	66.6	62.1
India	67.7	67.1	69.0	68.9	69.7	70.4	75.1	90.1	86.8	86.9	86.6	86.1	85.3	84.7	84.2
Indonesia	24.9	24.7	27.0	28.0	29.4	30.4	30.6	39.8	42.8	42.7	42.7	42.5	42.3	41.8	41.3
Iran	11.8	12.6	37.0	48.3	45.0	40.8	42.4	45.6	48.3	40.3	39.9	40.6	41.5	42.2	43.1
Kazakhstan	12.6	14.5	21.9	19.7	19.9	20.3	19.9	26.4	25.9	27.6	29.4	31.3	33.2	35.6	37.7
Kuwait	3.1	3.4	4.7	10.0	20.5	15.1	11.6	11.7	8.7	12.3	12.1	11.9	12.2	15.1	23.6
Lebanon	135.3	138.3	140.5	145.7	149.2	154.0	171.1	135.0	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia	55.7	55.4	57.0	55.8	54.4	55.6	57.1	67.8	69.0	69.2	68.9	68.8	68.4	68.3	68.4
Mexico	45.9	48.9	52.8	56.7	54.0	53.6	53.3	60.3	57.6	58.4	58.9	59.2	59.5	59.8	60.1
Morocco	61.7	63.3	63.7	64.9	65.1	65.2	64.8	76.4	76.3	77.1	77.5	78.0	77.8	77.1	76.4
Oman	5.3	4.6	15.8	33.7	45.9	51.3	60.5	71.4	65.3	44.0	37.6	32.5	27.8	23.3	19.1
Pakistan	57.9	57.1	57.0	60.8	60.9	64.8	77.5	79.6	74.0	71.3	66.8	64.4	62.5	60.2	57.9
Peru	20.0	20.6	24.1	24.5	25.4	26.2	27.1	35.1	35.9	34.4	34.7	34.4	34.0	33.6	32.9
Philippines	43.8	40.2	39.6	37.3	38.1	37.1	37.0	51.7	57.5	60.0	60.9	60.8	60.1	58.7	56.7
Poland	56.5	51.1	51.3	54.2	50.6	48.8	45.6	57.4	55.5	53.3	49.2	49.3	49.6	50.0	50.6
Qatar	30.9	24.9	35.5	46.7	51.6	52.2	62.1	72.6	58.4	46.0	44.5	42.7	41.0	38.6	36.2
Romania	39.1	40.4	39.4	39.0	36.8	36.5	36.8	49.6	51.4	56.0	58.6	61.4	64.0	66.4	68.2
Russia	12.3	15.1	15.3	14.8	14.3	13.6	13.7	19.2	17.0	16.8	18.9	20.0	20.9	21.4	21.2
Saudi Arabia	2.1	1.6	5.8	13.1	17.2	18.3	22.5	32.4	30.0	24.1	24.5	24.4	23.9	23.3	22.6
South Africa	40.4	43.3	45.2	47.1	48.6	51.6	56.3	69.4	69.1	70.2	73.4	76.7	80.1	83.7	87.5
Sri Lanka	71.8	72.2	78.5	79.0	77.9	84.2	86.8	101.2	107.2	109.0	107.5	109.2	111.5	114.2	117.5
Thailand	42.2	43.3	42.6	41.7	41.8	41.9	41.1	49.8	58.0	62.7	61.4	63.2	62.7	61.0	61.2
Turkey	31.2	28.5	27.4	28.0	28.0	30.2	32.7	39.5	41.6	43.7	45.0	45.3	46.8	48.9	48.9
Ukraine	40.5	70.3	79.5	79.5	71.6	60.4	50.5	61.0	49.0	86.2	78.0	78.7	82.9	88.7	92.3
United Arab Emirates	16.0	14.2	16.7	19.4	21.6	20.9	27.1	40.4	38.3	31.7	32.7	32.5	32.0	31.2	30.1
Uruguay[4]	50.3	51.4	58.2	56.8	56.5	58.6	60.5	68.1	67.5	65.7	66.4	66.9	67.1	66.8	67.0
Venezuela	33.2	25.1	11.0	5.1	26.0	180.8	232.8	304.1	307.0	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] "Gross debt" refers to the nonfinancial public sector, excluding Eletrobras and Petrobras and including sovereign debt held on the balance sheet of the central bank.

[2] In late 2016, the authorities changed the definition of "debt" to a consolidated basis, which in 2016 was 11.5 percent of GDP lower than the previous aggregate definition. Both the historic and projection numbers are now presented on a consolidated basis.

[3] These numbers are based on the nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[4] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly.

Table A16. Emerging Market and Middle-Income Economies: General Government Net Debt, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	23.2	24.6	29.0	34.7	36.0	36.7	38.1	45.4	46.2	44.0	44.0	44.4	44.7	44.8	44.6
Asia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Europe	31.6	30.2	29.3	31.2	29.9	30.3	29.0	36.4	39.1	39.0	38.0	38.9	39.6	40.5	40.5
Latin America	29.2	31.7	34.9	40.3	42.5	43.0	44.2	51.7	49.2	50.4	51.6	52.3	52.8	53.2	53.1
MENA	−6.7	−3.0	12.9	27.8	28.5	29.4	33.7	42.0	45.5	36.3	34.9	34.6	34.2	33.6	33.0
G20 Emerging	21.6	23.1	26.0	31.9	34.9	35.8	37.4	44.7	44.8	44.0	45.0	. . .	. . .	. . .	. . .
Algeria	−30.0	−21.8	−7.6	13.3	21.2	25.6	30.6	43.3	51.4	51.2	56.3	61.2	65.2	69.1	72.9
Angola	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Argentina	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Belarus	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Brazil	30.5	32.6	35.6	46.1	51.4	52.8	54.7	62.5	57.2	59.0	61.5	63.4	64.9	66.2	66.4
Bulgaria	6.5	13.1	15.4	11.3	10.3	9.0	8.4	13.4	13.7	14.2	16.6	18.8	17.7	16.5	15.4
Chile	−5.6	−4.4	−3.5	0.9	4.4	5.7	8.0	13.4	20.0	20.6	20.6	20.4	20.1	19.9	19.7
China	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Colombia	26.9	32.9	42.1	38.6	38.6	43.1	43.1	54.6	56.9	55.1	55.0	53.6	52.1	50.6	49.4
Croatia	64.8	68.8	70.1	67.8	64.7	61.5	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Dominican Republic	39.0	37.6	37.5	38.5	40.3	41.4	43.4	57.5	49.3	45.8	44.5	43.6	42.6	41.2	39.9
Ecuador	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Egypt[1]	73.7	77.1	79.4	86.2	91.3	84.8	78.5	83.8	88.6	89.1	84.7	83.3	81.2	78.7	75.8
Hungary	71.1	70.4	70.6	67.9	65.1	62.1	58.5	73.1	71.2	69.0	66.5	65.3	62.7	59.6	54.9
India	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Indonesia	20.6	20.4	22.0	23.5	25.3	26.7	27.0	36.1	39.5	39.7	39.9	40.0	39.9	39.7	39.3
Iran	−3.4	−3.4	21.6	36.8	32.9	29.3	32.7	37.4	41.5	34.0	33.6	34.3	35.2	36.0	36.9
Kazakhstan	−17.6	−19.1	−30.8	−23.8	−15.8	−15.8	−13.9	−8.6	−3.5	−4.9	−3.8	−3.8	−3.7	−3.5	−2.9
Kuwait	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Lebanon	126.0	129.9	134.0	140.0	143.6	149.7	165.9	132.6	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Malaysia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Mexico	40.0	42.6	46.5	48.7	45.7	44.9	44.5	51.7	50.0	50.7	51.2	51.5	51.9	52.2	52.4
Morocco	61.2	62.8	63.1	64.4	64.8	64.9	64.5	75.7	75.7	76.6	76.9	77.4	77.3	76.6	75.8
Oman	−44.2	−44.9	−42.2	−27.8	−11.9	7.3	12.9	29.0	26.5	14.5	8.2	2.8	−1.6	−5.5	−8.9
Pakistan	54.6	52.2	52.5	55.1	55.9	59.9	70.2	72.9	66.4	65.4	61.7	59.9	58.4	56.5	54.6
Peru	1.5	2.7	5.3	7.0	8.7	10.2	11.2	20.4	19.4	20.1	20.9	21.3	21.0	20.6	20.0
Philippines	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Poland	51.7	45.1	46.4	47.6	44.3	41.6	38.3	45.3	43.4	41.2	37.1	37.2	37.5	37.9	38.5
Qatar	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Romania	28.4	28.3	28.3	26.4	25.7	26.5	28.7	40.2	42.2	47.0	49.8	52.8	55.5	58.0	60.0
Russia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Saudi Arabia	−50.9	−47.1	−35.9	−17.1	−7.7	−0.1	4.9	15.8	17.7	8.6	4.1	−0.3	−4.6	−9.0	−13.2
South Africa	35.2	38.1	41.0	42.1	43.8	46.6	50.8	62.6	63.3	66.9	70.8	74.5	78.2	82.0	86.1
Sri Lanka	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Thailand	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Turkey	25.8	23.7	22.8	23.3	22.1	24.3	25.6	30.8	38.2	38.7	39.6	41.3	43.0	45.3	45.2
Ukraine	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
United Arab Emirates	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Uruguay[2]	39.7	41.6	45.6	45.6	45.7	47.9	51.2	57.9	57.4	55.6	56.5	57.0	57.3	57.2	57.4
Venezuela	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table C. MENA = Middle East and North Africa.

[1] These numbers are based on the nominal GDP series before the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

[2] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly.

Table A17. Low-Income Developing Countries: General Government Overall Balance, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	–3.4	–3.2	–3.9	–3.8	–3.7	–3.3	–3.5	–5.1	–4.9	–5.2	–4.6	–4.3	–4.2	–4.1	–4.0
Oil Producers	–3.0	–2.9	–4.6	–5.3	–5.4	–4.1	–4.5	–5.4	–5.8	–5.7	–5.3	–5.5	–5.7	–5.8	–6.0
Asia	–4.2	–3.7	–4.1	–3.4	–3.3	–3.0	–3.2	–5.0	–4.7	–5.7	–5.5	–5.1	–4.6	–4.4	–4.2
Latin America	–3.9	–2.7	–1.2	–0.7	–0.6	–1.0	–0.6	–3.4	–2.4	–1.5	–1.1	–1.2	–1.2	–1.3	–1.4
Sub–Saharan Africa	–3.2	–3.3	–4.1	–4.5	–4.5	–3.9	–4.0	–5.6	–5.5	–5.2	–4.4	–4.2	–4.2	–4.2	–4.2
Others	–2.2	–1.7	–3.1	–2.5	–2.3	–1.9	–2.7	–3.3	–2.9	–3.4	–2.7	–2.5	–2.4	–2.2	–2.1
Afghanistan	–0.6	–1.7	–1.4	0.1	–0.7	1.6	–1.1	–2.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Bangladesh	–3.4	–3.1	–3.9	–3.8	–4.9	–4.8	–6.3	–5.6	–4.2	–6.1	–5.7	–5.4	–5.0	–5.0	–5.0
Benin	–1.4	–1.7	–5.6	–4.3	–4.2	–3.0	–0.5	–4.7	–5.8	–4.5	–3.5	–2.5	–2.5	–2.5	–2.5
Burkina Faso	–3.5	–1.7	–2.1	–3.1	–6.9	–4.4	–3.4	–5.7	–5.6	–6.1	–5.0	–4.0	–3.0	–3.0	–3.0
Cambodia	–2.6	–1.6	–0.6	–0.3	–0.8	0.7	3.0	–3.5	–5.6	–4.1	–3.9	–3.3	–3.2	–3.1	–2.8
Cameroon	–3.6	–4.1	–4.2	–5.9	–4.7	–2.4	–3.2	–3.2	–3.2	–1.2	0.7	–0.4	0.0	–0.5	–1.0
Chad	–2.1	–4.2	–4.4	–1.9	–0.2	1.9	–0.2	2.1	–0.8	5.9	8.3	4.6	4.2	5.2	3.9
Congo, Democratic Republic of the	1.9	0.0	–0.4	–0.5	1.4	0.0	–2.0	–1.4	0.0	–3.3	–2.4	–2.1	–2.1	–1.7	–1.2
Congo, Republic of	–2.8	–10.7	–17.8	–15.6	–5.9	5.7	4.7	–1.2	2.0	11.3	7.7	7.5	4.8	3.1	3.1
Côte d'Ivoire	–1.6	–1.6	–2.0	–3.0	–3.3	–2.9	–2.3	–5.6	–5.6	–4.7	–3.8	–3.0	–3.0	–3.0	–3.0
Ethiopia	–1.9	–2.6	–1.9	–2.3	–3.2	–3.0	–2.5	–2.8	–2.8	–4.0	–3.3	–2.8	–2.5	–2.5	–2.5
Ghana	–9.1	–7.8	–4.0	–6.7	–4.0	–6.8	–7.3	–15.6	–11.6	–8.7	–7.8	–7.7	–7.4	–7.4	–7.1
Guinea	–3.9	–3.2	–6.9	–0.1	–2.1	–1.1	–0.5	–2.9	–1.5	–4.4	–4.2	–3.6	–3.6	–3.2	–2.7
Haiti	–4.0	–3.6	–1.5	0.0	0.1	–1.0	–2.1	–2.4	–2.5	–1.1	–1.6	–2.1	–2.3	–2.4	–2.4
Honduras	–5.7	–2.9	–0.8	–0.4	–0.4	0.2	0.1	–4.6	–2.8	–2.1	–0.4	–0.1	0.0	–0.1	–0.2
Kenya	–5.4	–5.9	–6.7	–7.5	–7.4	–6.9	–7.4	–8.1	–8.1	–6.9	–5.3	–4.5	–4.3	–4.0	–3.8
Kyrgyz Republic	–3.7	–3.1	–2.5	–5.8	–3.7	–0.6	–0.1	–3.3	–1.3	–1.2	–1.4	–1.5	–1.3	–1.2	–1.2
Lao P.D.R.	–4.0	–3.1	–5.6	–4.9	–5.5	–4.7	–3.3	–5.6	–5.5	–5.2	–4.8	–4.5	–4.4	–3.7	–4.1
Madagascar	–3.4	–2.0	–2.9	–1.1	–2.1	–1.3	–1.4	–4.0	–6.3	–6.3	–4.1	–3.9	–3.2	–3.4	–3.3
Malawi	–3.7	–3.1	–4.2	–4.9	–5.1	–4.3	–4.5	–8.2	–8.5	–7.8	–7.5	–6.9	–6.6	–5.9	–5.0
Mali	–2.4	–2.9	–1.8	–3.9	–2.9	–4.7	–1.7	–5.4	–4.9	–4.5	–3.5	–3.0	–3.0	–3.0	–3.0
Moldova	–1.6	–1.6	–1.9	–1.5	–0.6	–0.8	–1.4	–5.3	–2.6	–7.2	–6.2	–5.0	–4.1	–3.7	–3.4
Mozambique	–2.5	–9.9	–6.7	–5.1	–2.0	–5.6	–0.1	–5.1	–3.6	–3.0	–3.8	–2.7	–1.6	0.3	1.9
Myanmar	–1.7	–1.3	–2.8	–3.9	–2.9	–3.4	–3.9	–5.6	–7.8	–6.9	–6.3	–6.2	–5.7	–5.2	–4.8
Nepal	1.6	1.3	0.6	1.2	–2.7	–5.8	–5.0	–5.3	–4.2	–5.7	–5.1	–4.3	–3.4	–3.0	–3.0
Nicaragua	–0.7	–1.2	–1.5	–1.8	–1.8	–3.0	–0.3	–2.1	–1.7	–1.0	–1.9	–2.0	–2.1	–2.4	–2.6
Niger	–1.9	–6.1	–6.7	–4.5	–4.1	–3.0	–3.6	–5.3	–5.9	–5.4	–4.2	–3.0	–3.0	–3.0	–3.0
Nigeria	–2.7	–2.4	–3.8	–4.6	–5.4	–4.3	–4.7	–5.7	–6.0	–6.4	–5.9	–5.9	–6.1	–6.3	–6.4
Papua New Guinea	–6.9	–6.3	–4.5	–4.7	–2.5	–2.6	–4.4	–8.6	–7.4	–5.8	–4.7	–3.7	–2.5	–1.3	–0.6
Rwanda	–1.3	–3.9	–2.7	–2.3	–2.5	–2.6	–5.1	–9.4	–6.9	–6.8	–6.3	–3.5	–3.8	–3.2	–3.1
Senegal	–4.3	–3.9	–3.7	–3.3	–3.0	–3.7	–3.9	–6.4	–6.3	–4.7	–3.7	–3.0	–3.0	–3.0	–3.0
Sudan	–5.8	–4.7	–3.9	–3.9	–6.1	–7.9	–10.8	–5.9	–0.3	–2.7	–2.3	–1.6	–1.6	–1.6	–1.7
Tajikistan	–0.9	0.8	–2.0	–9.0	–5.7	–2.7	–2.1	–4.3	–2.0	–3.0	–2.5	–2.5	–2.5	–2.5	–2.5
Tanzania	–3.8	–2.9	–3.2	–2.1	–1.2	–1.9	–2.0	–2.5	–3.3	–3.3	–3.0	–2.4	–2.2	–2.2	–2.1
Uganda	–3.2	–2.7	–2.5	–2.6	–3.6	–3.0	–4.8	–7.5	–7.8	–5.6	–4.1	–3.3	–3.3	–1.8	–3.6
Uzbekistan	2.2	1.9	–0.2	0.8	1.2	2.0	0.6	–2.5	–4.6	–3.5	–2.5	–2.4	–2.4	–2.4	–2.5
Vietnam	–6.0	–5.0	–5.0	–3.2	–2.0	–1.0	–0.4	–3.9	–4.2	–5.0	–5.1	–4.7	–4.4	–4.0	–3.7
Yemen	–6.9	–4.1	–8.7	–8.5	–4.9	–7.8	–5.6	–5.2	–5.0	–4.7	–4.4	–4.9	–4.5	–3.4	–2.7
Zambia	–6.2	–5.8	–9.5	–5.7	–7.5	–8.3	–9.4	–13.8	–8.7	–9.0	–6.8	–5.5	–4.7	–5.6	–1.9
Zimbabwe	–1.3	–1.1	–1.8	–6.6	–10.6	–5.4	–1.0	0.8	–2.0	–2.6	–2.7	–2.7	–2.7	–2.8	–2.8

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table D.

Table A18. Low-Income Developing Countries: General Government Primary Balance, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	−2.2	−2.0	−2.5	−2.4	−2.3	−1.7	−1.9	−3.3	−2.9	−3.2	−2.5	−2.1	−1.9	−1.7	−1.6
Oil Producers	−1.7	−1.6	−3.1	−3.7	−4.1	−2.5	−2.8	−3.4	−3.5	−3.5	−2.9	−2.8	−2.8	−2.6	−2.4
Asia	−2.8	−2.2	−2.5	−1.9	−1.8	−1.4	−1.7	−3.3	−2.9	−4.0	−3.6	−3.1	−2.6	−2.3	−2.1
Latin America	−3.7	−2.4	−0.7	−0.2	−0.1	−0.4	0.1	−2.6	−1.7	−0.9	−0.3	−0.4	−0.5	−0.5	−0.7
Sub-Saharan Africa	−2.1	−2.2	−2.8	−2.9	−2.8	−2.0	−2.0	−3.5	−3.0	−2.7	−1.9	−1.5	−1.4	−1.3	−1.2
Others	−1.0	−0.4	−1.8	−1.6	−2.1	−1.7	−2.6	−3.0	−2.6	−3.0	−2.3	−2.2	−2.0	−1.8	−1.8
Afghanistan	−0.5	−1.7	−1.3	0.2	−0.6	1.7	−1.0	−2.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Bangladesh	−1.5	−1.1	−1.9	−1.9	−3.1	−2.9	−4.3	−3.5	−1.9	−3.7	−2.9	−2.6	−2.2	−2.2	−2.1
Benin	−1.0	−1.4	−5.0	−3.4	−2.8	−1.4	1.1	−2.7	−3.5	−2.6	−2.3	−1.2	−1.2	−1.2	−1.2
Burkina Faso	−3.0	−1.1	−1.5	−2.2	−6.1	−3.3	−2.2	−4.3	−4.0	−4.3	−3.1	−2.1	−1.1	−1.0	−1.0
Cambodia	−2.3	−1.3	−0.3	0.1	−0.5	1.0	3.3	−3.1	−5.2	−3.6	−3.4	−2.9	−2.8	−2.6	−2.4
Cameroon	−3.2	−3.7	−3.9	−5.2	−3.9	−1.5	−2.2	−2.3	−2.0	−0.3	1.5	0.3	0.8	0.2	−0.3
Chad	−1.5	−3.6	−2.7	0.1	1.3	3.0	0.8	3.0	0.3	6.7	9.0	5.6	4.9	5.7	4.4
Congo, Democratic Republic of the	2.4	0.3	−0.1	−0.2	1.6	0.4	−1.8	−1.2	0.2	−3.1	−2.1	−1.8	−1.8	−1.3	−0.8
Congo, Republic of	−2.7	−10.6	−17.2	−13.7	−4.3	7.5	7.9	0.1	4.2	12.7	9.3	9.0	6.3	4.8	4.9
Côte d'Ivoire	−0.6	−0.7	−0.9	−1.7	−2.1	−1.6	−0.8	−3.7	−3.7	−2.8	−1.8	−1.0	−0.9	−1.0	−1.0
Ethiopia	−1.6	−2.2	−1.5	−1.8	−2.8	−2.5	−2.0	−2.4	−2.2	−2.9	−2.2	−1.3	−1.2	−1.3	−1.3
Ghana	−5.6	−3.3	0.9	−1.5	1.2	−1.4	−1.7	−9.2	−4.1	−1.5	−0.6	−0.3	0.1	0.1	0.1
Guinea	−3.0	−2.2	−6.1	0.9	−1.2	−0.3	0.0	−2.2	−1.0	−3.5	−3.2	−2.8	−2.7	−2.3	−1.8
Haiti	−3.8	−3.4	−1.4	0.2	0.3	−0.8	−1.8	−2.1	−2.2	−0.9	−1.3	−1.8	−2.0	−2.0	−2.0
Honduras	−5.6	−2.6	0.0	0.2	0.2	0.8	0.8	−3.8	−1.9	−1.3	0.6	0.9	0.9	1.0	0.6
Kenya	−3.4	−3.6	−4.2	−4.6	−4.2	−3.4	−3.8	−4.2	−3.9	−2.5	−0.7	0.1	0.3	0.8	0.9
Kyrgyz Republic	−2.9	−2.3	−1.7	−4.9	−2.9	0.4	0.8	−2.3	−0.5	−0.3	−0.4	−0.3	0.0	0.2	0.2
Lao P.D.R.	−3.2	−2.4	−4.8	−4.0	−4.7	−3.5	−2.0	−4.1	−3.0	−2.5	−2.0	−1.7	−1.4	−1.2	−1.6
Madagascar	−2.8	−1.5	−2.2	−0.4	−1.4	−0.6	−0.7	−3.2	−5.6	−5.4	−3.2	−3.1	−2.4	−2.6	−2.4
Malawi	−1.2	0.0	−1.9	−1.8	−2.4	−1.6	−1.5	−5.0	−4.4	−3.3	−1.9	−0.6	−0.6	0.2	0.8
Mali	−1.9	−2.3	−1.2	−3.3	−2.0	−3.9	−0.7	−4.2	−3.5	−3.0	−1.9	−1.3	−1.3	−1.3	−1.3
Moldova	−1.1	−1.1	−1.2	−0.4	0.5	0.0	−0.7	−4.5	−1.8	−6.2	−4.6	−4.0	−3.1	−2.6	−2.2
Mozambique	−1.7	−8.9	−5.5	−2.7	1.0	−1.2	3.1	−2.0	−1.0	0.5	−0.6	0.3	1.3	2.9	4.1
Myanmar	−0.4	−0.1	−1.6	−2.6	−1.5	−1.6	−2.4	−4.0	−5.7	−4.4	−3.7	−3.4	−3.0	−2.4	−1.9
Nepal	2.2	1.8	0.9	1.5	−2.4	−5.4	−4.5	−4.7	−3.4	−5.0	−4.3	−3.4	−2.5	−2.0	−2.0
Nicaragua	−0.5	−0.9	−1.1	−1.2	−0.9	−1.9	0.9	−1.0	−0.5	0.0	−0.9	−1.1	−1.2	−1.5	−1.8
Niger	−1.7	−5.8	−6.3	−3.8	−3.4	−2.1	−2.6	−4.3	−4.8	−4.2	−2.9	−1.6	−1.7	−1.6	−1.6
Nigeria	−1.7	−1.5	−2.7	−3.4	−4.1	−2.6	−3.0	−3.5	−3.6	−4.1	−3.3	−3.1	−3.0	−2.8	−2.6
Papua New Guinea	−5.8	−4.6	−2.8	−2.8	−0.4	−0.2	−1.9	−6.0	−5.1	−3.5	−2.5	−1.0	0.0	1.3	1.9
Rwanda	−0.4	−3.1	−1.8	−1.3	−1.5	−1.4	−3.8	−7.8	−5.0	−4.3	−4.0	−1.4	−1.9	−1.4	−1.3
Senegal	−3.1	−2.6	−2.1	−1.6	−1.1	−1.7	−1.9	−4.4	−4.3	−2.6	−1.6	−1.0	−1.0	−1.0	−1.0
Sudan	−5.3	−3.9	−3.2	−3.5	−5.6	−7.7	−10.6	−5.9	−0.2	−2.4	−1.9	−1.2	−1.1	−1.2	−1.3
Tajikistan	0.1	1.4	−1.5	−8.3	−5.2	−1.6	−1.2	−3.4	−1.0	−2.0	−1.5	−1.6	−1.6	−1.7	−2.1
Tanzania	−2.6	−1.6	−1.7	−0.6	0.4	−0.2	−0.3	−0.9	−1.7	−1.7	−1.2	−0.5	−0.2	0.0	0.0
Uganda	−2.1	−1.5	−1.1	−0.6	−1.5	−1.2	−2.7	−5.2	−4.8	−2.6	−1.2	−0.6	−0.6	0.7	−1.4
Uzbekistan	2.1	1.8	−0.4	0.6	1.0	1.6	0.0	−2.8	−4.9	−3.7	−2.7	−2.4	−2.2	−2.2	−2.3
Vietnam	−4.8	−3.7	−3.4	−1.6	−0.4	0.5	1.0	−2.6	−2.9	−4.0	−4.0	−3.5	−3.1	−2.6	−2.3
Yemen	−1.5	1.5	−2.6	−3.2	−4.7	−7.8	−5.3	−3.2	−3.7	−3.7	−3.6	−4.2	−3.9	−2.8	−2.2
Zambia	−4.7	−3.6	−6.7	−2.2	−3.5	−3.5	−2.5	−7.8	−2.2	−1.8	0.6	1.4	1.5	1.5	2.6
Zimbabwe	−0.7	−0.4	−0.9	−6.0	−9.7	−4.4	−0.6	1.0	−1.6	−1.9	−2.1	−2.1	−2.2	−2.2	−2.2

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: "Primary balance" is defined as the overall balance, excluding net interest payments. For country-specific details, see "Data and Conventions" in text and Table D.

Table A19. Low-Income Developing Countries: General Government Revenue, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	16.2	15.9	14.5	14.1	14.5	15.1	14.8	14.1	14.2	...	...	...	...	...	...
Oil Producers	13.6	12.8	8.2	6.1	7.2	9.2	8.6	7.2	8.0	9.3	9.0	8.8	8.4	8.1	8.0
Asia	16.9	16.8	16.5	16.1	15.8	16.3	15.8	15.2	14.4	14.3	14.5	14.6	14.8	15.0	15.1
Latin America	19.7	19.9	20.6	21.8	21.4	20.9	21.2	19.7	20.2	20.6	21.0	21.2	21.2	21.5	21.6
Sub-Saharan Africa	14.5	14.3	12.4	11.8	12.8	13.3	13.0	12.2	13.0	13.8	13.7	13.6	13.5	13.4	13.3
Others	21.9	21.4	18.1	17.3	17.2	20.7	20.7	19.5	19.7	20.7	20.2	20.6	21.0	21.4	21.7
Afghanistan	24.3	23.7	24.6	28.2	27.1	30.6	26.9	25.7	...	...	...	...	...	...	...
Bangladesh	11.1	10.9	9.8	10.1	9.5	10.4	9.5	9.8	10.9	11.0	11.0	10.9	10.9	10.9	10.9
Benin	13.5	12.6	12.6	11.1	13.6	13.6	14.1	14.4	14.3	14.2	14.6	14.8	15.0	15.2	15.3
Burkina Faso	21.7	19.2	18.3	18.5	19.3	19.6	20.1	19.8	19.0	18.7	18.9	19.2	19.4	19.6	20.1
Cambodia	18.7	20.1	19.6	20.8	21.6	23.7	26.8	24.5	23.4	23.6	23.6	23.6	23.6	23.6	23.6
Cameroon	15.7	16.0	15.8	14.3	14.5	15.5	15.4	13.4	13.8	16.1	17.6	16.9	17.4	17.7	17.6
Chad	20.7	17.8	14.0	12.4	14.6	15.3	14.2	21.2	16.3	22.6	24.7	21.3	20.5	21.1	19.7
Congo, Democratic Republic of the	14.6	18.5	16.8	14.0	11.7	11.1	10.8	9.0	13.2	13.0	13.5	14.2	14.6	15.1	15.6
Congo, Republic of	39.5	37.8	23.5	26.1	22.4	24.9	26.7	22.2	23.7	28.9	27.9	27.6	26.9	26.1	26.6
Côte d'Ivoire	14.2	13.6	14.5	14.7	15.1	14.8	15.0	15.0	14.5	15.0	15.2	15.3	15.2	15.1	15.1
Ethiopia	15.8	14.9	15.4	15.6	14.7	13.1	12.8	11.7	11.0	10.5	11.7	12.2	12.7	12.8	12.8
Ghana	12.4	13.2	14.6	13.1	13.6	14.1	13.9	13.3	14.7	16.5	16.2	16.0	16.0	15.8	16.1
Guinea	14.8	17.0	14.8	16.0	15.3	14.9	14.4	12.9	12.6	12.6	13.2	13.6	14.3	14.6	15.1
Haiti	11.9	11.0	11.3	10.7	9.9	10.1	8.0	7.5	8.3	8.8	10.0	10.2	9.8	10.3	10.4
Honduras	23.8	24.7	25.2	27.0	26.5	26.4	25.8	23.4	25.0	25.6	26.0	26.1	26.2	26.2	26.2
Kenya	17.8	17.5	17.1	17.9	17.8	17.5	17.0	16.6	16.8	17.4	17.6	18.0	18.0	18.5	18.9
Kyrgyz Republic	34.4	35.4	35.6	33.1	33.3	32.5	32.5	30.8	34.0	34.2	33.4	33.2	32.8	32.5	32.3
Lao P.D.R.	20.2	21.9	20.2	16.0	16.3	16.2	15.4	13.0	13.3	13.6	14.0	14.5	14.8	15.0	14.6
Madagascar	9.3	10.6	10.2	12.4	12.8	13.0	13.9	12.4	12.4	14.3	14.8	14.4	14.3	14.5	14.9
Malawi	17.0	15.2	15.4	14.8	15.8	15.0	14.8	14.5	14.8	14.8	15.5	16.4	16.6	16.7	16.8
Mali	17.4	17.1	19.1	18.3	20.1	15.6	21.5	20.7	22.2	20.3	22.2	22.3	22.4	22.5	22.6
Moldova	30.9	31.8	30.0	28.6	29.8	30.1	29.9	31.4	32.0	30.4	31.4	32.0	32.6	32.9	32.9
Mozambique	29.6	30.4	26.0	23.9	27.1	25.8	29.7	28.1	27.1	29.4	28.2	26.3	26.2	25.3	24.5
Myanmar	20.6	22.5	21.4	19.6	17.9	17.6	16.3	16.0	14.1	15.0	15.7	16.0	16.3	16.6	16.9
Nepal	17.1	17.9	18.2	20.1	20.9	22.2	22.4	22.1	24.2	25.3	26.1	26.6	27.1	27.1	27.0
Nicaragua	23.5	23.3	23.8	24.9	25.5	24.6	27.5	26.9	28.3	26.1	25.5	25.9	26.0	26.2	26.2
Niger	18.5	17.5	17.5	14.9	15.4	18.1	18.0	17.6	18.3	17.7	18.1	18.6	19.5	19.6	19.6
Nigeria	11.5	10.9	7.2	5.1	6.6	8.5	7.8	6.3	7.2	8.4	8.1	8.0	7.7	7.4	7.3
Papua New Guinea	20.7	20.8	18.3	16.1	15.9	17.7	16.3	14.2	14.4	15.6	15.3	15.6	15.9	16.2	16.4
Rwanda	24.9	23.6	23.9	22.9	22.6	23.8	23.1	23.6	24.4	25.7	23.7	24.8	24.7	24.0	23.1
Senegal	17.8	19.2	19.3	20.7	19.5	18.9	20.3	20.2	19.4	20.9	21.3	21.7	22.7	22.9	23.1
Sudan	9.6	8.8	8.5	6.1	6.7	8.9	7.8	4.8	9.4	9.8	10.2	10.8	10.9	10.7	10.4
Tajikistan	26.9	28.4	29.9	29.7	28.1	28.2	26.8	24.8	25.1	24.9	24.9	25.1	25.5	25.6	25.2
Tanzania	15.0	14.4	14.0	14.8	15.4	14.7	14.6	14.6	14.6	15.4	15.6	15.7	15.7	15.7	15.7
Uganda	10.1	10.8	12.6	12.4	12.7	13.2	13.5	13.9	14.4	14.8	14.8	15.4	16.6	18.3	19.1
Uzbekistan	27.4	26.8	24.3	24.1	23.6	27.0	27.9	26.4	26.0	29.0	26.9	27.0	27.6	28.2	28.8
Vietnam	18.5	17.7	19.2	19.1	19.6	19.5	19.6	18.5	16.0	15.4	15.6	16.0	16.3	16.6	16.9
Yemen	23.9	23.6	10.7	7.6	3.5	6.4	7.3	6.5	5.7	5.6	6.6	7.5	7.3	7.8	8.3
Zambia	17.6	18.9	18.8	18.2	17.5	19.4	20.4	20.3	23.8	20.1	22.2	22.9	22.8	22.7	22.8
Zimbabwe	19.6	19.3	18.7	17.0	18.1	14.9	12.3	15.4	17.2	17.0	17.0	17.0	17.0	17.0	17.0

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table D.

Table A20. Low-Income Developing Countries: General Government Expenditure, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	19.5	19.1	18.4	17.9	18.2	18.5	18.4	19.2	19.1	19.8	19.2	19.0	18.8	18.7	18.7
Oil Producers	16.5	15.7	12.7	11.4	12.5	13.3	13.1	12.6	13.7	15.0	14.3	14.3	14.1	13.9	13.9
Asia	21.1	20.4	20.6	19.5	19.1	19.3	19.1	20.2	19.1	20.0	19.9	19.7	19.4	19.3	19.3
Latin America	23.6	22.7	21.8	22.4	22.0	21.9	21.8	23.1	22.7	22.1	22.2	22.4	22.5	22.8	23.0
Sub-Saharan Africa	17.7	17.6	16.5	16.3	17.2	17.2	17.0	17.9	18.5	18.9	18.1	17.8	17.7	17.6	17.5
Others	24.1	23.0	21.2	19.7	19.5	22.6	23.3	22.8	22.6	24.0	22.9	23.1	23.4	23.6	23.9
Afghanistan	25.0	25.4	25.9	28.0	27.7	28.9	28.0	27.9	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Bangladesh	14.5	14.1	13.8	13.9	14.4	15.2	15.7	15.4	15.1	17.1	16.7	16.3	15.9	15.9	15.9
Benin	14.9	14.2	18.2	15.4	17.8	16.6	14.6	19.1	20.1	18.7	18.1	17.3	17.5	17.7	17.8
Burkina Faso	25.3	20.9	20.4	21.6	26.2	24.0	23.5	25.5	24.6	24.7	23.9	23.2	22.4	22.6	23.1
Cambodia	21.4	21.7	20.3	21.1	22.4	23.0	23.8	28.0	29.0	27.7	27.4	26.9	26.8	26.6	26.4
Cameroon	19.2	20.1	20.1	20.2	19.2	18.0	18.7	16.6	17.0	17.3	16.8	17.4	17.4	18.2	18.7
Chad	22.8	22.0	18.3	14.4	14.9	13.3	14.3	19.1	17.1	16.7	16.5	16.7	16.3	16.0	15.8
Congo, Democratic Republic of the	12.7	18.5	17.2	14.5	10.4	11.1	12.8	10.4	13.2	16.4	15.9	16.3	16.7	16.7	16.8
Congo, Republic of	42.4	48.6	41.3	41.7	28.3	19.3	22.0	23.5	21.7	17.6	20.2	20.2	22.1	23.0	23.5
Côte d'Ivoire	15.9	15.2	16.5	17.7	18.4	17.7	17.3	20.5	20.1	19.7	19.0	18.3	18.2	18.2	18.2
Ethiopia	17.8	17.5	17.3	17.9	18.0	16.1	15.4	14.5	13.8	14.5	15.0	15.0	15.2	15.3	15.3
Ghana	21.6	21.0	18.6	19.9	17.6	20.9	21.1	29.0	26.3	25.2	23.9	23.7	23.4	23.2	23.1
Guinea	18.6	20.2	21.7	16.1	17.3	16.0	14.9	15.8	14.1	16.9	17.4	17.3	17.8	17.7	17.8
Haiti	15.9	14.6	12.7	10.6	9.8	11.1	10.1	9.9	10.8	9.9	11.6	12.3	12.1	12.7	12.8
Honduras	29.6	27.6	26.0	27.4	26.9	26.2	25.7	28.0	27.8	27.6	26.4	26.2	26.2	26.3	26.3
Kenya	23.2	23.4	23.8	25.3	25.2	24.5	24.4	24.7	24.9	24.3	22.9	22.5	22.4	22.5	22.7
Kyrgyz Republic	38.1	38.5	38.1	38.9	37.0	33.1	32.6	34.1	35.2	35.4	34.8	34.7	34.1	33.7	33.5
Lao P.D.R.	24.2	25.0	25.8	20.9	21.8	20.9	18.7	18.6	18.7	18.8	18.9	19.0	19.2	18.7	18.7
Madagascar	12.7	12.6	13.0	13.5	14.9	14.4	15.4	16.3	18.7	20.6	18.9	18.3	17.5	18.0	18.1
Malawi	20.7	18.3	19.5	19.7	21.0	19.4	19.3	22.7	23.3	22.7	23.0	23.3	23.2	22.6	21.9
Mali	19.8	20.0	20.9	22.3	22.9	20.3	23.1	26.1	27.1	24.8	25.7	25.3	25.4	25.5	25.6
Moldova	32.4	33.4	31.9	30.1	30.5	31.0	31.4	36.7	34.6	37.7	37.6	37.0	36.7	36.6	36.3
Mozambique	32.1	40.3	32.7	29.0	29.1	31.3	29.8	33.2	30.6	32.4	32.1	29.0	27.8	25.0	22.5
Myanmar	22.3	23.8	24.2	23.4	20.8	21.0	20.3	21.6	21.9	21.9	22.0	22.2	22.1	21.9	21.7
Nepal	15.5	16.6	17.7	19.0	23.6	28.0	27.3	27.4	28.5	31.0	31.2	30.9	30.5	30.0	30.0
Nicaragua	24.2	24.6	25.3	26.8	27.3	27.6	27.8	29.0	30.0	27.1	27.3	27.9	28.2	28.6	28.8
Niger	20.4	23.6	24.2	19.4	19.5	21.1	21.6	22.9	24.2	23.1	22.3	21.6	22.5	22.6	22.6
Nigeria	14.1	13.4	11.0	9.8	12.0	12.8	12.5	12.0	13.3	14.9	14.0	13.9	13.8	13.6	13.7
Papua New Guinea	27.6	27.1	22.8	20.9	18.4	20.3	20.7	22.7	21.8	21.4	19.9	19.3	18.4	17.5	17.0
Rwanda	26.2	27.5	26.6	25.1	25.1	26.4	28.2	32.9	31.3	32.4	29.9	28.3	28.5	27.1	26.2
Senegal	22.1	23.1	22.9	24.0	22.5	22.6	24.2	26.6	25.7	25.7	25.0	24.7	25.7	25.9	26.1
Sudan	15.3	13.5	12.4	10.0	12.8	16.8	18.7	10.8	9.6	12.5	12.5	12.3	12.5	12.3	12.0
Tajikistan	27.8	27.5	31.9	38.7	33.8	30.9	28.8	29.2	27.1	27.9	27.4	27.6	28.0	28.1	27.7
Tanzania	18.8	17.3	17.2	16.9	16.6	16.6	16.6	17.1	17.9	18.7	18.5	18.2	18.0	17.9	17.8
Uganda	13.3	13.6	15.1	15.0	16.3	16.2	18.3	21.4	22.1	20.4	18.8	18.8	19.9	20.1	22.7
Uzbekistan	25.2	24.9	24.6	23.3	22.4	24.9	27.3	28.9	30.6	32.4	29.4	29.4	29.9	30.6	31.2
Vietnam	24.5	22.8	24.2	22.2	21.5	20.6	20.0	22.4	20.1	20.4	20.7	20.7	20.7	20.6	20.6
Yemen	30.8	27.8	19.4	16.1	8.4	14.3	12.9	11.8	10.7	10.3	11.0	12.3	11.8	11.2	11.0
Zambia	23.8	24.7	28.3	23.9	25.0	27.7	29.8	34.1	32.5	29.1	29.0	28.3	27.6	28.2	24.6
Zimbabwe	20.9	20.4	20.5	23.7	28.7	20.3	13.3	14.7	19.2	19.5	19.7	19.7	19.7	19.7	19.7

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).
Note: For country-specific details, see "Data and Conventions" in text and Table D.

Table A21. Low-Income Developing Countries: General Government Gross Debt, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	31.2	31.8	36.1	39.4	42.1	42.4	43.6	49.5	49.8	50.3	48.8	47.8	47.1	46.5	45.9
Oil Producers	21.1	20.7	24.6	28.8	30.9	31.7	33.0	38.4	39.8	38.6	39.1	39.9	41.0	42.2	43.3
Asia	37.9	38.5	39.1	39.8	39.3	39.2	38.9	41.6	44.0	44.6	45.3	45.5	45.5	45.4	45.1
Latin America	31.8	29.7	30.3	31.5	31.8	33.6	37.7	41.8	40.4	39.8	38.5	38.9	38.7	37.7	36.9
Sub-Saharan Africa	26.0	27.4	33.0	37.0	40.3	41.6	43.4	49.9	51.1	50.3	48.8	47.8	47.0	46.5	45.9
Others	42.3	38.6	44.0	50.9	65.0	65.7	68.4	88.6	73.2	86.3	71.9	64.1	58.8	55.9	53.1
Afghanistan	6.9	8.7	9.2	8.4	8.0	7.4	6.1	7.4	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Bangladesh	35.8	35.3	33.7	33.3	33.4	34.6	36.1	39.5	41.4	42.6	42.8	42.7	42.3	42.1	41.9
Benin	18.5	22.3	30.9	35.9	39.6	41.1	42.5	46.1	50.6	49.3	48.7	47.0	45.2	43.9	42.8
Burkina Faso	25.9	26.6	31.4	33.2	33.6	38.0	42.0	46.5	50.7	53.4	53.1	51.6	50.2	49.0	47.9
Cambodia	31.7	31.9	31.2	29.1	30.0	28.5	28.6	34.3	38.7	40.9	42.4	43.2	43.6	43.9	43.8
Cameroon	17.5	20.7	31.6	32.1	36.5	38.3	41.6	44.9	47.1	45.2	41.0	38.5	35.4	33.0	31.4
Chad	30.6	38.2	42.5	50.0	49.1	47.9	51.1	52.1	58.2	46.5	39.8	35.7	32.3	28.1	26.6
Congo, Democratic Republic of the	19.1	16.8	17.0	19.5	19.2	15.1	15.0	15.6	12.7	10.6	8.7	7.1	3.8	4.7	3.8
Congo, Republic of	33.9	42.3	74.2	91.0	94.2	77.1	81.7	110.1	85.8	64.0	62.4	56.8	58.2	60.7	57.7
Côte d'Ivoire	24.6	26.7	29.2	31.4	33.2	35.6	38.4	47.0	51.4	51.8	51.4	50.7	50.1	49.6	49.0
Ethiopia	44.1	44.2	50.7	51.8	55.3	58.4	54.7	53.7	52.9	48.3	42.7	37.7	35.5	34.5	33.4
Ghana	42.9	50.1	53.9	55.9	57.0	62.0	62.7	78.3	81.8	84.6	84.8	85.7	86.7	88.4	87.4
Guinea	34.0	35.2	44.4	43.0	41.9	39.3	38.4	44.0	39.3	39.1	37.5	38.2	38.3	37.5	37.7
Haiti	24.4	20.8	21.7	21.6	19.0	21.6	25.8	21.3	24.2	22.5	21.8	22.1	22.6	23.3	23.9
Honduras	39.4	37.1	37.1	38.2	38.9	39.7	42.6	51.0	48.2	47.6	45.3	45.6	44.9	42.1	40.0
Kenya	39.8	41.3	45.8	50.4	53.9	56.4	58.6	67.6	68.1	70.3	69.4	67.7	65.5	62.8	60.4
Kyrgyz Republic	47.1	53.6	67.1	59.1	58.8	54.8	51.6	67.6	61.0	60.4	57.8	56.0	54.9	53.4	52.2
Lao P.D.R.	49.5	53.5	53.1	54.5	57.2	59.7	62.0	82.6	95.2	95.6	96.1	95.5	94.3	92.4	90.7
Madagascar	36.2	37.8	44.1	40.3	40.1	40.4	38.5	49.0	53.4	57.9	56.7	56.3	55.6	55.2	55.0
Malawi	35.3	33.5	35.5	37.1	40.3	43.9	45.3	54.8	63.5	66.9	71.2	74.2	75.6	75.8	74.3
Mali	26.4	26.9	30.7	36.0	36.0	37.5	40.7	47.3	52.1	53.4	52.1	50.8	50.3	50.4	50.9
Moldova	30.0	35.0	42.4	39.2	34.3	31.2	28.3	36.7	33.0	36.4	40.9	44.7	44.7	44.1	43.5
Mozambique	50.1	64.3	87.4	119.2	100.0	103.6	96.1	119.0	102.3	102.0	94.8	89.4	83.9	65.0	52.9
Myanmar	36.1	35.2	36.4	38.3	38.5	40.4	38.8	39.3	62.3	58.8	61.7	64.6	67.1	69.5	68.9
Nepal	31.9	27.6	25.7	25.0	25.0	30.1	33.1	42.2	47.2	51.5	53.7	54.9	55.4	55.4	55.4
Nicaragua	28.8	28.7	28.9	30.9	34.1	37.7	41.7	47.9	48.6	46.9	46.5	47.2	47.1	47.1	47.0
Niger	19.6	22.1	29.9	32.8	36.5	36.9	39.8	45.0	52.9	53.8	53.1	49.6	45.8	45.0	44.6
Nigeria[1]	18.3	17.5	20.3	23.4	25.3	27.7	29.2	34.5	37.0	37.4	38.8	40.2	41.6	42.9	44.2
Papua New Guinea	24.9	26.9	29.9	33.7	32.5	36.7	40.2	46.4	49.3	45.2	50.1	50.7	50.0	48.3	46.2
Rwanda	26.1	28.3	32.4	36.6	41.3	44.9	49.8	64.6	68.6	72.0	73.6	71.9	70.0	68.6	65.5
Senegal[2]	36.9	42.4	44.5	47.5	61.1	61.5	63.6	69.2	75.7	75.3	71.3	66.5	64.5	62.9	62.3
Sudan	105.8	84.4	93.2	109.9	149.5	186.7	200.3	270.4	184.3	284.1	216.9	188.6	165.7	155.1	147.8
Tajikistan	29.3	27.9	35.0	42.2	47.7	46.3	43.1	50.4	46.5	53.7	52.0	50.4	48.4	47.3	42.9
Tanzania	32.7	36.1	39.2	39.8	40.7	40.5	39.0	40.5	40.8	39.8	38.9	37.8	36.5	35.1	33.9
Uganda	22.1	24.8	28.5	31.0	33.6	34.9	37.6	46.4	51.6	53.1	52.4	51.5	49.5	46.9	43.5
Uzbekistan	6.2	6.1	6.7	8.2	19.3	19.7	28.4	37.6	36.8	39.4	38.3	35.9	35.1	34.1	32.9
Vietnam	41.4	43.6	46.1	47.5	46.3	43.7	41.3	41.7	40.2	41.3	42.0	42.3	42.4	42.4	42.2
Yemen	48.2	48.7	57.0	72.3	77.4	74.5	76.5	84.2	63.1	43.9	34.7	28.5	25.4	23.8	22.6
Zambia	27.1	36.1	65.8	61.6	66.3	80.5	99.7	140.2	123.2	. . .	. . .	. . .	. . .	. . .	. . .
Zimbabwe	36.9	42.2	47.5	49.1	74.1	51.0	93.2	102.6	67.6	67.2	61.7	59.2	59.5	60.2	60.3

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table D.

[1] Debt includes overdrafts from the Central Bank of Nigeria and liabilities of the Asset Management Corporation of Nigeria.

[2] From 2017 onward, Senegal data include the whole of the public sector, whereas before 2017, only central government debt stock was taken into account.

Table A22. Low-Income Developing Countries: General Government Net Debt, 2013–27
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Oil Producers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Asia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Latin America	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Others	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bangladesh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Benin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burkina Faso	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cameroon	15.3	19.1	27.6	30.5	33.3	35.9	39.5	43.0	45.7	44.5	40.5	37.9	34.7	32.3	30.8
Chad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congo, Democratic Republic of the	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congo, Republic of	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Côte d'Ivoire	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ethiopia	38.5	39.6	45.9	47.8	51.3	54.8	50.7	50.1	49.6	45.9	41.0	36.4	34.4	33.7	32.6
Ghana	39.9	45.3	49.8	50.9	51.9	60.7	59.0	74.1	76.8	79.6	79.8	80.7	81.7	83.4	82.4
Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Haiti	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Honduras	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kenya	35.8	34.8	39.7	47.5	48.1	50.8	54.1	62.8	64.5	66.1	65.6	64.2	62.7	61.2	60.0
Kyrgyz Republic	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lao P.D.R.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madagascar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malawi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mali	20.2	19.7	23.1	30.0	31.1	34.1	34.6	40.7	44.9	43.4	41.0	39.0	37.7	37.1	36.9
Moldova	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mozambique	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nicaragua	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Niger	15.3	17.2	25.9	29.5	32.3	34.0	35.9	41.0	47.5	48.7	48.4	45.3	41.9	41.3	41.0
Nigeria[1]	11.4	13.8	15.9	19.0	20.9	23.5	25.5	34.1	36.6	36.8	38.3	39.8	41.2	42.6	43.8
Papua New Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rwanda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Senegal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tajikistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tanzania	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uganda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vietnam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yemen	46.7	47.8	56.1	71.3	76.6	73.8	75.8	83.5	62.7	43.6	34.6	28.4	25.3	23.7	22.5
Zambia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Zimbabwe	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Source: IMF staff estimates and projections. Projections are based on staff assessments of current policies (see "Fiscal Policy Assumptions" in text).

Note: For country-specific details, see "Data and Conventions" in text and Table D.

[1] Debt includes overdrafts from the Central Bank of Nigeria and liabilities of the Asset Management Corporation of Nigeria. The overdrafts and government deposits at the Central Bank of Nigeria almost cancel each other out, and the Asset Management Corporation of Nigeria debt is roughly halved.

Table A23. Advanced Economies: Structural Fiscal Indicators
(Percent of GDP, except when indicated otherwise)

	Pension Spending Change, 2021–30[1]	Net Present Value of Pension Spending Change, 2021–50[2]	Health Care Spending Change, 2021–30[3a,3b]	Net Present Value of Health Care Spending Change, 2021–50[2]	Gross Financing Need, 2022[4]	Average Term to Maturity 2022 (years)[5]	Debt to Average Maturity, 2022	Projected Interest Rate–Growth Differential, 2022–27 (percent)	Prepandemic Overall Balance, 2012–19	Projected Overall Balance, 2021–27	Nonresident Holding of General Government Debt, 2021 (percent of total)[6]
Average	0.6	19.5	2.2	81.2	24.5	7.2	18.2	−2.4	−3.2	−3.8	30.1
G7	0.5	16.6	2.4	90.6	28.4	7.0	20.8	−2.3	−3.9	−4.4	28.7
G20 Advanced	0.6	17.4	2.4	88.2	26.8	7.1	19.8	−2.3	−3.7	−4.2	28.4
Australia	−0.1	−3.6	1.0	38.4	9.0	7.2	8.1	−1.8	−2.7	−3.1	33.7
Austria	1.3	29.7	0.9	39.7	13.2	11.5	7.3	−3.6	−1.2	−2.2	68.6
Belgium	1.5	44.9	1.5	63.7	16.6	9.3	12.1	−2.4	−2.3	−5.1	62.0
Canada	0.8	17.3	1.0	38.8	15.0	5.7	20.5	...	−0.5	−1.4	22.9
Cyprus	0.9	23.3	...	...	8.1	8.0	14.3	−4.4	−1.3	−0.1	87.4
Czech Republic	0.5	31.6	0.6	25.1	8.9	2.6	14.5	−2.7	−0.6	−2.7	27.4
Denmark	−0.6	−20.3	0.8	28.9	4.8	8.3	5.1	−1.9	0.2	0.2	33.7
Estonia	−0.7	−21.6	0.5	23.2	...	6.7	2.8	−6.5	−0.1	−2.7	84.0
Finland	0.5	−0.4	1.1	36.1	10.8	7.2	9.5	−2.8	−1.8	−1.7	58.2
France	0.6	4.9	0.9	36.2	16.9	8.2	14.0	−2.5	−3.6	−4.3	53.4
Germany	1.0	29.0	0.7	35.0	11.5	6.3	11.0	−3.2	0.9	−1.0	47.2
Hong Kong SAR	1.3	43.6	...	...	...	...	...	−1.1	2.5	−0.4	...
Iceland	1.4	48.7	1.3	51.8	12.2	4.5	6.7	−1.2	1.1	−3.2	15.9
Ireland	1.1	37.9	0.5	22.2	4.7	11.2	5.2	−4.6	−2.6	−0.6	53.0
Israel	0.2	11.2	0.3	11.8	...	7.9	9.1	−2.0	−2.8	−3.3	19.1
Italy[7]	1.7	36.7	0.5	25.5	22.2	7.1	21.9	−1.3	−2.5	−4.1	32.6
Japan	−0.9	4.9	1.6	52.0	52.4	8.1	32.0	−1.1	−4.7	−4.2	12.8
Korea	1.3	53.7	1.8	72.9	4.1	9.6	5.1	−2.9	1.3	−1.1	15.6
Latvia	−0.2	−9.9	0.8	30.4	...	8.8	4.9	−5.0	−0.7	−2.2	65.9
Lithuania	0.7	19.0	1.0	42.4	7.4	9.4	5.0	−5.5	−0.6	−2.6	76.6
Luxembourg	1.8	66.2	0.7	33.5	...	6.0	4.2	−3.7	1.6	0.0	48.9
Malta	−0.5	−4.3	...	...	14.1	8.5	6.2	−3.6	−0.3	−4.5	17.1
Netherlands, The	1.1	35.9	1.7	64.4	8.9	8.0	6.6	−3.0	−0.8	−2.4	35.8
New Zealand	1.2	37.9	1.1	41.8	6.5	7.6	5.6	−2.8	−0.3	−1.9	28.0
Norway	1.1	28.0	1.9	70.9	...	4.5	10.3	−2.4	7.8	3.6	36.5
Portugal	1.3	23.2	0.9	34.9	10.8	7.2	18.8	−2.6	−3.5	−1.5	51.5
Singapore[7]	0.8	30.6	...	...	14.2	3.6	42.4	...	4.7	2.0	...
Slovak Republic	1.4	54.9	0.4	18.0	10.1	8.5	7.0	−4.5	−2.4	−3.5	55.4
Slovenia	0.8	59.7	0.8	36.4	8.2	9.7	8.2	−5.3	−3.5	−3.7	62.8
Spain	−0.1	6.1	1.0	43.9	16.5	7.9	15.2	−2.4	−5.2	−4.6	48.0
Sweden	−0.3	−10.3	0.4	18.4	5.4	5.1	7.7	−3.8	0.0	−0.1	22.8
Switzerland	0.4	14.5	1.5	60.6	2.9	10.4	4.1	−1.9	0.5	−0.5	7.4
United Kingdom	0.3	12.6	1.6	62.1	10.2	14.6	7.0	−2.4	−4.1	−2.8	35.6
United States	0.7	17.2	3.5	130.7	32.0	5.9	22.9	−2.5	−5.0	−5.6	25.0

Sources: Bloomberg Finance L.P.; Joint External Debt Hub, Quarterly External Debt Statistics; national authorities; and IMF staff estimates and projections.

Note: All economy averages are weighted by nominal GDP converted to US dollars at average market exchange rates in the years indicated and based on data availability.

[1] Pension projections rely on authorities' estimates when these are available. When authorities' estimates are not available, IMF staff projections use the methodology described in Clements, Eich, and Gupta's Equitable and Sustainable Pensions: Challenges and Experience (IMF 2014). These pension spending projections may be different from the previous edition of the Fiscal Monitor because of new baseline pension numbers, new authorities' projections, or updated demographic data from the UN World Population Prospects.

[2] For net present value calculations, a discount rate of 1 percent in excess of GDP growth is used for each economy.

[3a] IMF staff projections for health care spending are driven by demographics and other factors. The difference between the growth of health care spending and real GDP growth that is not explained by demographics ("excess cost growth") is assumed to start at the economy-specific historical average and converge to the advanced economy historical average by 2050 (0.6 percent).

[3b] These health expenditure projections have been updated to include: (1) new available underlying health and economic data; (2) technical adjustments to the Excess Cost Growth calculation and the age-expenditure profiles; (3) exclusion of health expenditure growth during the COVID-19 period in the underlying trend expenditure growth estimate.

[4] "Gross financing need" is defined as the projected overall deficit and maturing government debt in 2022. For most economies, data on maturing debt refer to central government securities. Data are from Bloomberg Finance L.P. and IMF staff projections.

[5] For most economies, the average-term-to-maturity data refer to central government securities; the source is Bloomberg Finance L.P.

[6] Nonresident holding of general government debt data are for the third quarter of 2021 or latest available from the Joint External Debt Hub, Quarterly External Debt Statistics, which include marketable and nonmarketable debt. For some economies, tradable instruments in the Joint External Debt Hub are reported at market value. External debt in US dollars is converted to local currency, then taken as a percentage of the 2021 gross general government debt.

[7] Singapore's general government debt is covered by financial assets and is issued to deepen the domestic market, meet the Central Provident Fund's investment needs, and provide individuals with a long-term savings option.

Table A24. Emerging Market and Middle-Income Economies: Structural Fiscal Indicators
(Percent of GDP, except when indicated otherwise)

	Pension Spending Change, 2021–30[1]	Net Present Value of Pension Spending Change, 2021–50[2]	Health Care Spending Change, 2021–30[3a,3b]	Net Present Value of Health Care Spending Change, 2021–50[2]	Gross Financing Need, 2022[4]	Average Term to Maturity, 2022 (years)[5]	Debt to Average Maturity, 2022	Projected Interest Rate–Growth Differential, 2022–27 (percent)	Prepandemic Overall Balance, 2012–19	Projected Overall Balance, 2021–27	Nonresident Holding of General Government Debt, 2021 (percent of total)[6]
Average	1.5	69.0	0.6	26.8	13.1	7.6	9.4	–4.9	–3.2	–5.4	13.7
G20 Emerging	1.6	72.8	0.6	26.9	12.9	7.8	8.8	–4.7	–3.4	–6.1	10.2
Algeria	2.7	112.1	0.6	30.4	...	...	...	–6.6	–7.1	–6.2	1.3
Angola	0.1	2.2	0.1	5.7	...	5.1	27.0	–4.7	–1.6	0.8	...
Argentina	0.8	41.6	0.9	40.8	19.9	10.5	9.8	–22.3	–5.0	–2.9	40.7
Belarus	4.0	109.3	0.7	28.3	...	4.9	9.7	–5.2	–0.3	–0.6	65.0
Brazil	0.3	31.0	0.9	38.4	21.0	5.4	18.4	2.1	–6.4	–5.5	11.3
Bulgaria	0.1	6.7	0.8	35.4	...	7.4	3.1	–4.9	–0.9	–1.1	50.1
Chile	1.1	45.4	1.2	51.0	2.1	10.9	3.0	–2.9	–1.6	–1.5	38.5
China	2.1	95.7	0.7	29.6	...	7.3	9.4	–5.7	–2.7	–6.9	3.5
Colombia	1.8	80.6	1.7	74.7	5.7	10.1	6.5	–1.6	–2.4	–2.6	33.0
Croatia	0.6	3.9	1.1	46.6	8.3	5.5	16.0	–3.9	–2.4	–2.2	32.5
Dominican Republic	0.1	2.3	0.5	23.6	4.2	9.8	7.3	–3.8	–2.9	–2.6	55.2
Ecuador	0.8	36.0	0.9	41.6	4.2	12.6	4.8	...	–4.3	...	67.9
Egypt	0.8	37.9	0.2	9.3	35.8	3.3	26.8	–3.4	–10.7	–6.5	21.9
Hungary	–0.1	22.7	1.1	46.1	14.7	6.4	12.5	–4.9	–2.3	–3.0	32.9
India	0.6	28.7	0.2	7.4	14.3	10.6	8.5	–4.2	–7.0	–8.7	4.8
Indonesia	0.2	9.8	0.3	12.6	6.6	8.7	4.5	–2.9	–2.2	–3.1	40.5
Iran	1.3	89.4	...	...	...	...	...	–13.7	–1.7	–6.7	...
Kazakhstan	1.7	49.3	0.2	10.3	...	6.8	3.9	–3.0	–0.1	–1.1	32.2
Kuwait	6.3	347.8	0.9	40.0	10.5	1.4	8.2	–1.2	13.2	10.9	...
Lebanon	...	...	...	...	...	4.9	27.6	...	–8.7	...	...
Malaysia	1.6	66.8	0.4	15.3	9.7	8.5	8.0	–2.2	–2.7	–3.6	24.2
Mexico	0.9	42.3	0.5	22.7	12.7	8.4	7.2	2.1	–3.0	–3.1	25.2
Morocco	1.5	56.8	0.4	17.5	15.4	6.6	11.7	–2.0	–4.8	–5.1	22.3
Oman	0.5	24.4	0.6	29.6	8.6	7.5	9.5	2.5	–7.2	3.8	...
Pakistan	0.2	10.8	0.2	7.0	27.7	2.7	29.2	–4.8	–5.8	–4.4	32.8
Peru	0.3	12.9	0.6	27.7	4.4	14.7	2.4	–2.6	–1.0	–1.4	49.4
Philippines	0.2	8.7	0.2	10.1	13.0	6.4	8.1	–5.2	–0.3	–3.9	25.1
Poland	0.1	–2.3	0.8	34.8	7.4	4.6	12.5	–5.1	–2.4	–3.3	29.6
Qatar	0.9	49.3	0.4	18.1	8.6	9.5	7.6	–2.6	8.9	8.5	8.6
Romania	3.1	94.1	...	...	12.9	7.4	6.7	–2.8	–2.8	–6.7	47.5
Russia	2.6	68.5	0.6	26.3	5.1	7.3	2.6	–2.7	–0.7	–3.2	20.8
Saudi Arabia	1.7	81.2	0.8	34.5	11.6	10.0	3.2	–1.0	–4.4	3.6	36.5
South Africa	0.3	11.8	0.8	35.3	15.9	11.8	5.9	2.8	–4.1	–6.8	27.3
Sri Lanka	0.6	24.5	0.3	13.6	33.6	4.5	22.4	–3.8	–6.0	–10.5	32.1
Thailand	3.2	114.4	0.6	24.5	13.4	7.6	6.5	–1.8	–0.2	–4.4	10.8
Turkey[7]	0.4	31.2	0.7	30.5	11.3	5.3	7.2	–12.6	–2.4	–6.4	34.6
Ukraine	0.7	35.1	0.6	25.6	27.0	6.8	9.0	0.6	–2.9	–11.1	49.8
United Arab Emirates	0.8	40.8	0.4	19.4	...	3.6	11.2	–2.5	1.6	4.9	...
Uruguay[8]	0.8	39.0	1.2	51.3	5.9	12.3	5.6	–2.9	–2.3	–2.0	49.9
Venezuela	...	...	...	...	...	...	...	...	–15.3	...	...

Sources: Joint External Debt Hub, Quarterly External Debt Statistics; national authorities; and IMF staff estimates and projections.

Note: All country averages are weighted by nominal GDP converted to US dollars at average market exchange rates in the years indicated and based on data availability.

[1] Pension projections rely on authorities' estimates when these are available. When authorities' estimates are not available, IMF staff projections use the methodology described in Clements, Eich, and Gupta's Equitable and Sustainable Pensions: Challenges and Experience (IMF 2014). These pension spending projections may be different from the previous edition of the Fiscal Monitor because of new baseline pension numbers, new authorities' projections, or updated demographic data from the UN World Population Prospects.

[2] For net present value calculations, a discount rate of 1 percent a year in excess of GDP growth is used for each economy.

[3a] IMF staff projections for health care spending are driven by demographics and real GDP growth that is not explained by demographics ("excess cost growth") is assumed to be the income group historical average (1.2 percent).

[3b] These health expenditure projections have been updated to include: (1) new available underlying health and economic data; (2) technical adjustments to the Excess Cost Growth calculation and the age-expenditure profiles; (3) exclusion of health expenditure growth during the COVID-19 period in the underlying trend expenditure growth estimate.

[4] "Gross financing need" is defined as the projected overall balance and maturing government debt in 2022. Data are from IMF staff projections.

[5] Average-term-to-maturity data refer to government securities; the source is Bloomberg Finance L.P.

[6] Nonresident holding of general government debt data are the third quarter of 2021 or latest available from the Joint External Debt Hub, Quarterly External Debt Statistics, which include marketable and nonmarketable debt. For some countries, tradable instruments in the Joint External Debt Hub are reported at market value. External debt in US dollars is converted to local currency, then taken as a percentage of 2021 gross general government debt.

[7] The average-term-to-maturity data for Turkey is in accordance with the published data for central government debt securities as of July 2021.

[8] Data are for the nonfinancial public sector, which includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. The coverage of fiscal data was changed from the consolidated public sector to the nonfinancial public sector with the October 2019 submission. With this narrower coverage, the central bank balances are not included in the fiscal data. Historical data were also revised accordingly.

Table A25. Low-Income Developing Countries: Structural Fiscal Indicators
(Percent of GDP, except when indicated otherwise)

	Pension Spending Change, 2021–30[1]	Net Present Value of Pension Spending Change, 2021–50[2]	Health Care Spending Change, 2021–30[3a,3b]	Net Present Value of Health Care Spending Change, 2021–50[2]	Average Term to Maturity, 2022 (years)[4]	Debt to Average Maturity, 2022	Projected Interest Rate–Growth Differential, 2022–27 (percent)	Pre-Pandemic Overall Balance, 2012–19	Projected Overall Balance, 2021–27	Nonresident Holding of General Government Debt, 2021 (percent of total)[5]
Average	0.5	21.9	0.2	7.6	7.0	8.1	-6.9	-3.4	-4.5	46.7
Afghanistan	...	...	...	...	...	...	...	-0.4	...	...
Bangladesh	0.2	12.9	0.1	2.9	5.3	7.4	-5.0	-4.2	-5.2	36.6
Benin	0.0	1.1	0.1	2.8	8.1	5.7	-4.9	-2.6	-3.4	...
Burkina Faso	0.0	3.0	0.3	12.3	3.1	15.0	-3.2	-3.5	-4.2	50.9
Cambodia	0.2	8.7	0.2	10.5	...	...	-7.4	-0.9	-3.7	90.9
Cameroon	0.0	2.8	0.0	1.2	5.0	8.9	-4.6	-3.7	-0.8	...
Chad	0.0	0.0	0.1	4.0	...	...	-4.0	-1.3	4.5	...
Congo, Democratic Republic of the	...	...	0.1	2.8	...	...	-5.5	0.3	-1.8	...
Congo, Republic of	0.2	10.1	0.1	3.9	...	...	-2.0	-4.4	5.6	...
Côte d'Ivoire	0.0	1.8	0.1	5.3	...	...	-3.6	-2.4	-3.7	...
Ethiopia	0.0	1.0	0.1	4.7	...	...	-19.1	-2.3	-2.9	...
Ghana	0.2	9.6	0.2	9.8	6.9	11.4	-4.3	-6.8	-8.2	...
Guinea	0.0	0.0	0.1	3.6	...	...	-10.7	-2.5	-3.3	...
Haiti	...	...	0.1	3.6	...	...	-11.5	-1.8	-2.1	...
Honduras	0.4	20.4	0.4	19.2	4.1	12.3	-2.5	-1.7	-0.8	...
Kenya	0.4	21.8	0.3	14.0	8.3	8.1	-3.0	-6.5	-5.3	47.9
Kyrgyz Republic	4.2	123.5	0.3	14.9	...	...	-8.2	-3.2	-1.3	79.8
Lao P.D.R.	0.1	7.4	0.2	6.8	...	...	-4.5	-4.2	-4.6	...
Madagascar	0.2	9.8	0.2	8.6	...	...	-9.1	-2.1	-4.4	48.8
Malawi	0.0	3.6	0.4	15.6	2.7	17.5	-1.9	-3.9	-6.9	43.0
Mali	-0.1	0.5	0.1	6.5	3.2	14.9	-3.6	-2.7	-3.6	...
Moldova	4.6	134.5	0.8	31.3	2.5	14.6	-7.0	-1.4	-4.6	50.0
Mozambique	-0.1	0.7	0.2	10.2	3.2	37.2	-9.8	-4.4	-1.8	...
Myanmar	0.2	10.6	...	...	...	...	-6.7	-2.8	-6.1	...
Nepal	0.2	15.5	0.2	7.8	...	...	-8.3	-1.3	-4.1	...
Nicaragua	0.9	45.6	0.8	34.8	1.6	30.1	-5.3	-1.3	-2.0	79.3
Niger	0.0	-1.0	0.2	9.6	...	...	-7.2	-3.8	-3.9	...
Nigeria	0.0	1.1	0.1	3.0	8.8	3.9	-4.9	-3.5	-6.1	...
Papua New Guinea	0.1	2.4	0.2	10.4	...	...	-1.8	-4.1	-3.7	40.7
Rwanda	0.1	2.6	0.3	15.0	6.6	9.8	-8.9	-2.8	-4.8	69.4
Senegal	0.0	`	0.1	5.6	9.5	7.3	-5.2	-3.7	-3.8	...
Sudan	0.0	1.4	0.2	7.1	...	...	-31.8	-6.3	-1.7	...
Tajikistan	0.5	14.6	0.3	11.3	...	...	-7.8	-2.6	-2.5	79.5
Tanzania	0.2	11.0	0.2	8.8	8.8	4.6	-4.8	-2.6	-2.6	...
Uganda	0.0	3.7	0.1	4.2	...	...	-5.3	-3.1	-4.2	...
Uzbekistan	3.1	105.5	0.3	12.9	...	...	-11.3	1.8	-2.9	64.4
Vietnam	1.8	76.3	0.3	13.2	...	...	-7.6	-3.5	-4.4	...
Yemen	0.1	8.8	0.1	2.9	...	...	-20.1	-6.6	-4.2	...
Zambia	0.1	5.4	0.3	11.6	...	...	-5.2	-6.9	-6.0	...
Zimbabwe	0.0	6.8	0.4	17.5	...	...	-23.3	-3.5	-2.6	...

Sources: Joint External Debt Hub, Quarterly External Debt Statistics; national authorities; and IMF staff estimates and projections.

Note: All country averages are weighted by nominal GDP converted to US dollars at average market exchange rates in the years indicated and based on data availability.

[1] Pension projections rely on authorities' estimates when these are available. When authorities' estimates are not available, IMF staff projections use the methodology described in Clements, Eich, and Gupta's Equitable and Sustainable Pensions: Challenges and Experience (IMF 2014). These pension spending projections may be different from the previous edition of the Fiscal Monitor because of new baseline pension numbers, new authorities' projections, or updated demographic data from the UN World Population Prospects.

[2] For net present value calculations, a discount rate of 1 percent a year in excess of GDP growth is used for each economy.

[3a] IMF staff projections for health care spending are driven by demographics and other factors. The difference between the growth of health care spending and real GDP growth that is not explained by demographics ("excess cost growth") is assumed to be the income group historical average (1.2 percent).

[3b] These health expenditure projections have been updated to include: (1) new available underlying health and economic data; (2) technical adjustments to the Excess Cost Growth calculation and the age-expenditure profiles; (3) exclusion of health expenditure growth during the COVID-19 period in the underlying trend expenditure growth estimate.

[4] The average-term-to-maturity data refer to government securities; the source is Bloomberg Finance L.P.

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IMF EXECUTIVE BOARD DISCUSSION OF THE OUTLOOK, APRIL 2022

The following remarks were made by the Chair at the conclusion of the Executive Board's discussion of the Fiscal Monitor, Global Financial Stability Report, *and* World Economic Outlook *on April 11, 2022.*

Executive Directors broadly agreed with staff's assessment of the global economic outlook, risks, and policy priorities. They noted that the war in Ukraine has led to a costly humanitarian crisis, with economic and financial repercussions and spillovers—through commodity markets, confidence, trade, and financial channels—that have prompted a downgrade to the global economic outlook and increased inflationary pressures at a time when the global economy has not yet recovered from the COVID-19 crisis. Directors concurred that the sharp increase in uncertainty could make economic projections especially volatile. They agreed that emerging risks—from an intensification of the war, further sanctions on Russia, fragmentation in financial and trade markets, and a sharper-than-expected slowdown in China due to COVID-19 outbreaks—on top of the continued risk of new, more virulent COVID-19 strains have further tilted the balance of risks to the downside. Moreover, Directors noted that the war in Ukraine has increased the likelihood of food shortages and wider social tensions given higher food and energy prices, which would further adversely impact the outlook.

Against this backdrop, Directors agreed that policy priorities differ across countries, reflecting local circumstances and differences in trade and financial exposures. Directors emphasized that the layering of strains—slowing economic growth, persistent and rising inflation pressures, increased food and energy insecurity, continued supply chain disruptions, and COVID-19 flare-ups—further complicates national policy choices, particularly for countries where policy space shrank after the necessary response to the COVID-19 pandemic. At the global level, Directors stressed that multilateral cooperation and dialogue remain essential to defuse geopolitical tensions and avoid fragmentation, end the pandemic, and respond to the myriad challenges facing our interconnected world, particularly climate change.

Directors concurred that, in many countries, fiscal policy is operating in a highly uncertain environment of elevated inflation, slowdown in growth, high debt, and tightening borrowing conditions. While acknowledging that fiscal policy has a role to play in moments of large adverse shocks, Directors considered that, particularly for countries with tighter budget constraints, fiscal support should focus on priority areas and target the most vulnerable. They emphasized that, in countries where economic growth is strong and where inflation is elevated, fiscal policy should phase out pandemic-related exceptional support, moving toward normalization. Directors acknowledged that many emerging markets and low-income countries face difficult choices given limited fiscal space and higher demands on governments due to energy disruptions and the pressing need to ensure food security. In this context, they underscored that a sound and credible medium-term fiscal framework, including spending prioritization and measures to raise revenues, can help manage urgent needs while ensuring debt sustainability. Directors stressed that short-term measures to mitigate high food and energy prices should not undermine actions to ensure greater resilience through investment in health, food, and cleaner energy sources.

Directors concurred that monetary authorities should act decisively to prevent inflationary pressures from becoming entrenched and avoid a de-anchoring of inflation expectations. They noted that central banks in many advanced and emerging market economies need to continue tightening the monetary policy stance to bring inflation credibly back to target and preserve hard-built policy credibility. Directors stressed that transparent, data-driven, and clearly communicated monetary policy is critical to avoid financial instability. They considered that, should global financial

conditions tighten suddenly, emerging and developing economies could face capital outflows and should be ready to use all available tools, including foreign exchange interventions and capital flow management measures, when needed and in line with the Fund's Institutional View on the Liberalization and Management of Capital Flows and without substituting for exchange rate flexibility and warranted macroeconomic adjustments.

Directors agreed that the war in Ukraine will test the resiliency of the financial system. They noted that, although no systemic event has materialized so far, financial stability risks have risen along many dimensions while global financial conditions have tightened significantly. Directors concurred that, in those emerging markets where the sovereign-bank nexus could pose vulnerabilities, it should be closely monitored. They also noted risks of fragmentation of capital markets and payment systems, the creation of blocks of central bank digital currencies, a more widespread use of crypto assets, and more frequent cyberattacks. Directors recommended tightening selected macroprudential tools to tackle pockets of elevated vulnerabilities while avoiding procyclicality and a disorderly tightening of financial conditions. They also called for comprehensive global standards and a multifaceted strategy for crypto assets and for a more robust oversight of fintech firms and decentralized finance platforms.

Directors agreed that strong multilateral cooperation is essential to respond to existing and unfolding humanitarian crises, safeguard global liquidity,

manage debt distress, ensure food security, mitigate and adapt to climate change, and end the pandemic. Noting that many countries are coping with higher volatility, increased spending from the pandemic and humanitarian crises, and tightening financial conditions, Directors called on the Fund and other multilateral institutions to stand ready to provide financial support. At the same time, they noted that prompt and orderly debt restructuring, particularly by improving the G20 Common Framework, will be necessary in cases where liquidity support is insufficient. Directors noted that increasingly dire climate change developments heighten the urgency for tangibly advancing the green economic transformation. They stressed the importance of intensifying efforts to implement the COP26 roadmap together with appropriate measures to address energy security concerns. Directors considered that international cooperation in corporate taxation and carbon pricing could also help mobilize resources to promote the necessary investments and reduce inequality. As the pandemic persists, Directors underscored that prompt, equitable, and wider access to vaccinations, testing, and treatments remains a key priority. They also reiterated that measures to address the scars from the pandemic remain crucial to boost long-term prospects and create a more resilient and inclusive global economy. Above all, Directors called for a peaceful resolution of the war in Ukraine, an end to the resulting humanitarian crisis, and a return to the rules-based international order that helped lift millions out of poverty over the past decades.
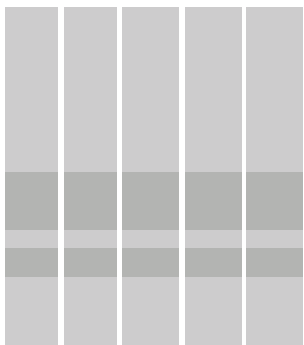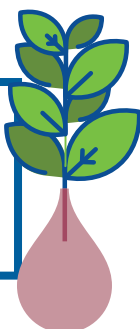
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