

INTERNATIONAL MONETARY FUND

FISCAL MONITOR

Helping People
Bounce Back

2022
OCT



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Editor’s Note (12/8/22): The reference to Christl and others (2022) was revised after publication to better acknowledge the role of the Joint Research Centre of the European Commission, where most coauthors are affiliated.

ASSUMPTIONS AND CONVENTIONS

The following symbols have been used throughout this publication:

- . . . 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.

“Basis points” refers to hundredths of 1 percentage point (for example, 25 basis points are equivalent to $\frac{1}{4}$ of 1 percentage point).

“n.a.” means “not applicable.”

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

As used in this publication, the term “country” does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis.

FURTHER INFORMATION

Corrections and Revisions

The data and analysis appearing in the *Fiscal Monitor* are compiled by IMF staff at the time of publication. Every effort is made to ensure their timeliness, accuracy, and completeness. When errors are discovered, corrections and revisions are incorporated into the digital editions available from the IMF website and on the IMF eLibrary. All substantive changes are listed in the Table of Contents of the online PDF of the report.

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PREFACE

The projections included in this issue of the *Fiscal Monitor* are drawn from the same database used for the October 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 October 2022 *Fiscal Monitor*.

The *Fiscal Monitor* is prepared by the IMF Fiscal Affairs Department under the general guidance of Vitor Gaspar, Department Director. The project was directed by Paolo Mauro, Deputy Director; and Paulo Medas, Division Chief. The main authors of Chapter 1 in this issue are W. Raphael Lam (team lead) and Roberto Piazza (deputy lead), Fernanda Brollo, Xuehui Han, Gee Hee Hong, Youssouf Kiendrebeogo, Anh Dinh Minh Nguyen, John Ralyea, Alexandra Solovyeva, and Alberto Tumino, with contributions from David Amaglobeli, Carolina Bloch, Nick Carroll, Mengfei Gu, Emine Hanedar, Mauricio Soto, Céline Thévenot, and João Jalles (University of Lisbon), and research support from Andrew Womer and Zhonghao Wei.

The Methodological and Statistical Appendix was prepared by Chenlu Zhang under the guidance of John Ralyea and Alexandra Solovyeva. Meron Haile and Andre Vasquez provided excellent coordination and editorial support. Runit Pancholi from the Communications Department led the editorial team and managed the report’s production, with editorial assistance from Grauel Group and TalentMEDIA Services.

Inputs, comments, and suggestions were received from other departments in the IMF, including area departments—namely, the African Department, Asia and Pacific Department, European Department, Middle East and Central Asia Department, and Western Hemisphere Department—as well as the Communications Department, Institute for Capacity Development, Legal Department, Monetary and Capital Markets Department, Research Department, Secretary’s Department, Statistics Department, and Strategy, Policy, and Review Department. Chapter 1 of the *Fiscal Monitor* also benefited from comments by Markus Brunnermeier (Princeton University), Wendy Edelberg (Brookings), Leonardo Iacovone (World Bank), Camille Landais (London School of Economics), Eric Parrado Herrera (Inter-American Development Bank), and Ricardo Reis (London School of Economics and Political Science). Both projections and policy considerations are those of the IMF staff and should not be attributed to Executive Directors or to their national authorities.

FOREWORD

The global economy is being buffeted by a sequence of disturbances. After unprecedented expansion in 2020, monetary and fiscal policy have pivoted together from expansion to tightening. Debt and deficits fell in 2021 and 2022 but remain above prepandemic levels and projections. These developments reflect mainly the unwinding of pandemic-related measures and surprise inflation. In the context of high inflation, high debt, rising interest rates, and elevated uncertainty, consistency between monetary and fiscal policy is paramount. In most countries, this means keeping the budget on its tightening course.

Inflation surprises are contributing to the reduction of debt and deficits. But we also must recognize that inflation surprises cannot endure. If inflation becomes broad-based and persistent, it will eventually be reflected in inflation expectations. In such a situation, assets that promise nominal returns become less attractive. High and volatile inflation makes credit more expensive and unreliable. There is thus a trade-off between short-run expediency and macroeconomic stability. With inflation elevated and financing conditions tightening, policymakers should prioritize macroeconomic and financial stability above all else. This is especially relevant as recent developments in bond markets show increased market sensitivity to deteriorating (or bad) fundamentals. That raises the prospect of more frequent and more disruptive fiscal crises across the world.

Very high inflation, together with surging food and energy prices, translates into a politically salient cost-of-living crisis. Governments are adopting hundreds of policy actions this year in response to surging food and energy prices. Food spending is proportionately much greater in poorer countries (and poorer households). Hence, in these economies, food is the dominant driver of policy action. In advanced economies energy dominates.

Our report includes the results of a survey of 174 countries covering about 750 measures enacted in the first half of 2022 to counter the food and energy crisis. The most common measures aim at

dulling price pass-through and include reductions in consumption taxes, customs duties, and energy price subsidies. Most measures have not been targeted at those most in need.

The rise of extreme poverty and food insecurity that began even before the pandemic is very concerning. Emergency support is necessary. The food crisis should be addressed, at the global level, by a broad set of initiatives including the lifting of restrictions on exports of food and fertilizers. Some emergency financing will be available through the new Food Shock Window under the IMF emergency financing toolkit. But more is needed, including through the voluntary rechanneling of wealthier countries' allocations of the IMF's special drawing right (SDR) to poorer countries.

At the national level, countries must prioritize food security. In many cases, binding financing constraints make the trade-offs very painful for countries. Coordinated global action is thus urgent.

Compounding the food plight, the energy crisis—especially in Europe—is proving to be profound, protracted, and is likely to persist. Given the size of the shock, many households and firms require support that facilitates adjustment. It is critical to design the policy response in a way that navigates difficult, but pressing, trade-offs. The price mechanism must play a key role in the allocation of scarce energy resources and targeted measures help to reconcile the imperative of support for the vulnerable with maintaining the budget deficit on a downward path. Facing a shifting landscape, policymakers must stay agile to be able to respond appropriately to the unexpected. Long commitments are not more than a pretense of certainty and can quickly become unaffordable.

This *Fiscal Monitor* takes a deep dive into how fiscal policy can build a resilient society that helps people bounce back from significant adversity. The pandemic has shown that fiscal measures can be swift and impactful in protecting people and firms in difficult times. Governments have used novel and innovative tools, often leveraging digital technology.

These measures can be more efficient if building on a sound pre-existing social protection system when crises strike. The *Fiscal Monitor* thus stresses the importance of preparing a strategy, making social support readily scalable and better targeted and building fiscal buffers in normal times. These actions would allow governments to respond promptly and flexibly to deliver support to those who really need it. Infor-

mation, transparency, the institutional capacity will be key—as will managing risks and exiting support measures. This is particularly challenging when facing shocks that are both as far-reaching and persistent as we are witnessing today.

Vitor Gaspar
Director of the Fiscal Affairs Department

EXECUTIVE SUMMARY

Current Developments

Rising inflation and climbing interest rates have supplanted more than a decade of muted inflation and low interest rates in many countries. Recession concerns are surfacing and geopolitical tensions have increased further as Russia's invasion of Ukraine persists (October 2022 *World Economic Outlook*). Fiscal policy trade-offs are increasingly difficult, especially for high-debt countries where responses to the COVID-19 pandemic exhausted their fiscal space. Households are struggling with elevated food and energy prices, raising the risk of social unrest.

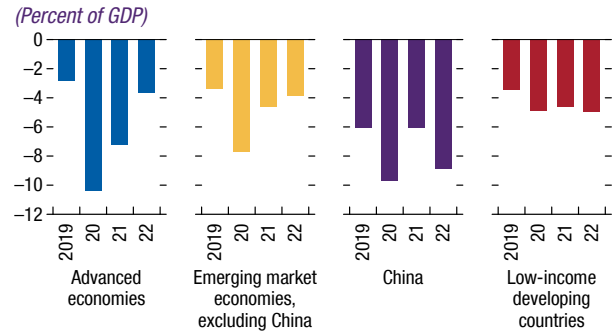
A Shifting Landscape Puts Pressure on Budgets

In 2021 and 2022, fiscal deficits have fallen sharply in advanced and emerging market economies but remain larger than prepandemic levels across income groups (Figure ES.1). The contraction in the average deficit for advanced economies and emerging market economies (excluding China) is notable, reflecting the unwinding of pandemic-related measures amid rising inflation. In addition, many oil exporters are now running fiscal surpluses because of higher oil revenues. Conversely, China's deficit is projected to widen in 2022 as growth slows and inflation remains low. For low-income developing countries, which had a relatively mild fiscal response to the pandemic, the average deficit has barely changed. Compared with 2019, the larger deficits in advanced economies and low-income developing countries reflect higher spending than three years ago (partly because of responses to the food and energy crises), whereas in emerging market economies it is mainly because revenues have yet to rebound.

Global government debt is projected to be 91 percent of GDP in 2022, which is about 7.5 percentage points above the prepandemic levels, despite the recent reduction in the ratio for many countries (Figure ES.2). Debt decreased because of deficit reduction, economic recovery, and inflation shocks (Figure ES.3).

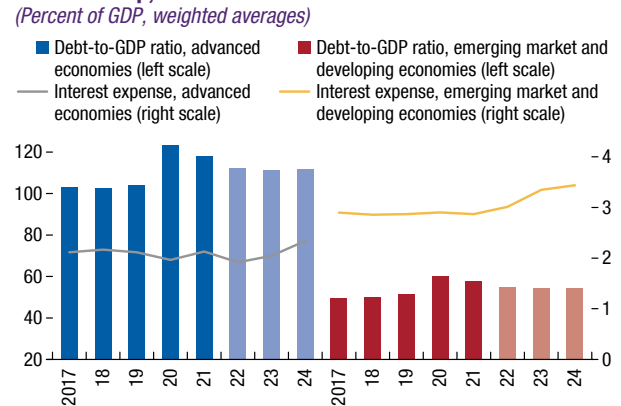
The sharp rise in food and energy prices also puts pressure on government budgets. Food and energy prices remain well above prepandemic levels—the UN Food and Agriculture Organization's Food Price Index for August 2022 was 45 percent higher than in 2019. Countries have implemented new

Figure ES.1. National Budget Balances, by Income Group, 2019–22



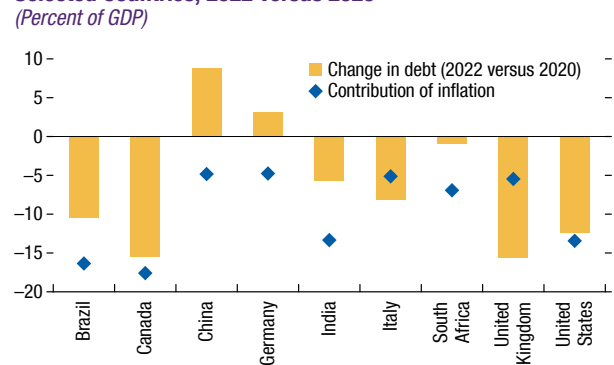
Source: IMF, World Economic Outlook database.

Figure ES.2. National Gross Debt and Interest Expense, by Income Group, 2014–24



Sources: IMF, World Economic Outlook; and IMF staff calculations. Note: China is excluded. Bars for 2022–24 are projected data.

Figure ES.3. Effect of Inflation Shock on the Debt Ratio, Selected Countries, 2022 versus 2020



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

measures, including price subsidies, tax cuts, and cash transfers, to help households. In most countries, the announced measures cost more than 0.5 percent of GDP (excluding existing subsidies) reflecting in part insufficient targeting. Low-income developing countries have incurred the highest relative cost for new food-related measures (Figure ES.4).

Budget constraints are tightening as global financial conditions become more challenging (October 2022 *Global Financial Stability Report*). Many emerging market economies and low-income developing countries have been managing surging spreads in 2022; the median spread for low-income developing countries has increased over 50 percent in the past year (Figure ES.5). Interest expense relative to GDP is projected to rise over the coming years even as debt stabilizes. If inflation becomes more volatile, borrowing costs could rise further as investors require a higher premium for long-term debt. Also, revenue could fall if higher interest rates reduce central bank profits and the related dividend payments to governments. Moreover, almost 60 percent of the lowest-income economies are already in or at high risk of debt distress, highlighting the need for a robust Common Framework for debt relief.

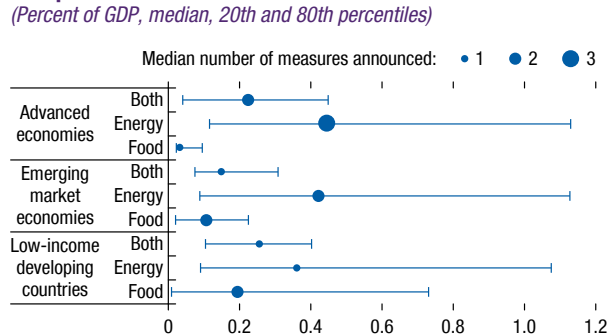
The global economy is slowing amid continued tight financing conditions. A sharp downturn would further accentuate trade-offs among competing priorities of demand management, debt stabilization, protection of vulnerable populations, and investment for the future.

Fiscal Policy Needs to Adjust

Defining a consistent medium-term policy framework for the postpandemic world is crucial. Relying on repeated inflation surprises to reduce public debt is not a viable strategy and will lead to spending pressures (for example, wages and cost of services). Reducing deficits, as many advanced and emerging markets are projected to do (Figure ES.6), is necessary to help tackle inflation and address debt vulnerabilities. Fiscal consolidation sends a powerful signal that policymakers are aligned in their fight against inflation, which, in turn, would reduce the size of required policy rate increases to keep inflation expectations anchored and keep debt servicing costs lower than otherwise. Many countries are also revamping their fiscal rules to anchor policies. While politically difficult, gradual and steady fiscal tightening is less disruptive than an abrupt fiscal pullback brought on by loss of market confidence.

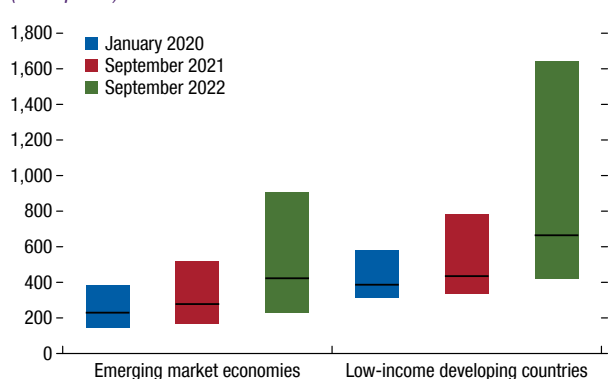
Prioritizing policies and programs is increasingly vital as governments operate within tighter budgets. Top priorities are to ensure everyone has access to affordable food and to protect low-income households from rising inflation.

Figure ES.4. Food and Energy Support Policies, by Income Group
(Percent of GDP, median, 20th and 80th percentiles)



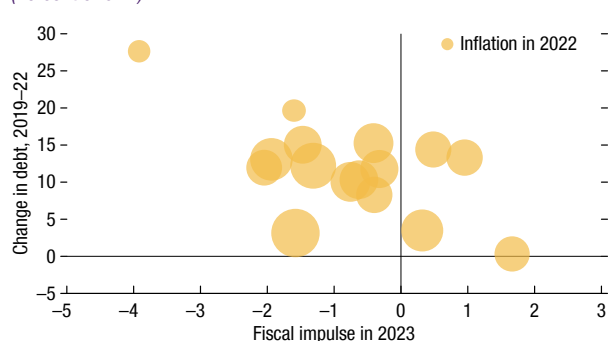
Source: IMF staff estimates.
Note: Whiskers reflect the 20th and 80th percentiles. Dots reflect the median and the number of announced measures of each type.

Figure ES.5. Sovereign Spreads, by Income Group, 2020–22
(Basis points)



Source: JPMorgan Emerging Market Bond Index.
Note: Lines are median and shaded areas are interquartile ranges for a sample of 49 emerging market economies and 9 low-income developing countries.

Figure ES.6. Fiscal Impulse, Inflation, and Debt for G20 Countries
(Percent of GDP)



Source: IMF, World Economic Outlook database.
Note: Includes Spain; excludes Argentina, Russia, Saudi Arabia, and Türkiye. Fiscal impulse is measured by the change in the cyclically adjusted primary balance. The size of the bubble reflects the inflation rate.

Faced with long-lasting supply shocks and broad-based inflation, attempts to limit price increases through price controls, subsidies, or tax cuts will be costly to the budget and ultimately ineffective. Governments should allow prices to adjust and provide temporary targeted cash transfers to the most vulnerable. Price signals are critical to promote energy conservation and encourage private investment in renewables. Public investment in critical areas should be safeguarded. As part of the prioritization effort, countries may need to raise additional revenues and contain the growth of other expenditures, including public wages, both of which could help contain overall wage and price pressures. In the dwindling number of countries with fiscal space, and where inflation is under control, automatic stabilizers should operate fully.

Helping People Bounce Back

Government policies foster resilience by helping households and firms recover from or adjust to adversity. In advanced economies, fiscal actions were swift and forceful to protect people's livelihoods from the outset of the COVID-19 pandemic and laid the foundation for a quick bounceback. Such measures also involved fiscal costs and risks, with implications for policies going forward. Fiscal responses were more diverse among emerging markets and developing economies, with many economies financially constrained throughout the pandemic.

Building a resilient society requires government actions to protect households and firms against large losses of *real* income and employment—the focus of this *Fiscal Monitor*. It also requires actions in other intertwined areas, including (but not limited to) health care and pandemic preparedness, adaptation to climate changes and natural disasters, and equitable access to opportunities. For example, a society with strong social safety nets and equitable access to health care and education helps ensure that individuals who lose their jobs do not suffer lasting setbacks in their well-being or lifetime earnings. The COVID-19 pandemic (and the global financial crisis a decade and a half ago) led to innovative and forceful discretionary fiscal responses, against the backdrop of constrained monetary policy with interest rates near zero or negative, in many advanced economies. The ensuing reassessment of the appropriate size and mix of policy tools in response to large crises can inform the response to current challenges, including the cost-of-living squeeze associated

with spikes in food and energy prices, and can help governments prepare for future adversities:

- Social protection systems help people bounce back from unemployment, sickness, or poverty, making them resilient to a broad set of negative shocks. As demonstrated during the pandemic, social safety nets or broad-based cash transfers can be expanded quickly, often by leveraging new technologies. But preparation is necessary to make such systems more readily scalable and better targeted, to limit unnecessary spending, and to deliver support to those who truly need it. Reducing informality in the economy—a challenge in many low-income and developing economies—would allow people and firms to benefit from better protection when crises strike.
- Job-retention schemes provided strong income stabilization and were largely well targeted. They are a useful part of the fiscal toolbox alongside unemployment income support, particularly in situations in which layoffs would curb labor productivity.
- To cushion the blow from high food and energy prices, policies should in general avoid price subsidies or controls that are costly and ineffective, and instead target support to low-income households through social safety nets. Countries without strong safety nets can expand social programs (for example, school feeding and public transportation) or lump-sum discounts on utilities. For low-income developing countries, food security should be prioritized within the existing fiscal envelope.
- Exceptional financial support to firms averted an economy-wide implosion in recent crises but needs to be restricted to major crisis situations in which severe negative externalities, such as risks of widespread bankruptcies, are evident. Public interventions to support viable firms are risky because many countries have weak governance and limited capacity to assess or monitor firms' viability. To manage the fiscal risks from measures without immediate budget impact, such as direct lending and public guarantees, governments should focus on transparency, quantification of risks, good governance, and enlisting private sector expertise to assess firms' viability.

Building on the experience of the pandemic, policymakers can now develop tools that can be readily deployed and prepare strategies that set out desirable policy responses under various scenarios.

Where protection systems are well developed, and high-frequency economic indicators are reliable, prelegislated actions conditional on previously specified triggers may be considered (such as expanded unemployment insurance following consecutive employment drops). Encouraging the private sector to build its own resilience through insurance or having workers acquire new skills can reduce the need for government intervention, which can be devoted to protecting the most vulnerable households.

Policy trade-offs are at the forefront when designing fiscal strategies. To respond flexibly during adverse events, governments need to gradually build fiscal buffers in normal times (preferably in the context of a medium-term fiscal framework) and preserve debt sustainability and access to financing. Macroeconomic trade-offs also imply that when inflationary pressures are high, fiscal policy should protect the most

vulnerable while pursuing a tightening stance to avoid overburdening monetary policy in the fight against inflation. Building buffers and tightening fiscal policy require prioritizing spending among competing needs and mobilizing revenues in a growth-friendly way. These trade-offs are stark for low-income countries that face adverse shocks while pursuing development goals—similarly important elements of resilience.

Domestic measures need to be complemented by global cooperation to foster resilience. Global synergies on pandemic preparedness and vaccine deployment were evident during the pandemic. Investing in climate adaptation can benefit from cooperation among countries. For emerging markets and developing economies that are at risk of a food crisis and have limited resources or capacity, greater global efforts can provide emergency financing, humanitarian assistance, and unhindered trade.

Introduction

A key role of government is to foster resilience—the ability for households and firms to recover from or successfully adjust to challenges such as macroeconomic crises, pandemics, climate change, or the cost-of-living squeeze associated with spikes in food and energy prices. Major crises such as the COVID-19 pandemic present the ultimate test of societal resilience. Many fiscal measures launched during the pandemic aimed to preserve the ability of people and firms to return to their activities before the crisis and to lay the foundations for a swift individual and collective bounceback.

Views on the appropriate fiscal response to adverse events have been reshaped by the experience gained during the COVID-19 pandemic and the global financial crisis that began in 2008. Previously, discretionary fiscal responses were deemed too slow or hard to unwind (Blanchard, Dell’Ariccia, and Mauro 2010; Blinder 2016), and automatic stabilizers—built-in mechanisms that raise spending or reduce taxes in a timely and temporary manner when adverse events occur—were considered sufficient. The two major global crises of the past decade and a half have led to a re-assessment. Fiscal interventions during the global financial crisis shored up private sector balance sheets and stimulated aggregate demand in advanced economies at a time when monetary policy was constrained because interest rates were nearly zero. During the unprecedented global shock of the pandemic, political consensus made it possible to deploy even more rapid, diverse, and novel measures. At the outset of the pandemic, governments and central banks served as financiers of last resort by guaranteeing firms’ credit and liquidity. Many governments quickly provided cash transfers to support households—often not just poor households but also broader segments of the population.

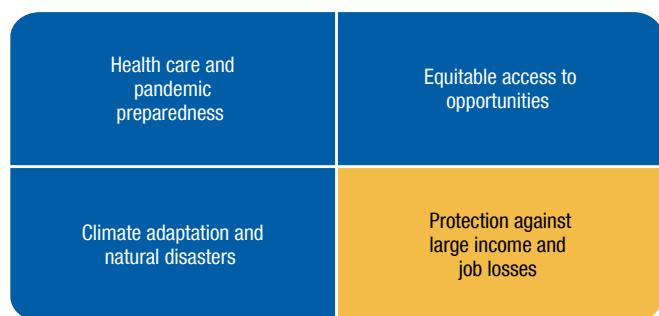
This *Fiscal Monitor* explores how fiscal policy and institutions can make society more resilient to current and future large adverse shocks. Broadly, the topic encompasses a comprehensive list of potential challenges—including climate change and natural disasters, health care and pandemic preparedness, and equitable access to opportunities—and a set of

fiscal tools and institutions whereby governments can bolster resilience. The report focuses on a narrower aspect: how to bounce back from large, widespread real income losses. Policies considered fall into three categories. The first includes support to households and workers who have lost, or are at risk of losing, their jobs or incomes. The second comprises measures to limit the adverse impact of large spikes in food and energy prices on the real incomes of households (especially those of low-income families). The third encompasses providing public support to firms to bolster their liquidity and solvency through direct lending, guarantees, and equity injections to prevent bankruptcies.

An early assessment of costs and effectiveness of policies undertaken during the first 2½ years of the pandemic can help strengthen policies to tackle current challenges and prepare for future adverse events. Policy trade-offs are at the forefront of the discussion. For example, the need for speedy discretionary action at a time of great uncertainty regarding the size and duration of a shock may come at the cost of limited targeting. Public guarantees and job support schemes may lead to market distortions that, if left unchecked, could hamper economic growth. Given that fiscal policy plays a more active role during large crises, the ability to provide substantial fiscal interventions during severe crises requires taking a longer-term perspective that includes building greater fiscal buffers in normal times. These considerations emphasize how important it is to prepare a comprehensive fiscal strategy in advance—with a clear rationale for each fiscal instrument—ready to deploy in time of need.

Fiscal Policy to Build a Resilient Society

The analysis in this *Fiscal Monitor* focuses on a subset of policies that help people and firms bounce back from job and income losses in the aftermath of major crises. It considers the costs, timeliness, and effectiveness of such policies. Preexisting inequities in access to basic public services such as education and health care often amplify the harm to individuals from these major crises.

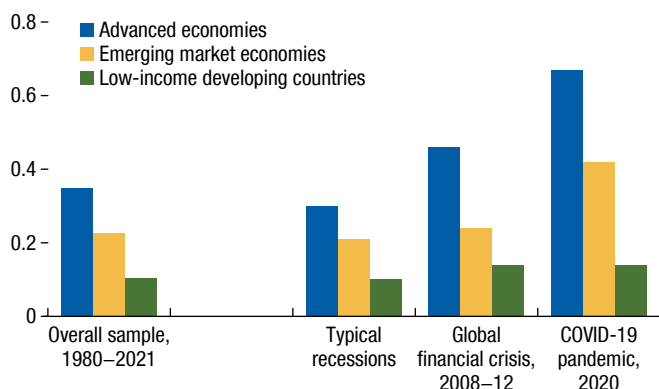
Figure 1.1. Fiscal Policy Builds Resilience in Several Critical Areas

Source: IMF staff.

More broadly, governments also build resilience by acting in several areas, such as strengthening health care systems and addressing climate change (Figure 1.1; see Box 1.1 for an overview and references).

Governments undertake fiscal policies and provide basic public services that attenuate any long-lasting harm from crises and ensuing reductions in income or employment. The recent surge in inflation, with spikes in food and energy prices, has increased the cost of living, particularly for low-income families. If safety nets are inadequate and public services such as health care or education insufficiently robust, the loss of real income or employment from a crisis can squeeze household budgets and push a family into a poverty trap, with worse health outcomes and curtailed school attendance for its children (Bellon, Pizzinelli, and Perrelli 2020; Brunnermeier 2021). Likewise, a severe fall in demand or loss of access to credit can push otherwise viable firms into bankruptcy. Tools that counter large drops in income and employment thus reduce the likelihood of lifelong harm from a broad set of adverse events (Box 1.1).

Fiscal policies have been more active during large crises. The increase in deficits (as a fraction of GDP) for each percentage point drop in real GDP growth was bigger during the global financial crisis and the COVID-19 pandemic than during typical recessions (Figure 1.2; Online Annex 1.1). Fiscal activism during major crises is even stronger when considering fiscal measures that are not immediately recorded in the deficit, such as government loans, guarantees, and equity injections to firms. For the global financial crisis, the stronger response can be partly explained by the fact that advanced

Figure 1.2. Fiscal Responses in Large Crises
(Estimated coefficients)

Source: IMF staff estimates (see Online Annex 1.1).

Note: The figure shows the average of time-varying coefficients by country income groups, based on panel regressions estimated on the sensitivity to GDP growth of the deficit-to-GDP ratio from 1980 to 2021. Typical recessions are defined as periods when individual countries' growth rates are below their own average levels over the previous three years.

economies were more adversely affected and monetary policy was constrained. The pandemic was instead a global shock, and fiscal policy aimed to protect lives and livelihoods rather than to sustain aggregate demand. Conventional macroeconomic policies that stimulate aggregate demand had limited capacity to restore employment and income, given that health concerns constrained household spending (Chetty and others 2020; Auerbach and others 2022). Fiscal responses to major crises were greater in advanced economies than in emerging markets or low-income countries, likely reflecting easier access to financing and perhaps better information about recipients of social programs, in view of a smaller informal sector. The more muted deployment of fiscal tools in emerging market and developing economies was constrained by limited fiscal space. This likely contributed to some scarring in growth prospects relative to prepandemic levels (October 2022 *World Economic Outlook*).

Several themes emerging from recent major crises are relevant to fiscal policies to meet current adversity and future challenges.

First, governments deployed a wider range of tools during major crises than typical business cycles. During the pandemic, they used multiple discretionary measures, including broad-based cash transfers. In advanced economies, these measures operated on top of already well-established automatic stabilizers, such

as unemployment insurance and social assistance.¹ Firms benefited from measures to preserve liquidity and solvency.

Second, to ensure that fiscal policies are cost-effective, it is important to determine the eligible recipients, such as those most in need of a hand up and less capable of bouncing back. Assessment should examine the distributional implications of policies in addition to their aggregate impact.

Third, the case for fiscal interventions—beyond their sizable fiscal costs—cannot be assessed in isolation from other policies. For example, a fiscal expansion can strongly support the economy when monetary policy is constrained. However, when inflation is above target, fiscal expansion can complicate the tasks of central banks. In some instances, fiscal interventions become necessary because of gaps in other policy frameworks. During the global financial crisis, for example, public bailouts of financial institutions were required to provide a backstop to the flow of credit. The ensuing fiscal costs reflected weaknesses in financial regulation, pointing to the importance of actions by both the public and private sectors. At a time when public budgets are stretched, policies that facilitate the private sector to cope with adverse shocks in a self-reliant way are helpful.

The following sections take a more in-depth analysis of fiscal tools to support households and firms against the background of these themes and discuss ways to improve those tools to meet current challenges and future adversity.

Building Resilience for Households against Job or Income Losses

Many government programs protect households from losses in income or employment. The scope of these programs in strengthening individual resilience expands during large crises, when it is harder for people to find a new job and afford a basic standard

¹Social protection systems consist of policies designed to reduce individuals' exposures to risks and vulnerabilities and to enhance their capacity to manage negative shocks such as unemployment, sickness, poverty, disability, and old age. Social protection encompasses three broad categories: (1) social safety net programs (noncontributory transfer programs to ensure a minimum level of economic well-being), (2) social insurance programs (contributory interventions to help people better manage risks), and (3) labor market programs to insure individuals against unemployment risks and improve job search prospects.

of living and when multiple household members' real incomes may fall at the same time. In these dire situations, programs such as unemployment income support or targeted transfers not only reduce the likelihood that individuals will face financial distress and suffer lasting deterioration of their well-being but also cushion the adverse impact on aggregate demand and thus speed up economic recovery.

Certain components in government budgets support households and firms automatically during adverse events. These automatic stabilizers are, by design, intended to be timely, targeted, and temporary. On the spending side, they include unemployment income support and social assistance, whereas on the revenue side they include income taxes, which ensures that individuals and firms automatically pay less tax when the economy slows down. But automatic stabilizers may be unavailable or may not be sufficient in a large crisis, especially in developing countries where informality is widespread. In those situations, discretionary measures can flexibly tailor assistance to specific situations. However, unless prior planning takes place or special efforts are made, such measures may be delayed because they require government or parliamentary approval and are often harder to unwind (Romer and Romer 2010; Eyraud, Gaspar, and Poghosyan 2017). The rest of this section looks separately at several automatic stabilizers and discretionary measures, with a focus on how they operated during the pandemic.²

Automatic Stabilizers

The size of automatic stabilizers can be measured through microsimulations that quantify how well existing tax and benefit systems buffer shocks to households' market income (income before taxes and transfers). This approach allows a detailed analysis based on household characteristics, but it does not account for the feedback effects on aggregate income when policies change (see "Takeaways from Pandemic-Related Measures to Support Households").

²The distinction between automatic stabilizers and discretionary measures is indicative and depends on countries' circumstances and legal frameworks. For example, in some European countries, job-retention schemes are activated automatically, but in others they have been used on a discretionary basis during the pandemic.

Considering policies before the pandemic for countries in the *European Union* (EU) and household-level data, microsimulations suggest that the tax and benefit systems compensated households for nearly 40 percent of a large market income loss on average during 2011–19 (Online Annex 1.2; Coady and others, forthcoming), compared with 32 percent for the *United States* before 2011 (Dolls, Fuest, and Peichl 2012).³ The degree of consumption stabilization is estimated to have been 85 percent in the *European Union* on average (meaning that EU households reduced their consumption by 15 percent for each unit drop in market income).⁴ This means that households drew down their savings to maintain consumption despite the decline in their disposable income. For low-income households, social benefits have been important in stabilizing disposable income, representing 40 percent of the overall income stabilization in the tax and benefit system (or absorbing 16 percent of the market income shock on average). For higher-income households, the progressivity of direct taxes was instead more important in stabilizing income. Similar patterns were also observed in the *United States* and other major advanced economies. In addition to stabilizing individual income, spending-side automatic stabilizers tend to redistribute resources toward the poor or vulnerable households and provide social insurance for all households, reducing their precautionary saving needs (McKay and Reis 2016, 2021).

In response to the pandemic, governments boosted protections against job and income losses. Two prominent instruments were unemployment income

support and job-retention schemes. The latter encompass policies that subsidize workers' wages in firms that have reduced working hours but preserved jobs. Many EU countries had some forms of job-retention schemes in place before the pandemic, some of which could be activated automatically (through firms), such as *Kurzarbeit* in *Germany*. As the health crisis intensified, governments introduced new or expanded existing job-retention and unemployment income support schemes. Take-up rates rose to a median of 13 percent of the working age population at the peak of the crisis, before gradually subsiding to prepandemic levels (Giupponi, Landais, and Lapeyre 2022). The *United States* stepped up its federal unemployment support by about 3 percent of GDP to raise benefits through weekly supplements, expand the eligibility to include independent workers, and extend the duration of federal benefits. Different reliance on these fiscal tools was reflected in labor market outcomes—mass layoffs or furloughs in the *United States* and reductions in working hours in Europe (Online Annex 1.2).

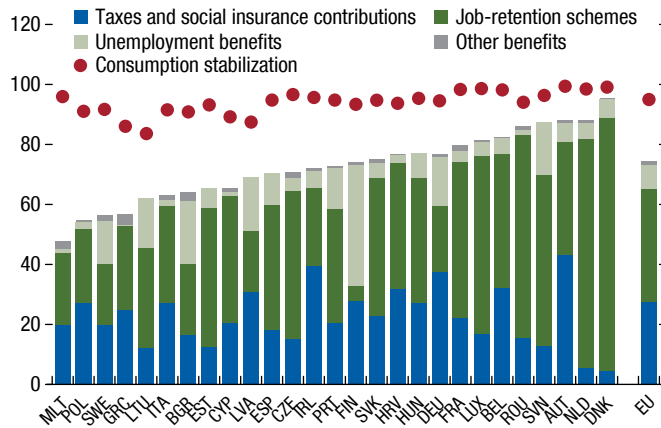
Microsimulations for the *European Union* show that the degree of income stabilization increased, thanks to the fiscal measures introduced in response to the pandemic. The tax and benefit systems (including pandemic-related measures) are estimated to have absorbed about 75 percent of the market income loss—much larger than 40 percent prevailing before the crisis (Online Annex 1.2). The job-retention schemes alone absorbed almost 40 percent of the market income shock at the EU level (Figure 1.3), at a fiscal cost of about 2 percent of GDP. An alternative scenario indicates that in the absence of job-retention schemes, the tax and benefit system would have absorbed only 47 percent of market income losses. The income stabilization coefficient, expressed in percent, was 85 percent for households in the lowest income quintile, compared with 65 percent for those in the top income quintile—although with significant variations among countries (Figure 1.4). Simulations also suggest that households might have stabilized more than 90 percent of their consumption on average (Christl and others 2022), although caution is needed when interpreting the simulation results.⁵

⁵The consumption stabilization coefficient measures the share of the market income shock that is not transmitted to household consumption or demand (see Online Annex 1.2). A higher consumption stabilization coefficient means temporary market income shocks affect consumption less.

³The approach uses a simulation model (EUROMOD) for EU countries to assess the impact of a change in tax and benefit systems, including simulations of tax liabilities and in-cash benefit entitlements at the individual or household level. The simulations are based on the 2019 EU Statistics on Income and Living Conditions (EU-SILC). The prepandemic shock is modeled in a stylized way involving a 5 percent proportional decline in market income across all households. The simulations exclude stabilization effects from old-age pensions, value-added taxes, and corporate income taxes. The results are not directly comparable with those obtained using other approaches that measure the size of automatic stabilizers on the basis of the cyclical component of the government budget responses to changes in GDP. The latter method finds that automatic stabilizers reduce one-half of output volatility in advanced economies and one-third in emerging market economies, with large variation across countries (see the April 2015 *Fiscal Monitor*; Mohl, Mourre, and Stovicek 2019).

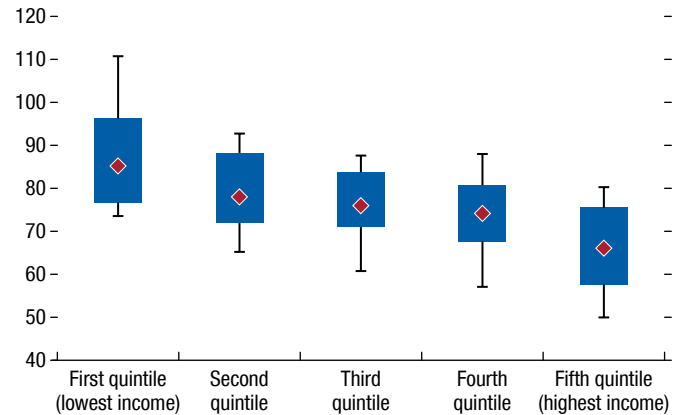
⁴The level of consumption stabilization is based on estimates of the marginal propensity to consume by household income groups for individual EU countries in Carroll, Slacalek, and Tokoku (2014) (see Online Annex 1.2).

Figure 1.3. Simulations of the Stabilization of Income and Consumption across EU Countries, 2020
(Stabilization coefficients, expressed in percent)



Sources: Christl and others 2022; and IMF staff estimates.
Note: Based on EUROMOD simulations and 2019 data for the *European Union* (see Online Annex 1.2). Data labels in the figure use International Organization for Standardization (ISO) country codes. EU = European Union.

Figure 1.4. Stabilization of Income across EU Countries, by Household Income Groups, 2020
(Stabilization coefficients, expressed in percent)



Sources: Christl and others 2022; and IMF staff estimates. See also Lam and Solovyeva, forthcoming.
Note: Based on EUROMOD simulations and 2019 data for the *European Union* (see Online Annex 1.2). Red diamonds refer to the median level. Blue boxes are the interquartile ranges. Whiskers are the 10th and 90th percentile levels.

Real per capita consumption declined by 7 percent among EU countries on average in 2020, partly because of the unique nature of the pandemic, which prevented households from consuming because of lockdown restrictions.

Higher income stabilization rates among the poorest segments of the population indicated that policies were largely targeted toward those who needed help the most. Microsimulations, together with regression results, further suggest that income stabilization was stronger for the young and for less-educated workers, as well as those working in sectors that rely on personal contact, which were more vulnerable to the pandemic shocks (Online Annex 1.2). Findings in the literature indicate that stabilization from unemployment income support was also the greatest for low-skilled workers, who, according to Ando and others (2022), were the most vulnerable to job losses. Similar effects were observed in the *United States* from its temporary expansion of unemployment income support, which was progressive, with most benefits accruing to low-income workers (Ganong and others 2022). By stabilizing income and redistributing resources across individuals, the pandemic-related measures also affected income inequality. Microsimulations show that the Gini coefficient of income inequality would have increased by 0.65 percentage point in the *European Union* in 2020 before taxes and transfers, whereas the

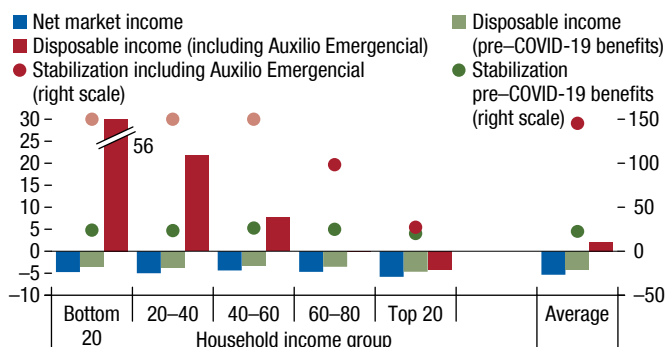
Gini coefficient of inequality in disposable income (after taxes and transfers) would have declined by 0.24 percentage point (Online Annex 1.2).

Discretionary Fiscal Support

Governments in many countries used discretionary measures—especially broad-based cash transfers—to provide direct income support to households during the pandemic. Cash transfers can be deployed in response to a wide range of shocks, including situations in which other measures are insufficient (because the crisis is too severe) or less feasible (for example, job-retention schemes where informality is high). Cash transfers can be used flexibly because they are usually not tied to past or current work status, which makes them appealing in unusual crises such as the pandemic. They are typically progressive (their proportional impact on disposable income is greater among poor households than among rich ones) because they generally consist of a flat amount for each individual or household, and eligibility is usually capped for those with higher incomes. Even so, cash transfers can be disbursed only if the government can identify and verify eligible recipients and deliver payments to them—a constraint especially relevant for many low-income countries. If such information and capacity are lacking in regard to destitute people, for example, because

Figure 1.5. Change in Per Capita Income across Household Income Quintiles in Brazil, 2020

(Percent change, left scale; percent, right scale)



Sources: BraSim tax and benefit tool; and IMF staff estimates.

Note: Estimates are based on microsimulations. Net market income includes contributory pension benefits received. Stabilization coefficient is defined as $(1 \text{ percent change in disposable income} / \text{percent change in market income}) \times 100$. Stabilization coefficients including the Emergency Aid program for the bottom 60 percent of households are larger than 230 and are not drawn to scale.

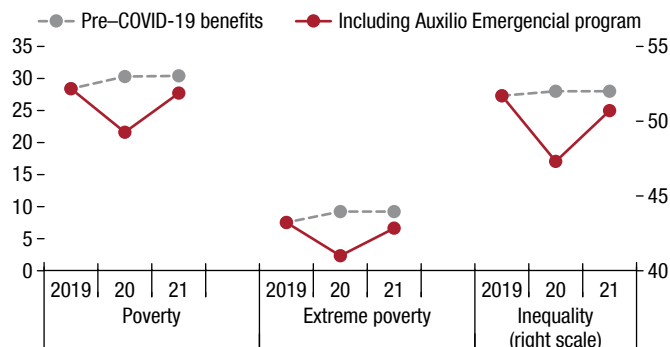
they have limited ties to the formal economy, these programs are likely less effective.

The Emergency Aid program in *Brazil* (Auxilio Emergencial) during 2020–21 provides a case study of the use of cash transfers because of its broad coverage and the availability of high-quality data (Online Annex 1.3). The program initially covered almost one-third of the population, including 90 percent of the households in the bottom 40 percent of the income distribution. Benefits were three times higher than the standard social benefit and more than half of the national minimum wage. The effect on household income is assessed using household-level data and microsimulations based on BraSim, a tax and benefit tool developed by the World Bank (Cereda, Rubiao, and Sousa 2020).

The stabilization effects of the Emergency Aid program in *Brazil* far exceeded those of the social protection system in place before the pandemic. Simulations show that, on average, per capita disposable income in *Brazil* edged up by 2.1 percent in 2020. Disposable income increased in the majority of households (more than 60 percent of households) and rose by more than 20 percent in low-income households (Figure 1.5; Brollo, Lara Ibarra, and Campante Vale, forthcoming). As a result, the poverty rate and the Gini index of disposable income inequality fell temporarily in 2020 (Figure 1.6). A counterfactual scenario without the Emergency Aid program suggests that the prepandemic tax and benefit system would have absorbed only

Figure 1.6. Evolution of Poverty and Income Inequality during the Pandemic in Brazil, 2019–21

(Percent, left scale; Gini coefficients, right scale)



Sources: BraSim tax and benefit tool; and IMF staff estimates.

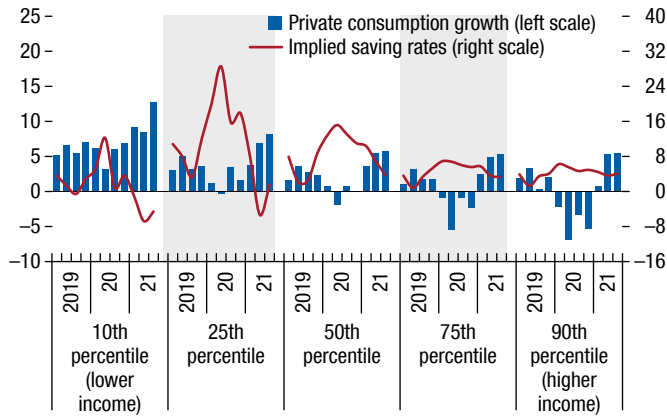
Note: Estimates are based on microsimulations. Poverty is defined as per capita household income less than half of minimum wage (US\$6.30 per day in 2011 purchasing power parity [PPP] terms). Extreme poverty is US\$2.25 per day at 2011 PPP, defined using the Bolsa Familia eligibility thresholds. Income inequality is based on disposable income (market income after taxes and transfers).

one-quarter of the market income loss, and that average per capita disposable income would have declined by 4.1 percent. The cumulative fiscal cost for the Emergency Aid program, in 2020–21, was approximately 4 percent of GDP. An alternative simulation suggests that a lower benefit level of the program (at one-third of the initial benefit amounts) would still have effectively protected income for the population at large, at about half the cost (Online Annex 1.3).

Many advanced economies approved cash transfer programs and disbursed the benefits swiftly under the pressures of the health crisis. For example, the *United States* disbursed the first round of the Economic Impact Payments by mid-April 2020 (about two weeks after the Coronavirus Aid, Relief, and Economic Security [CARES] Act was enacted in late March 2020) (Gelman and Stephens 2022).⁶ Together with other fiscal measures, the programs more than compensated for the loss in market income among most of the population. Real disposable income for households in

⁶According to data from the US Treasury, the three rounds of Economic Impact Payments, disbursed between April 2020 and December 2021, amounted to \$800 billion in total. The payments covered most of the population, phasing out beginning with an adjusted gross income of \$75,000 for singles and \$150,000 for married persons. The first round of Economic Impact Payments was mandated under the CARES Act, which was signed into law on March 27, 2020. About half of first-round payments were delivered by mid-April 2020, and nearly 90 percent were delivered by early June 2020 (Gelman and Stephens 2022).

Figure 1.7. US Consumption Growth during the Pandemic, by Income Group, 2019–21
 (Percentage change relative to the 2018 first-quarter levels, left scale; change in percent of disposable income relative to the 2018 first-quarter levels, right scale)



Sources: Meyer, Murphy, and Sullivan 2022; US Bureau of Labor Statistics Consumer Expenditure Surveys; and IMF staff estimates.

Note: Savings are estimated as the difference between quarterly disposable income and total expenditures. Consumption is estimated using a method similar to that in Meyer, Murphy, and Sullivan (2022).

the bottom 50 percent of the income distribution rose on average by 9 percent in 2020 and by 17 percent in 2021, compared with 2019 levels (Blanchet, Saez, and Zucman 2022). The transfers were effective at supporting consumption levels of low-income households soon after they received the cash transfers (Chetty and others 2020; Autor and others 2022; Meyer, Murphy, and Sullivan 2022; Figure 1.7).⁷ Even middle- and higher-income families benefited from the transfers. Their disposable income rose by about 8 percent in 2020 and 2021, relative to that in 2019. However, because of social distancing constraints, families in higher income groups saved most of this additional income and reduced consumption in 2020.

The increase in disposable income for a large fraction of the population in some countries points to the trade-offs policymakers faced when designing the pro-

⁷With the recognition that direct comparison across episodes is difficult, the effects on consumption appeared smaller than those resulting from previous cases of cash transfers (Johnson, Parker, and Souleles 2006; Barnes and others 2022), possibly owing to the unique nature of the pandemic, such as lockdown restrictions and ample liquidity being in place (Auerbach, Gorodnichenko, and Murphy 2021; Parker and others 2022). Small effects on consumption of low-income households were also found during the pandemic in the case of direct cash transfers for childcare in *Germany* (Goldfayn-Frank, Lewis, and Wehrhofer 2022).

grams. Policymakers needed to design support programs under great uncertainty regarding the course of the pandemic and economic recovery, and had limited capacity to target the recipients who needed assistance most in real time. In hindsight, some government interventions appear generous. Broad-based cash transfers were initially effective in protecting household income, particularly in low-income households, and contained the rise in poverty. As more information on the pandemic became available and economic conditions improved, adjusting support to better target individuals could have reduced the fiscal costs.

The considerations just discussed hold for advanced and a few emerging market economies. The fiscal response to the pandemic in many emerging market and developing economies was instead constrained by limited fiscal space. For these countries, the main concern is the potential negative repercussions that their relatively modest fiscal response might have on their ability to bounce back to prepandemic paths in output (April 2022 *Fiscal Monitor*). This could affect efforts to reduce poverty in the coming decade (World Bank 2022).

Preexisting social safety nets were the most important tools used by emerging market and developing economies, in which automatic stabilizers such as unemployment income support are less prevalent and provide limited coverage because many jobs and businesses are informal (Ohnsorge and Yu 2022). Although several countries incorporate elements in their social safety nets that automatically adjust transfers (for instance, by linking them to natural disasters),⁸ most do not have mechanisms in place to automatically scale up benefits in response to adverse shocks. As a result, many emerging market economies and low-income countries had to rely on discretionary measures to support vulnerable households. Several countries leveraged digital tools and big data (Table 1.1). For example, *Colombia* implemented a harmonized payment system whereby beneficiaries could withdraw benefits from their designated bank accounts. *Indonesia* and *Thailand* created dedicated websites for direct registration of new beneficiaries, and *Togo* selected households for cash transfer programs based on satellite and phone record data. Satellite imagery was combined with census data

⁸For example, the number of beneficiaries of *Ethiopia's* Productive Safety Nets Program increases if there is warning of impending drought. Similarly, *Kenya's* Hunger Safety Net Program has clear triggers specifying who is covered by the scheme, as well as the amount and duration of benefits, depending on drought conditions.

Table 1.1. Selected Examples of Social Spending during the COVID-19 Pandemic in Emerging Market and Developing Economies

Country	Expanded Eligibility	Increased Benefits	Additional Targeting	Digital Innovations	Remarks
Bolivia		✓	Elderly, school students, and families with children		Bolivia implemented several programs to support vulnerable groups, including: (i) the Bono Contra el Hambre program, a transfer of Bs1,000 (US\$146) each to over 4 million people between 18 and 59 years old who were not receiving either salaries or pensions; (ii) the Bono Familia program to compensate low-income families, which paid Bs500 (US\$73) for each child in elementary school, Bono Canasta Familiar, and Bono Universal; (iii) conditional cash transfers continued in Bono Juancito Pinto (for school students, created in 2006), Bono Juana Azurduy (for mothers needing assistance, created in 2009), Renta Dignidad (for the elderly, since 2008).
Brazil	✓	✓	Elderly, poor, and unemployed	Deliver payments through state-owned banks; mobile apps for registration	Brazil allocated more resources to the Bolsa Familia program and included an additional 1.2 million new beneficiaries; introduced the Auxilio Emergencial program for workers and low-income households during April 2020–December 2021.
Chile		✓	Low-income households	Deliver payments through state-owned banks	Cash transfers for the most vulnerable households.
China	✓	✓			China increased the coverage and benefits of Dibao—its social assistance program for the poorest—particularly to cover families affected by COVID-19 and falling into poverty.
Colombia	✓	✓	Informal workers	Mobile-banking applications	In addition to higher benefits for current beneficiaries in existing programs, a cash transfer program (Solidarity Income) of Col\$160,000 (or US\$42) monthly was delivered electronically for informal workers and families, including 3 million households identified via social registries and tax collection databases.
Egypt	✓		Informal workers in existing databases, by local governments or community organizations		Egypt provided a monthly payment of LE500 over three months for informal workers registered in the workforce directorates databases of governorates.
India		✓	Elderly and families with children	Mobile-banking applications	India provided Rs1000 (US\$13) to all beneficiaries under the National Social Assistance Program (NSAP) for elderly, widows, and disabled receiving social pensions (35 million beneficiaries), front-loaded payments of Rs2000 (US\$26) for 87 million farmers, and transferred Rs500 (US\$6.5) for three months to 200 million women with a Pradhan Mantri Jan Dhan Yojana (PMJDY) (financial inclusion) account.
Indonesia	✓	✓		Dedicated website for registration	Assistance for 10 million beneficiary families in the Family Hope Program was increased by 25 percent in 2020; the food aid program (e-food vouchers) was expanded to more recipients with additional benefits for nine months.
Peru		✓	Families affected by COVID-19 in existing databases, by local governments or community organizations	Digital networks for cash payments	Peru introduced an exceptional payment of about US\$107 for each vulnerable family affected by the quarantines.
Rwanda			Informal workers in existing databases, by local governments or community organizations		Rwanda distributed food to informal sector workers in Kigali identified through the system of Mudu Gudu, a network of community organizations in charge of targeting and distributing social transfers.
Togo	✓	✓		The Novissi system used a machine-learning approach based on geospatial, survey, and phone metadata.	The Novissi emergency social assistance program was introduced in April 2020 to provide cash transfers to more than 570,000 informal workers and additional beneficiaries in the poorest 100 cantons.

Sources: Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic (<https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>); Shang, Evans, and An 2020; and Una and others 2020.

to map the poorest urban areas and target beneficiaries in *Nigeria*. Countries increased transfers through the social safety net, but the transfers were often delayed and it was challenging to deliver support on time and reach those most in need, according to extensive surveys by the World Bank on more than 50 developing countries (World Bank 2022).

Takeaways from Pandemic-Related Measures to Support Households

Diverse and forceful fiscal responses during the pandemic opened new grounds to support households against income or job loss. The preceding analyses provide several takeaways that can inform policy design when policymakers are tackling current challenges and preparing for future adversity.

First, job-retention schemes can become a more prominent part of the resilience toolkit for future crises, together with unemployment income support measures. Once their architecture is put in place, both schemes can provide a timely, effective buffer and reduce the loss of labor income, especially for vulnerable workers such as youth and low-skilled workers. These two tools are best used in different conditions. The pandemic presented a unique situation for using job-retention schemes, given that it triggered a deep but short-lived disruption to the labor markets (April 2021 *World Economic Outlook*, Chapter 3). Policymakers were wary of the risks of massive layoffs that could undermine valuable employer-employee relationships (see “Ensuring the Resilience of Firms in Extraordinary Times”), especially in countries with rigid labor markets that would be less able to reabsorb unemployed workers quickly, or in countries with inadequate levels of social protection. In this context, job-retention schemes are especially useful for workers who typically fall outside of regular unemployment income support, such as workers who have not worked long enough to qualify for unemployment assistance.

The advantage of preserving work relationships in the short term is illustrated by a model analysis (calibrated to a typical advanced economy) whereby long-term unemployment leads to a productivity loss for workers even after they are re-employed (Online Annex 1.4). Simulations show that a persistent productivity loss from unemployment would reduce the consumption stabilization coefficient by 80 percent, even when unemployed workers receive unemployment

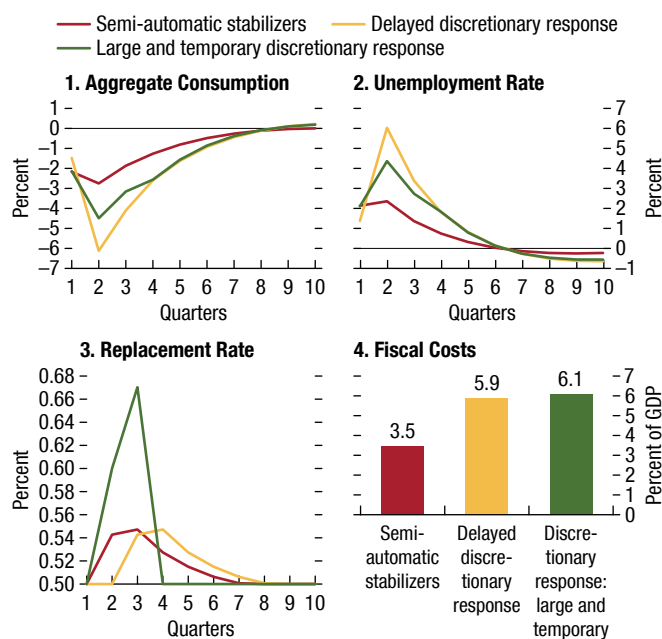
income support.⁹ Job-retention schemes can avert such large productivity loss from unemployment, which would then help contain the decline in the consumption stabilization coefficient to only 10 percent. In contrast, if the shocks persisted for a long time, preserving jobs through job-retention schemes would hinder necessary reallocation. In that case, a well-designed unemployment support scheme is preferred. In the early stages of the pandemic, concerns about large economic transformation after the pandemic made job-retention schemes appear less appropriate. In hindsight, the pandemic did not lead to overwhelming structural changes, and the use of job-retention schemes quickly returned to prepandemic levels.

The second takeaway is that targeting support to the right beneficiaries would raise the impact of fiscal responses and save valuable fiscal resources. Policymakers can integrate social registries updated with current information (for instance, *Ingreso Familiar de Emergencia* in *Chile* and the National Socio-Economic Registry in *Pakistan*) and make use of high-frequency household surveys, where available, to facilitate better targeting for new beneficiaries. Broad-based support to households’ incomes was necessary—at least at the onset of the pandemic. As economic conditions improved, the generosity of measures could have been scaled back faster.

Preparing a strategy in advance to deploy fiscal tools can improve governments’ ability to target those in need of most support and to attune support to evolving economic conditions. One option is to set out the likely course of action and policy responses under different scenarios. This allows a timely response without delaying the necessary fiscal support in a large crisis. In some cases, it would be helpful to put in place semi-automatic stabilizers—that is, prelegislated increases in benefits or eligibility with previously agreed triggers such as a decline in employment beyond a threshold. These combine the benefits of timely and targeted support, while retaining the flexibility to adjust the generosity and coverage of income support to the severity of

⁹The productivity loss is calibrated to 0.12 percentage points in the quarter following a negative shock, as in Engler and Tervala (2018). The consumption stabilization coefficient is defined as 1 minus the ratio of volatility of consumption in the scenario with productivity loss of unemployment to that in the baseline scenario without productivity loss. A higher coefficient means households can stabilize consumption more in a negative shock (see Online Annex 1.4).

Figure 1.8. Simulated Effects of Discretionary Support and Time-Varying Automatic Stabilizers
(Percentage point deviations from the baseline scenario, unless otherwise stated)



Source: IMF staff estimates (see Online Annex 1.4).

Note: The unanticipated adverse events occur in the first and second quarters and then gradually fade away. The semi-automatic unemployment income support features a time-varying replacement rate that increases by 2 percentage points for each 1 percentage point deviation of unemployment rate from its natural rate. The two discretionary responses vary in terms of size and timing. Fiscal costs across scenarios are cumulative over 2½ years and are expressed in percent of GDP.

the negative shocks (Solow 2005; Boushey, Nunn, and Shambaugh 2019; Blanchard and Summers 2020; April 2020 *Fiscal Monitor*; April 2020 *World Economic Outlook*, Chapter 2).

Results from a dynamic stochastic general equilibrium model show that semi-automatic stabilizers could stabilize household consumption better than conventional automatic stabilizers (that is, those with fixed generosity and coverage), at a modest fiscal cost (Online Annex 1.4). Additional stabilization comes from greater support at the time of a crisis and guidance of expectations about fiscal policy. In addition, by transferring resources toward low-income unemployed individuals, semi-automatic stabilizers support aggregate consumption and reduce inequality. This enhances stabilization at aggregate and individual levels for a relatively modest fiscal cost, thanks to lower output losses. Timeliness and tailoring to economic conditions of fiscal support are crucial, as Figure 1.8 illustrates (see Online Annex 1.4).

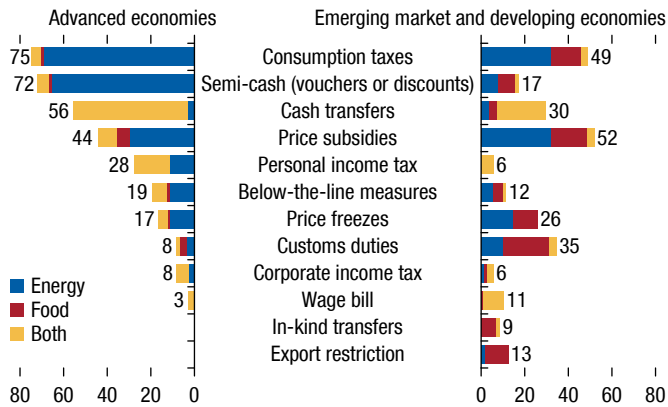
The figure depicts the effects of a severe adverse shock that, in the absence of a fiscal response, would raise the unemployment rate by 7 percentage points. Three policy scenarios are considered: (1) timely and anticipated fiscal support—in the form of expanding the benefit levels of unemployment income support—tailored to the aggregate economic conditions (such as semi-automatic stabilizers); (2) large but short-lived discretionary fiscal support; and (3) delayed discretionary response. Fiscal support tends to be more effective if it is timely and short-lived than if it is smaller and delayed. At a similar fiscal cost, a timely fiscal support stabilizes consumption one-third more than a delayed response. The “semi-automatic” mechanism is more effective in stabilizing consumption and employment than the other two scenarios. Semi-automatic stabilizers have, however, two potential limitations. First, it is difficult to prespecify the triggers for more generous support because the nature of shocks is different. Ideally, these would be based on observable variables that are available at high frequency and co-move strongly with the underlying economic conditions. Second, putting policy support in place for too long could generate work disincentives (Grosch and others 2008; Landais, Michaillat, and Saez 2018).

The third takeaway is that social safety nets can be scaled up quickly, but this requires preparatory work ahead of future crises. Social safety nets are compatible with a diverse set of shocks and can reach a targeted (but potentially large or specific) segment of the population, if governments can identify those in need and deliver assistance in a timely manner. Doing so necessitates large-scale and dynamic information systems, including universal and robust identification systems and the ability to collect and verify up-to-date socioeconomic information, while addressing concerns about information quality, privacy, and security (Aiken and others 2022). Strong implementation capacity to deliver payments is also key, as is coordination among government entities.

Responses to Surging Food and Energy Prices

The sharp rise in food and energy prices that began in 2021 and was exacerbated by Russia’s invasion of Ukraine has prompted governments to respond once more. Since early last year, global oil prices have doubled, natural gas prices in Europe have increased sharply, and prices for fertilizers have more than tripled.

Figure 1.9. Recently Announced Measures in Response to High Energy and Food Prices
(Share of surveyed countries, as of July 2022)

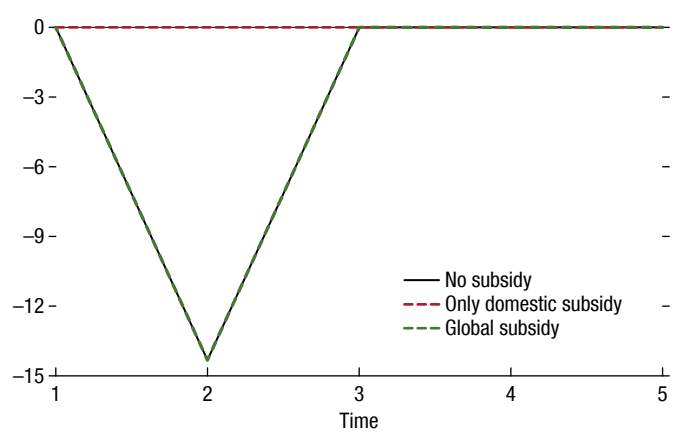


Source: IMF staff estimates.
Note: Based on an IMF survey of 174 countries on the measures taken during the period from January to June 2022 in response to rising food and energy prices. The stacked bars show the breakdown of total measures in each category.

Soaring food and energy prices have raised the cost of living for households and thus reduced their real incomes across most countries. These developments have given rise to concerns about potential social unrest, have pushed more households into poverty, and have placed more than 340 million people at risk of food shortage in the short term, according to the World Food Programme. The impact has differed across countries—depending on whether they are net importers or exporters of commodities. Some emerging markets and low-income developing countries may be at risk of a food crisis. Adverse effects have also differed across individuals within a country, considering that a surge in food prices hurts low-income households, especially, who spend a greater share of their income on food than others do. Rising prices of necessities and basic staples can cause devastating, long-lasting harm for people.

These concerns underlie the multiple measures undertaken in response to the recent spike in food and energy prices (Figure 1.9). In many cases, countries implemented measures to mitigate directly the rise in the cost of living for most households, although some of these measures involve large fiscal costs and tend to be inefficient (Amaglobeli and others 2022). In advanced economies, cash and semi-cash transfers (including vouchers and utility bill discounts) have been common, but most other measures have aimed at lowering prices including reductions in the value-added tax (VAT) for some

Figure 1.10. Domestic Consumption by Low-Income Households under Different Energy Subsidy Schemes
(Percent of precrisis consumption)



Source: IMF staff simulations (see Online Annex 1.5).
Note: At time 2, a temporary reduction in global supply increases the international price of energy products. Under the “no subsidy” scenario, domestic consumption of low-income households falls. Under the scenario with “only domestic subsidy” on energy prices, with that subsidy financed by taxes on richer households, consumption of low-income households can be fully stabilized. But if all countries enact the same “global subsidy” scheme, then international prices rise and consumption is the same as with “no subsidy.”

energy products (for example, in *Belgium* and *Italy*) and excise taxes (for example, in *France* and *Korea*). Emerging market and developing economies have most used price subsidies and reductions in VAT and excise taxes (for example, *Poland*, *Thailand*, and *Türkiye*). The lower pass-through of the global spikes to domestic energy prices in emerging market and developing economies is explained by the prevalence of price subsidies, especially in the Middle East, North Africa, and sub-Saharan Africa. Pricing subsidies or cuts on fuel and energy taxes to limit the pass-through are often hard to reverse when prices come down.

Energy pricing subsidies do not really insulate the domestic economy from the shock when many countries implement them at the same time, because commodity price increases lead to a negative terms-of-trade shock and a fall in real income for commodity importers, regardless of the domestic subsidy scheme in place. Energy price subsidies in many countries at a global scale would translate one to one into a higher global energy price, while leaving the domestic (subsidized) price relatively unchanged. Price subsidies on energy across countries will be costly but ineffective at protecting the most vulnerable individuals, as illustrated in a multicountry model (Online Annex 1.5; Figure 1.10). They will also complicate the green transition toward renewable energy sources.

Overall, they will result in a net transfer of fiscal resources from commodity-importing countries to commodity exporters. The global bidding up of prices from subsidies can be detrimental to low-income countries that already lack policy space and strong social protection.

Protecting vulnerable households from spikes in food and energy prices is best achieved by strengthening social safety nets to deliver temporary targeted cash transfers (Online Annex 1.4; Amaglobeli and others 2022). The fiscal cost can be offset by other measures, including taxes, although one needs to weigh carefully whether taxes on windfall profits from fuel extractions are appropriate. In general, a permanent tax on windfall profits from fossil fuel extraction based on economic rents (that is, excess profits) can be considered if an adequate fiscal instrument is not already in place. It helps raise revenue without reducing investment or increasing inflation and avoids distortions from a temporary tax on windfall profits (Baunsgaard and Vernon 2022). Targeted cash transfers are a better option than blanket price subsidies on fuel because they allow the rise in fuel costs to pass on eventually to end users to facilitate energy conservation and switching out of fossil fuels. In most countries, pricing subsidies provide greater benefits to high-income individuals. Low-income countries should prioritize food security within the existing fiscal envelope. Countries without strong social safety nets can expand existing social programs (for example, public transportation and school feeding programs) to provide relief to vulnerable households. A gradual adjustment of food prices may help reduce food waste especially in advanced economies.

At the global level, facilitating trade and lifting export restrictions on the purchase of food for humanitarian assistance will support low-income countries at risk of a food crisis in meeting their urgent needs. Ensuring an adequate and affordable supply of food and energy in global markets will also support low-income countries in the short term. Stronger domestic and international efforts to transition to a more diverse, renewable energy mix would reduce vulnerabilities to fossil fuel price shocks.

Ensuring the Resilience of Firms in Extraordinary Times

Government support to firms expanded massively in scale and scope during the COVID-19 pandemic and the global financial crisis that began in 2008. The goal during the pandemic was to allow firms to avoid bankruptcy and preserve employer-employee relationships

while economic activity was restricted, so that firms could bounce back as soon as lockdowns ended and business resumed. Direct lending, public guarantees, subsidized private bank lending, and equity support were used on an unprecedented scale. For example, some countries including *Germany*, *Italy*, and *Japan* announced public guarantee envelopes reaching about 30 percent of GDP. Many emerging market and developing economies intervened in their distressed state-owned enterprises, which often operated in core sectors or provided basic services. Some also used discretionary budget measures such as deferrals on taxes and social security contributions, in addition to job-retention schemes that, as noted, benefited workers and firms jointly. Likewise, during the global financial crisis, many advanced economies made ample use of public loans, guarantees, and equity support to shore up the balance sheets of financial institutions and systemic firms (Cusmano and Thompson 2018). Collectively, these measures alleviated corporate cashflow crunches and preserved working capital, although private demand recovered more gradually in the 2010s than in 2021, partly because of differences in the strength of the balance sheets of private financial institutions and households.

In times of normal economic activity, government support to private firms is usually limited to encouraging investment through tax incentives or promoting access to finance for small and medium-sized enterprises or specific sectors. In typical business cycles, support to firms seldom extends beyond the automatic stabilization implied by the tax system (because firms pay lower taxes when profits decline).

During major crises, exceptional interventions by the public sector can avert an economic collapse, although such support entails large fiscal risks. In situations of extreme uncertainty, banks may become reluctant to extend liquidity even to sound and viable firms, impairing their ability to conduct business. A failure of systemic firms could disrupt supply chains or credit relationships, and the disruptions could spread to other firms and lead to sizable job and income losses if left unaddressed (Gourinchas and others 2022). In such circumstances, public interventions—along with monetary or financial policies—can restore market confidence, preserve valuable links between firms and their creditors, and reduce lasting effects from systemic bank failures (Edelberg, Sheiner, and Wessel 2022).

The benefits of public financial support to viable firms amid major crises include the confidence channels—in which firms' expected profits depend on

investors' and consumers' views of future economic conditions (Battersby and others 2022). Adverse events can make people more pessimistic, leading to a contraction in demand. Incentives for firms to invest wane and business prospects suffer. Banks become less willing to extend credit. A wave of bankruptcies, even among viable firms, is possible. The adverse impact of the initial shock is thus amplified by widespread pessimism. A well-designed public guarantee program can break this self-reinforcing formation of pessimistic expectations by reducing the share of viable firms that are forced to downsize. This in turn lifts people's views on economic prospects. Such benefits of support to firms by governments are larger in deeper crises, when a greater share of firms is subject to bankruptcy risks.

However, public support to firms comes with risks, which could outweigh potential benefits. When uncertainty is great, distinguishing between illiquid but viable and nonviable firms is difficult (Ebeke and others 2021) and processing or monitoring support for many small and medium-sized enterprises can strain governments' administrative capacity (Diez and others 2021). For countries with limited fiscal space, borrowing costs may rise during crises, increasing the opportunity cost of public funds for other needed spending. Moreover, prolonged support to firms can delay the reallocation of resources to more productive uses or crowd out funding for new businesses. The costs of exceptional support to firms likely outweigh the benefits in most circumstances for countries with large shares of informal jobs and businesses in their economies, weak governance, and scant information about firms' balance sheets. Even in advanced economies with strong legal, administrative, and institutional systems, the large fiscal costs and fiscal risks may be warranted only in exceptional circumstances to avert a severe economic crisis.

While government interventions to support firms contained the rise of bankruptcies during the pandemic, some programs entailed large fiscal risks. Bankruptcy rates declined by 11 percent on average across 42 advanced economies and emerging markets during the pandemic (Araujo and others 2022).¹⁰ However, some programs appeared generous and entailed large fiscal costs (Chodorow-Reich, Sunderam, and Iverson 2022). Untargeted programs can imply that nonviable firms before the pandemic nonetheless

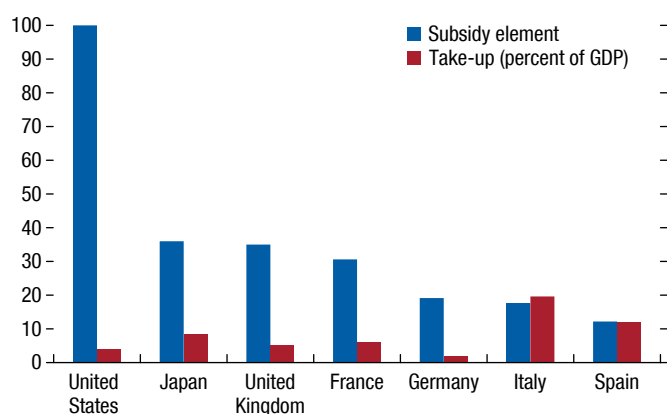
obtained benefits. In the *United States*, some firms used loans from the Paycheck Protection Program—intended to retain workers during the pandemic—to make non-payroll payments or build up savings, leading to small employment effects (Granja and others 2020), while many small businesses did not receive support loans (Kaplan, Mills, and Sarkar 2022). Firm-level survey results across 74 emerging market and developing economies suggest that about one-fifth of firms that were not much affected during the pandemic received some form of government support. In low-income developing countries, the majority of firms that did not receive (but likely qualified for) policy support missed out because firm owners were not aware of those support measures (World Bank 2021).

To make support to firms more effective, governments should strive for good targeting and communication. Support should be triaged based on an assessment of firms' viability. Well-defined exit strategies, sound legal frameworks, good governance, and sound management of fiscal risks are priorities in this regard (Box 1.2). Limiting the duration of support programs can contain fiscal costs. Likewise, sharing risks with private banks through partial guarantees can reduce government exposure.

Estimating and managing fiscal risks from support to firms on an ongoing basis reduce subsequent losses. This requires establishing regular surveys or registries to obtain timely information about firms. Some measures, such as public guarantee programs that do not have immediate budget impact and are contingent on the recovery of the firms, make estimation difficult. Countries use different approaches to report the cost of support, including contingent liabilities, in the budget and fiscal risk statements but often underestimate the true cost (Battersby and others 2022). This in part reflects the difficulty in estimating implicit subsidies from government loans and guarantee programs. Hong and Lucas (forthcoming) apply an approach reflective of the fair value of support in seven advanced economies. They measure the fair value of the subsidy component as the difference between actual disbursement of loans and guarantees and the net present value of expected future cash flows (including loan principal repayment, interest, and guarantee fees) over the duration of the programs. To calculate this net present value, market interest rates are used as the discounting factor because they reflect market participants' views about the default risk for firms participating in the loan guarantee programs (US Congressional Budget Office 2012). Results for seven advanced economies suggest that

¹⁰Estimates by Auerbach and others (2022) for the United States suggest that fiscal support to firms, alongside other fiscal responses, contained the rise of bankruptcies, particularly for firms at the brink of exit.

Figure 1.11. Estimated Implicit Subsidy and Take-Up of Government Guarantee Programs, 2020–21
(Percent of loan principal and percent of GDP)



Source: Hong and Lucas, forthcoming.

Note: The take-up is measured by the take-up rate multiplied by the announced program size in percent of GDP. The subsidy component is a weighted average across countries as of the end of 2021.

governments subsidized a median of 30 percent of loan principal during the pandemic (Figure 1.11). Differences in program design explain the variation across countries, ranging from 24 percent to 100 percent: longer maturities or higher guarantee rates raise the subsidy component, whereas higher fees or interest rates reduce it. Guarantees were often more generous for small enterprises, leading to higher subsidies and associated fiscal risks. For example, the US Paycheck Protection Program is estimated to have been fully subsidized (essentially amounting to grants to firms), partly reflecting lenient requirements on repayment.

Preparing a Strategy Ready to Deploy

Preparation can help governments protect households and firms even better during large adverse shocks in advance. Specifying fiscal responses in advance to tackle all possible adversities is not feasible. Similarly, targeting support in real time in situations of great uncertainty is challenging. Nonetheless, countries can prepare strategies and tools that can be more readily deployed.

Building fiscal buffers in normal times is a prerequisite for policies to respond flexibly during crises without jeopardizing access to financing. As evident during the pandemic and the global financial crisis, fiscal policy can be active and powerful, if resources are available. Experience from the aftermath of earlier crises indicates that countries often do not rebuild sufficient buffers afterward—public debt remained elevated after the emergencies subsided, constraining

countries' ability to respond to negative shocks. In the early stages of the pandemic, advanced economies and some emerging markets were able to finance a major fiscal expansion, despite elevated public debts, because interest rates were at the effective lower bound and inflation was below target. Those conditions are no longer in place and may not be in place when the next crisis strikes. Low-income countries face a stark trade-off because they need to build fiscal buffers against adverse shocks while pursuing development goals—similarly important elements of resilience. Building buffers requires gradual fiscal adjustment and involves trade-offs, including prioritizing competing spending needs and mobilizing domestic revenues, while pursuing inclusive and sustainable growth. Fiscal adjustments should in general be gradual and differentiated according to circumstances, under a medium-term fiscal framework to promote credibility.

Experience from the pandemic points to trade-offs between the risk of doing too much and the risk of doing too little, or between large fiscal costs and generosity of support (in terms of coverage or amounts per individual). Preparation can ameliorate those trade-offs, by improving the ability to target those in need and limiting incentives for individuals and firms to shirk or take on excessive risks. It may be helpful to develop a strategy that sets out desirable policy responses under various scenarios. In some cases, the evolution of high-frequency indicators of economic conditions can then be related by policymakers to such scenarios, facilitating their responses. In a few instances, it may also be feasible to put in place “semi-automatic” stabilizers (preagreed responses) that will thus be timely and attuned to economic conditions. Such an approach would make fiscal policy responses more predictable. The anticipation of policy support would help guide households' and investors' expectations and increase policy effectiveness. In turn, timely and efficient measures would limit net fiscal costs. The transparency of such an approach would integrate measures into medium-term fiscal frameworks, promote fiscal credibility, and reduce the influence of short-term political pressures.

Social protection systems are part of a resilience infrastructure and are compatible with a broad set of negative shocks. The recent crises have shown not only that social safety nets can be expanded quickly, often leveraging new technologies, but also that preparation is necessary to make them more readily scalable and well targeted to deliver cash or in-kind support to those who truly need it. Gathering information about

people and firms, and reducing informality in normal times make it possible to provide support more effectively and efficiently during crises.

In the face of soaring food and energy prices that have squeezed household budgets, countries can provide targeted and temporary support to vulnerable households. For emerging market and developing economies without strong social safety nets, existing social programs (for example, child benefits, public transportation, or school feeding programs) can be expanded to provide relief to vulnerable households, while taking advantage of the opportunity to strengthen the social protection system. Existing targeting methods in developing countries, although imperfect, can provide more on a per beneficiary basis, compared with universal programs (Hanna and Olken 2018). Improved legal frameworks and administrative capacity can facilitate targeting, leveraging digital innovations to verify eligibility and deliver payments, while limiting leakage and fraud.

Different types of adversity require a different mix of policy tools. The appropriate choice depends on the nature of the event, available policy space, and the extent of resilience in the private sector. For example, when inflationary pressures are high, fiscal policy should protect the most vulnerable while maintaining a tightening stance to facilitate the monetary policy's price stability objective. Scaling up existing means-tested cash transfers is preferable to enacting energy pricing subsidies because the rise in fuel costs passes on to end users, facilitating energy conservation and switching out of fossil fuels. For low-income countries, food security should be prioritized within the existing fiscal envelope. In general, rare events with major adverse impact (for example, major natural disasters or pandemics) would require multiple instruments and more proactive public interventions (Table 1.2). The response to negative shocks that occur with high probability but have less pronounced impact (for example, typical business cycles

Table 1.2. Appropriate Fiscal Tools to Deploy Depend on the Nature of the Adversity of Shocks

Fiscal Tools	Type of Adversity			
	Output or Employment Shock		Major Disruption in Key Goods and Services (for example, large spikes in food and energy prices)	Major Natural Disasters
	Temporary	Longer Lasting		
Automatic stabilizers	✓	✓	✓	✓
Unemployment income support ¹	✓	(✓): Supplement with active labor market policies	✗	✓
Job-retention schemes	✓	✗	✗	✓
Scale-up of social protection	(✓): Ready to scale up as needed	(✓): Facilitate better social well-being (equity and poverty reduction)	✓	(✓): Widen eligibility to cover affected people not just poor people
Progressive taxes	✓	✓	✓	✓
Discretionary or ad hoc measures				
Cash transfers	(✓): Only if targeted and severe adversity	✗	(✓): Build on current social protection system or targeted discounts on utility bills	(✓): Targeted transfer
Pricing subsidies	✗	✗	✗	✗
Discretionary support to firms				
Tax deferral	(✓): Particularly if limited access to finance before the shocks	✗	✗	✓
Financing measures (for example, direct lending and public guarantees)	(✓): If severe externalities exist	(✗): Should instead facilitate exit of nonviable firms	(✗): Unless evident severe externalities exist	✓

Source: IMF staff compilation.

¹ Comprises contributory unemployment insurance and noncontributory unemployment assistance benefits.

Note: ✓ refers to appropriate tools to be used to protect against income losses for the specific type of adversity. ✗ stands for less appropriate tools. Fiscal tools are not mutually exclusive, and governments can use multiple tools at the same time depending on the availability of the fiscal space and the nature of the shocks, institutional capacity of governments, debt sustainability concerns, and the private sector risk-sharing mechanism, among other factors.

or seasonal hurricanes) could rely on automatic stabilizers or existing market-based mechanisms such as private insurance for natural disasters. If those stabilizers are not available, targeted discretionary support could protect against income losses within available fiscal space and fiscal rule limits.

Fiscal responses need to have a clear exit strategy to ensure that they are temporary. To manage fiscal risks from measures without immediate budget impact, governments should focus on good governance, transparency, and quantification of risks and contingent liabilities. Regarding exceptional circumstances that call for fiscal support to viable firms, governments need to identify beforehand the externalities that warrant public interventions and clearly assess the trade-offs. Fiscal risks from the support programs need to be managed over time to reflect the implicit cost of measures, including by involving the private sector in sharing risks.

Global cooperation can bolster resilience by limiting the negative externalities a country could impose on others and by coordinating policy responses in the face of negative shocks. The COVID-19 pandemic has shown that global efforts are needed to step up

vaccinations and pandemic preparedness to prevent, detect, and manage global health threats. Resilience to climate change calls for international support for investment in climate adaptation in vulnerable countries and the transition toward green energy. The new IMF Resilience and Sustainability Trust is part of such collaborative efforts. Building buffers in low-income developing countries is challenging given other pressing needs and limited capacity. In that context, advancing the Group of Twenty Common Framework for Debt Treatment could provide relief for low-income countries facing high risks of debt distress. In addressing the adverse impact from the surge in food and energy prices, governments need to eliminate export restrictions and avoid food hoarding, while increasing aid and humanitarian support to low-income developing countries. Energy pricing subsidies in individual countries harm others, particularly low-income developing countries without policy space. Global efforts are needed to support these low-income developing countries, including through emergency finance, humanitarian assistance, affordable food supply and production, and safeguards on access to finance.

Box 1.1. Building a Resilient Future

This box outlines how fiscal policy and institutions can build resilience to prominent challenges such as health shocks and pandemic preparedness, access to opportunities, and adaptation to climate change and natural disasters.

Investment in Health Care and Pandemic Preparedness

A health system supports resilience when it helps people recover from illness, injury, or disabilities and resume productive activities quickly, without incurring excessive expenditures that might lead to financial distress or personal bankruptcy (IMF 2022a). Deteriorated health conditions keep individuals out of work and school (Garcia-Gomez 2011; Bor and others 2012; Halla and Zweimüller 2013; Weil 2014; Trevisan and Zantomio 2016; Meyer and Mok, 2019; Jones, Rice, and Zantomio 2020) and lead to lower GDP growth (Dixon, McDonald, and Roberts 2001; Tompsett 2020). Unfavorable chronic health status in childhood is associated with lower educational attainment and reduced lifetime earnings (Almond 2006; Black, Devereux, and Salvanes 2007; Smith 2009; Currie 2016).

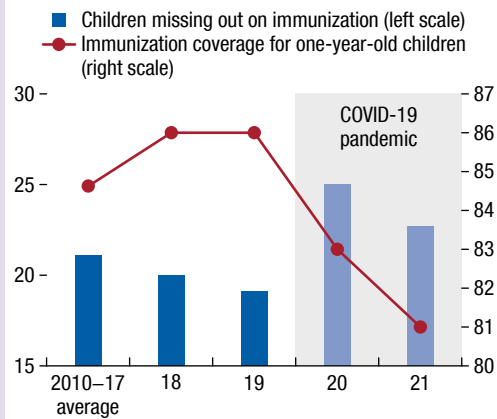
Global and national efforts are needed to build societal resilience to health shocks. The COVID-19 pandemic has led to a greater focus on invigorating country capacities to prevent, detect, and manage threats to health security, administer vaccinations and testing, and invest in global pandemic preparedness (Ahuja and others 2021; Agarwal and others 2022). Boosting health resilience requires well-articulated systems to respond to large outbreaks of diseases or public health emergencies without crowding out other health care needs and socioeconomic priorities. For example, the COVID-19 pandemic and associated disruptions led to 25 million children missing out on regular immunizations in 2021, nearly 6 million more than in 2019, according to the World Health Organization (Figure 1.1.1). More generally, investments in nutrition, clean water, improved sanitation, and basic health services such as primary care and immunizations are critical to improving health and resilience in many low-income countries that face financing and fiscal space constraints (Deaton 2013).

Equitable Access to Opportunities

A society is more resilient if individuals have similar access to opportunities, irrespective of the economic and social conditions into which they were born. If people do not face scarring for life after an adversity, inequality

Figure 1.1.1. Children Missing Out on Non-COVID-19 Immunization

(Millions, left scale; immunization coverage in percent, right scale)



Sources: World Health Organization; and IMF staff estimates.

is lower, which helps preserve social and macroeconomic stability (Chetty and others 2020; IMF and World Bank 2020; April 2021 *Fiscal Monitor*).

Public investment in basic services such as education can build opportunity for individuals from disadvantaged backgrounds who have suffered setbacks. For example, additional resources are needed for students—especially those from lower-income families—who missed out on schooling during the pandemic (Agostinelli and others 2022). In countries with more developed tax systems, child tax credits to lower-income households can boost children's school attendance, performance, and future earnings (Chetty and others 2015) not only by making learning and health-related expenses more affordable for families, but also by relieving the stress of income insecurity.

Likewise, policies focusing on the acquisition of productive skills and on adapting labor market institutions to new forms of work can help workers adjust to and gain from economic transformation, such as digitalization (Organisation for Economic Co-operation and Development 2018). Policies include active labor market policies—vocational training, job search assistance, hiring subsidies—and support for entrepreneurship or independent workers. Making childcare more affordable and narrowing gender gaps in work can allow women to realize their full economic potential, even after pandemic-related disruption (Elborgh-Woytek and others 2013).

Box 1.1 (continued)*Adaptation to Climate Change and Resilience to Natural Disasters*

By raising the frequency and severity of extreme weather events and natural disasters, climate change can have major fiscal costs and cause irreversible economic losses (IMF 2019; Intergovernmental Panel on Climate Change 2022). Vulnerability to recurrent disasters hampers a country's growth potential, both directly through damage to physical capital and indirectly through a higher effective cost of capital and greater migration outflows (April 2016 *Fiscal Monitor*). Disasters also disproportionately hurt the poor, who have fewer mechanisms for coping with them. For low-income and developing economies, economic development is an important element of resilience to climate change (Bellon and Massetti 2022).

Resilience to natural events requires investment in adaptation policies—often with the private sector participation (Roy and others 2018; October 2019 *Fiscal Monitor*; Intergovernmental Panel on Climate Change 2022). Investing in adaptation can reduce losses from climate change, support growth, and yield social and environmental benefits (Global Commission on Adaptation 2019). Adaptation strategies should be built on three pillars (IMF 2019;

Bellon and Massetti 2022). The first is investment in physical and information infrastructure, including accompanying regulations. Both “hard” policy measures (for example, upgrading infrastructure resilience such as reliable power systems and efficient irrigation systems) under a strong infrastructure governance (Schwartz and others 2020; IMF 2022b) and “soft” measures (such as early warning systems and low-emission building codes and zoning rules) are needed. The second pillar concentrates on strengthening financial resilience to protect fiscal sustainability. Depending on the frequency and severity of disasters, governments can manage their risk by (1) building fiscal buffers to self-insure, (2) transferring risk through private sector insurance or regional mechanisms to share risks, (3) arranging credit lines or other contingent financing, or (4) accessing concessional financing and humanitarian assistance when risk transfer is not cost-effective in the event of large and rare disasters. The third pillar ensures a prompt response to and recovery from a major disaster through contingency planning and related investments. For example, social protection systems, including primary care networks, can be scaled up speedily for humanitarian needs.

Box 1.2. Designing Government Support to Firms during a Crisis

This box presents considerations for designing government support to firms in the event of a large shock, focusing on financing measures such as public loans, credit guarantees, and solvency support. Such support entails sizable risks and thus poses difficult trade-offs. It should generally be reserved for exceptional adverse shocks.

When designing measures to support firms, a comprehensive approach can manage risks and trade-offs. Public support for firms is usually extended in conjunction with other fiscal measures and financial policies. Policymakers need to set priorities, determine available resources, and coordinate different policies depending on the nature of the shocks and institutional capacity. Scarce public resources should focus on addressing market failures, such as widespread strains on firms' liquidity as a result of great uncertainty, which could have knock-on effects and further disrupt economic activity if left unaddressed.

Design Considerations

Policy priorities and sequencing. At the onset of a crisis, when uncertainty is great and market failures are evident, there is a premium on a swift response over fine-tuned targeting. Broad-based measures can buy time for policymakers to better assess the likely duration and impact of the shock (Balibek and others 2020). As activity recovers and information becomes available, priorities should shift toward more targeted measures to contain cost and avoid wasting support on nonviable firms. Existing institutional expertise and capacity influence the desired role of public and private sectors.

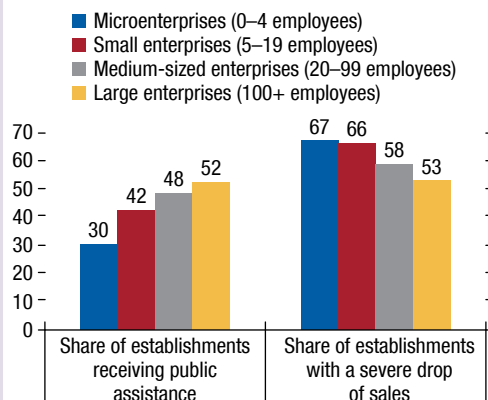
Assessing firms' viability and targeting support. Determining which firms to support is critical but challenging. Viability should be a key criterion—support should be directed to viable firms that face temporary difficulties, whereas unhealthy firms should be restructured or closed to avert a drag on productivity (Group of Thirty 2020; April 2021 *Global Financial Stability Report*). However, governments often lack the information or capacity to assess viability efficiently, especially during large crises. To overcome this constraint, some pandemic-related programs have engaged the private financial institutions or development banks (Credit Guarantee Fund in *Korea*, Micro Enterprise Facility in *Malaysia*) with a comparative advantage in serving as intermediaries. For example, *Colombia* relied on its development bank to extend credit support to firms during the pandemic.

To better target credit programs as recovery takes hold, governments could apply stricter credit underwriting standards, focus on addressing the effects of negative externalities on the loan portfolio rather than individual loans, and encourage differentiated credit spreads among supported firms. As the health crisis subsided, public loan programs became better targeted as in *Australia*, *Germany*, and the *United States*.

Choice of fiscal instruments. The selection of fiscal measures will depend on policy space and administrative capacity.

- *Large strategic viable firms.* Support for viable strategic firms tends to be arranged on an individual, ad hoc basis. In addition to extending direct solvency support, governments sometimes act as intermediaries between the problem firm and its creditors—for example, by creating incentives for greater private participation through debt-to-equity conversion.
- *Micro, small, and medium-sized enterprises.* Governments generally do not have the capacity to assess the viability of each firm, making it more challenging to target support to micro- and small-sized enterprises, which are numerous and diverse (Figure 1.2.1). Temporary standardized support by sector or based on the extent of losses may allow some differentiation but full tailoring to individual firms is not practical. Large informality also makes it challenging to reach firms in need. In this case, support can better be provided through the social protection system to limit income losses to households.

Figure 1.2.1. Firms Receiving Public Support



Sources: World Bank COVID-19 Business Pulse Surveys Dashboard; and IMF staff estimates.

Note: The numbers are group averages based on the latest wave of the survey for 2021. The survey months varied across countries from January to October.

Box 1.2 (continued)

Exit strategy. Government support should include an exit strategy. Prolonged support would add to fiscal costs and delay a necessary reallocation of resources toward productive uses. For example, the guarantee programs in the *United Kingdom* have clear sunset clauses. To avoid potential “cliff effects” as support is withdrawn, an exit strategy could be contingent on observable indicators rather than based on a preannounced timetable. A gradual withdrawal could narrow the scope of new loans, reduce the generosity of benefits, and increase private risk exposures. Raising gradually the guarantee fees or reducing the guarantee ratio backed by governments can facilitate exit from credit guarantee programs.

Managing fiscal risks. As many financing support measures are outside the traditional budget and fiscal reporting apparatus, strengthening the reporting of contingent liabilities and fiscal risks and quantifying such risks is crucial (see IMF Fiscal Risk Toolkit). Lack of clarity in legislative requirements

on disclosure adds to the challenges. Robust oversight, sound legal frameworks, good governance, and transparency about the benefits and cost of support to firms will help prevent unwelcome surprises that could strain public finances (Emre and others 2020). In that context, preparing a framework in advance for the use of financing measures is important.

Supporting Institutions

Support to firms can involve other macroeconomic and financial policies, such as easing of bank capital requirements and provisioning requirements for non-performing loans. Moreover, countries can strengthen their insolvency frameworks to prepare for a crisis. This may involve better use of out-of-court restructurings and bolstering the insolvency regime (Araujo and others 2022). Strong social protection systems are an important backstop for microenterprises and informal firms because targeted support to these firms is likely not practical.

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ECONOMY ABBREVIATIONS

Code	Name	Code	Name
AFG	Afghanistan	DOM	Dominican Republic
AGO	Angola	DZA	Algeria
ALB	Albania	ECU	Ecuador
ARE	United Arab Emirates	EGY	Egypt
ARG	Argentina	ERI	Eritrea
ARM	Armenia	ESP	Spain
ATG	Antigua and Barbuda	EST	Estonia
AUS	Australia	ETH	Ethiopia
AUT	Austria	FIN	Finland
AZE	Azerbaijan	FJI	Fiji
BDI	Burundi	FRA	France
BEL	Belgium	FSM	Micronesia, Federated States of
BEN	Benin	GAB	Gabon
BFA	Burkina Faso	GBR	United Kingdom
BGD	Bangladesh	GEO	Georgia
BGR	Bulgaria	GHA	Ghana
BHR	Bahrain	GIN	Guinea
BHS	Bahamas, The	GMB	Gambia, The
BIH	Bosnia and Herzegovina	GNB	Guinea-Bissau
BLR	Belarus	GNQ	Equatorial Guinea
BLZ	Belize	GRC	Greece
BOL	Bolivia	GRD	Grenada
BRA	Brazil	GTM	Guatemala
BRB	Barbados	GUY	Guyana
BRN	Brunei Darussalam	HKG	Hong Kong Special Administrative Region
BTN	Bhutan	HND	Honduras
BWA	Botswana	HRV	Croatia
CAF	Central African Republic	HTI	Haiti
CAN	Canada	HUN	Hungary
CHE	Switzerland	IDN	Indonesia
CHL	Chile	IND	India
CHN	China	IRL	Ireland
CIV	Côte d'Ivoire	IRN	Iran
CMR	Cameroon	IRQ	Iraq
COD	Congo, Democratic Republic of the	ISL	Iceland
COG	Congo, Republic of	ISR	Israel
COL	Colombia	ITA	Italy
COM	Comoros	JAM	Jamaica
CPV	Cabo Verde	JOR	Jordan
CRI	Costa Rica	JPN	Japan
CYP	Cyprus	KAZ	Kazakhstan
CZE	Czech Republic	KEN	Kenya
DEU	Germany	KGZ	Kyrgyz Republic
DJI	Djibouti	KHM	Cambodia
DMA	Dominica	KIR	Kiribati
DNK	Denmark	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	Türkiye
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 built in the budget 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.

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.

Coverage of public benefits Share of individuals or households of a particular socioeconomic group who receive a public benefit.

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 efficiency cost Losses in consumer and producer surplus (net of any gains/losses to the government) from a policy change, leaving aside environmental effects. For carbon taxes, it reflects the value of the reduction in fuel consumption below levels that consumers would prefer without the carbon tax.

Economic scarring Long-lasting economic damage.

Equity injections by the public sector Purchase of shares (ownership) of a firm by governments or public corporations, to provide it with the required capital to continue operations.

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

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 multiplier Measures the short-term impact of discretionary fiscal policy on output. Usually defined as the ratio of a change in output to an exogenous change in the fiscal deficit with respect to their respective baselines.

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

Fiscal stabilization Contribution of fiscal policy to output stability through its impact on aggregate demand.

Fiscal stabilization coefficient (FISCO) FISCO measures how much a country’s overall budget balance changes in response to a change in economic slack (as measured by the output gap). If FISCO is equal to 1, it means that when output falls below potential by 1 percent of GDP, the overall balance worsens by the same percentage of GDP. The higher the FISCO, the more countercyclical the conduct of fiscal policy. Technical details on FISCO estimation are in Annex 2.1 of the April 2015 *Fiscal Monitor* and Furceri and Jalles (2018).

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.

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

Government guarantees Governments can undertake payment of a debt or liabilities in the event of a default by the primary creditor. The most common type is a government-guaranteed loan, which requires government to repay any amount outstanding on a loan in the event of default. In some contracts, governments provide a revenue or demand guarantee. The budget costs related to guarantees are usually not recognized in the budget without any upfront cost, but they create a contingent liability, with the government exposed to future calls on guarantees and fiscal risks.

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* guide.) 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.)

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 employee's hours worked or top up an employee's pay for hours reduced (that is, lost wages).

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.

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

Price subsidies Price subsidies are measures that keep prices for end users below market levels, or for suppliers above market levels. Subsidies can take various forms including direct transfers, but also indirect support such as tax exemptions, price controls, or rebates.

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.

Quasi-fiscal activities Noncommercial activities (such as subsidies or loans) undertaken by public corporations (such as state-owned enterprises or banks) on behalf of the government, outside their regular mandate.

Replacement rate Refers to the ratio of unemployment insurance and benefits to average employment earnings. For job-retention schemes, it refers to the rate at which a wage subsidy covers the lost wages of a worker due to reduced hours or pay.

Semi-automatic stabilizers Fiscal measures that combine the desirable properties of automatic stabilizers and discretionary measures that prespecify support that would be targeted, temporary, and tailored to the economic conditions. Examples include prelegislated increases in unemployment benefits or eligibility when a decline in employment exceeds a certain predetermined threshold.

Short-term/short-time work schemes Wage subsidies for temporary reductions in working time or pay of employees in firms affected by a temporary shock, to cover all or part of their lost wages.

Social insurance Programs aimed at protecting households from shocks that can adversely impact their incomes and welfare; typically financed by contributions or payroll taxes.

Social protection The social protection system consists of policies designed to reduce individuals' exposures to risks and vulnerabilities, and to enhance their capacity to manage negative shocks such as unemployment, sickness, poverty, disability, and old age. It has three broad categories: (1) social safety net programs (noncontributory transfer programs to ensure a minimum level of economic well-being), (2) social insurance programs (contributory interventions to help people better manage risks), and (3) labor market

programs to insure individuals against unemployment risks and improve job search prospects.

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

Structural primary balance Extension of the cyclically adjusted primary balance that also corrects for other nonrecurrent effects that go beyond the cycle, such as one-off 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.

Take-up of public income support programs Eligible population of individuals who receive public income support programs.

Wage subsidies Government payments to workers or their employers to incentivize employers to recruit or retain (often disadvantaged) workers.

Reference

Furceri, Davide, and João Tovar Jalles. 2018. "Determinants and Effects of Fiscal Counter Cyclical." *Ensayos Sobre Política Económica* 36 (85): 137–51.

METHODOLOGICAL AND STATISTICAL APPENDIX

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 October 5, 2022.

Data and Conventions

Country-specific data and projections for key fiscal variables are based on the October 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: 40 advanced economies, 97 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 only to 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 GFSM 1986. “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 authorities’ 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 the authorities’ 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. Gross debt refers to the nonfinancial public sector, excluding Ethiopian Airlines.
- 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 canton and commune levels may be 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.
- Türkiye:* Projections in the *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. 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: Starting in October 2018 Uruguay's 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 2018–22 are affected by these transfers, which amounted to 1.2 percent of GDP in 2018, 1.1 percent of GDP in 2019, 0.6 percent of GDP in 2020, and 0.3 percent of GDP in 2021 and are projected to be 0.1 percent of GDP in 2022 and 0 percent thereafter. See IMF Country Report 19/64 for further details. The disclaimer about the public pension system applies only to the revenues and net lending/borrowing series. The coverage of the fiscal data for Uruguay was changed from consolidated public sector to nonfinancial public sector with the October 2019 *World Economic Outlook*. In Uruguay, nonfinancial public sector coverage includes central government, local government, social security funds, nonfinancial public corporations, and Banco de Seguros del Estado. Historical data were also revised accordingly. Under this narrower fiscal perimeter—which excludes the central bank—assets and liabilities held by the nonfinancial public sector where the counterpart is the central bank are not netted out in debt figures. In this context, capitalization bonds the government issued to the central bank in the past are now part of the nonfinancial public sector debt. Gross and net debt estimates for 2008–11 are preliminary.

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 October 2022 *World Economic Outlook*, unless noted otherwise. For underlying assumptions other than on fiscal policy, see the October 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 the 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 because of a lack of clarity within the international community regarding the recognition of a government in Afghanistan.

Argentina: Fiscal projections are based on available information regarding budget outturns, budget plans and IMF-supported program targets for the federal government, fiscal measures announced by the authorities, and 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 FY2022/23 budget published by the respective state/territory governments (as of August 30, 2022), and the IMF staff's estimates and projections.

Austria: Fiscal projections are based on the 2022 budget, the Austria Stability Programme, and Austria National Reform Programme 2022. The NGEU fund and latest announcement on fiscal measures have also been incorporated.

Belgium: Projections are based on the 2022–25 Stability Programme, the 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 the latest policy announcement.

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

Canada: Projections use baseline forecasts from the 2022 Federal Budget 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 the IMF staff's projections for GDP, copper prices, depreciation, and inflation.
- China:* After significant fiscal tightening in 2021, fiscal policy is projected to loosen considerably in 2022 based on the annual budget document released in March, subsequent announcements of additional fiscal support for the economy, and the fiscal outturn for the first seven months of 2022.
- Colombia:* Projections are based on the authorities' policies and projections reflected in the 2022 Financing Plan and the 2022 Medium-Term Fiscal Framework, adjusted to reflect the IMF staff's macroeconomic assumptions.
- Croatia:* Projections are based on the macroeconomic framework and the authorities' medium-term fiscal guidelines.
- Cyprus:* Projections are based on the IMF staff's assessment of authorities' budget plans and the IMF staff's macroeconomic assumptions.
- Czech Republic:* The fiscal projections are based on the authorities' latest-available convergence program, budget and medium-term fiscal framework, as well as the IMF staff's macroeconomic framework. Structural balances are net of temporary fluctuations in some revenues and one-offs. COVID-19-related one-offs are, however, included.
- 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:* The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.
- Egypt:* Fiscal projections are mainly based on budget sector operations. Projections are based on the budget for FY 2022/23 and the IMF'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 (for example, measures to mitigate the impact of higher energy costs and the impact of the war in Ukraine) for staff's macroeconomic scenario.
- Finland:* Fiscal projections are based on authorities' projections, which reflect their latest medium-term fiscal plan, adjusting where appropriate for the IMF staff's macroeconomic and other assumptions.
- France:* Projections for 2022 onward are based on the measures of the 2018–22 budget laws, Stability Program 2022–27, and other available information on the authorities' fiscal plans, adjusted for differences in revenue projections and assumptions on macroeconomic and financial variables.
- Germany:* The IMF staff's projections for 2022 and beyond are based on the 2022 budget, the Stability Programme 2022, the draft 2023 federal 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.
- 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 the IMF staff's projections of the macroeconomic framework and fiscal policy plans announced in the 2022 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 official government budget. Staff adjust expenditure to remove 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 assume that spending will be below budget in 2022, given current trends, but spending cuts in the medium term will be more modest than in the authorities' medium-term framework.

Italy: The IMF staff's estimates and projections are informed by the fiscal plans included in the government's 2022 budget and amendments. 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 two supplementary budgets, the 2023 budget and the medium-term fiscal plan announced with the 2023 budget, and IMF staff's adjustments.

Libya: The IMF staff's fiscal policy assumptions based on 2021 fiscal accounts.

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

Malta: Projections are based on the authorities' budget documents and the latest Stability Programme, taking also into account 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 and 2023 are informed by the estimates in Pre-Criterios 2023; projections for 2024 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 made based on budget numbers and changed macro environment.

Netherlands, The: Fiscal projections for 2022–27 are based on the IMF staff's forecast framework and are informed by the authorities' draft budget plan and Bureau for Economic Policy Analysis projections.

New Zealand: Fiscal projections are based on the FY2022/23 budget (May 2022) and the IMF staff's estimates.

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

Norway: Fiscal projections are based on the 2022 budget and subsequent ad hoc updates.

Pakistan: The FY2022/23 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

Philippines: Revenue projections reflect the IMF staff's macroeconomic assumptions and incorporate the updated data. 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. Projections begin in 2022, based on the 2022 budget and subsequent temporary tax relief measures known as the Anti-Inflation Shield.

Portugal: 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 recovery measures from the temporary recovery instrument Next Generation EU.

Russia: The government has suspended the fiscal rule in response to the sanctions imposed after the invasion of Ukraine. The projection assumes an increase in discretionary spending by the amount of what would otherwise have been saved according to the fiscal rule, some borrowing, and a decline in revenues because of the projected recession.

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

Singapore: FY2020 figures are based on budget execution. FY2021 are based on revised figures using budget execution through early 2022. FY2022 projections are based on the initial FY2022 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 (1) the increase of the Goods and Services Tax (GST) from 7 percent to 8 percent on January 1, 2023, and to 9 percent on January 1, 2024; (2) 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 (3) an increase of the carbon tax from S\$5 per tonne of CO₂ emissions 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 Stability Program but considers available data for 2022.

Spain: Fiscal projections for 2022 include COVID-19– and energy-related support measures, the legislated increase in pensions, and the legislated revenue measures. Fiscal projections from 2023 onward assume no policy changes. Disbursements under the EU Recovery and Resilience Facility are reflected in the projections for 2021–24.

Sri Lanka: Fiscal projections are based on IMF staff’s judgment.

Sweden: Fiscal estimates for 2021 and 2022 are based on authorities’ Spring Budget Bill 2022 and were updated with authorities’ latest interim forecast. The impact of cyclical developments on the fiscal accounts is calculated using the 2014 Organisation for Economic Co-operation and Development elasticity to take into account output and employment gaps.

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

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

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

United Kingdom: Fiscal projections are based on the latest GDP data published by the Office for National Statistics on August 12, 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 do not include all of the measures announced by the government on September 23, 2022, and assume

that there will be some additional fiscal consolidation with the goal of complying with the fiscal rules announced at the time of the Spending Review on October 27, 2021, and to secure public debt sustainability. The IMF staff’s data exclude public sector banks and the effect of transferring assets from the Royal Mail Pension Plan to the public sector in April 2012. 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 2022 Congressional Budget Office baseline, adjusted for the IMF staff’s policy and macroeconomic assumptions. Projections incorporate the effects of the proposed American Jobs Plan; the American Families Plan; the Bipartisan Infrastructure Law; the legislated 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.

Uruguay: Historical fiscal and monetary data are from the Uruguayan authorities. Projections are based on the authorities’ policies and projections, adjusted to reflect IMF staff macroeconomic assumptions and assessment of policy plans.

Venezuela: Projections for 2022–27 are omitted because of an unusually high degree of uncertainty.

Vietnam: Estimates and projections starting from 2021 use authorities’ 2021 budget numbers and IMF staff’s projections.

Yemen: Hydrocarbon revenue projections are based on WEO assumptions for hydrocarbon prices and authorities’ projections for oil and gas production. Non-hydrocarbon revenues largely reflect authorities’ projection 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 because of 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 economies can be found at <https://www.imf.org/external/datamapper/datasets/FM>.

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

Table A. Economy Groupings (continued)

Advanced Economies	Emerging Market Economies	Low-Income Developing Countries	G7 Countries	G20¹ Countries	Advanced G20¹ Countries	Emerging G20 Countries
	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					
	Tonga					
	Trinidad and Tobago					
	Tunisia					
	Türkiye					
	Turkmenistan					
	Tuvalu					
	Ukraine					
	United Arab Emirates					
	Uruguay					
	Vanuatu					
	Venezuela					
	West Bank and Gaza					

Note: G7 = Group of Seven; G20 = Group of Twenty.

¹ Does not include European Union aggregate.

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, Republic of	Angola
Cambodia	Nicaragua	Burundi	Kyrgyz Republic	Nigeria	Azerbaijan
Kiribati		Cameroon	Mauritania	Timor-Leste	Bahrain
Lao P.D.R.		Central African Republic	Moldova	Yemen	Brunei Darussalam
Myanmar		Chad	Somalia		Canada
Nepal		Comoros	Sudan		Congo, Republic of
Papua New Guinea		Congo, Democratic Republic of the	Tajikistan		Chad
Solomon Islands		Congo, Republic of	Uzbekistan		Ecuador
Timor-Leste		Côte d'Ivoire	Yemen		Equatorial Guinea
Vietnam		Eritrea			Gabon
		Ethiopia			Iran
		Gambia, The			Iraq
		Ghana			Kazakhstan
		Guinea			Kuwait
		Guinea-Bissau			Libya
		Kenya			Nigeria
		Lesotho			Norway
		Liberia			Oman
		Madagascar			Qatar
		Malawi			Russia
		Mali			Saudi Arabia
		Mozambique			Timor-Leste
		Niger			Trinidad and Tobago
		Nigeria			Turkmenistan
		Rwanda			United Arab Emirates
		São Tomé and Príncipe			Venezuela
		Senegal			Yemen
		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?
	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	GG	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
Netherlands, The	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.

¹In 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 ³	GG	CG,LG	Mixed	...	...	...	GG	CG,LG	Nominal
Argentina	GG	CG,SG,SS	C	CG	CG	C	CG	CG	Nominal
Belarus ⁴	GG	CG,LG,SS	C	...	...	...	GG	CG,LG,SS	Nominal
Brazil ⁵	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 ⁶	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	...	...	...	CG	CG	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 ⁷	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 ⁸	GG	CG,SG,SS	C	GG	CG,SG,SS	C	GG	CG,SG,SS	Nominal
Sri Lanka	CG	CG	C	...	...	...	CG	CG	Nominal
Thailand ⁹	PS	CG,BOG,LG,SS	A	PS	CG,BOG,LG,SS	A	PS	CG,BOG,LG,SS	Nominal
Turkiye	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	GG	CG,BOG,SG,SS	Mixed	...	...	...	GG	CG,BOG,SG,SS	Nominal
Uruguay	NFPS	CG,LG,SS,NMPC,NFPC	A	...	...	...	NFPS	CG,LG,SS,NMPC,NFPC	Face
Venezuela ¹⁰	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 security funds; SS = social security funds. Accounting practice: A = accrual; C = cash; Mixed = combination of accrual and cash accounting.

¹In 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 of their market prices.

³Gross debt includes the domestic and external debt of the central government; the external debt of the state-owned oil company, Sonangol, and the state-owned airline, TAAG; public guarantees; and reported external liabilities of other state entities, including external arrears.

⁴Gross debt refers to general government public debt, including publicly guaranteed debt.

⁵Gross debt refers to the nonfinancial public sector, including 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.

⁶Revenue is recorded on a cash basis and expenditure on an accrual basis.

⁷The FY2022/23 projections for Pakistan are based on information available as of the end of August and do not include the impact of the recent floods.

⁸Coverage for South Africa is 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.

⁹Data for Thailand do not include the debt of specialized financial institutions (SFIs/NMPC) without a government guarantee.

¹⁰The 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 2018–19 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	...	CG	CG	Nominal
Benin	CG	CG	C	...	...	...	CG	CG	Nominal
Burkina Faso	CG	CG	CB	...	...	...	CG	CG	Face
Cambodia	CG	CG, LG	A	CG	CG, LG	...	CG	CG, LG	Face
Cameroon	CG	CG	C	...	...	...	CG	CG	Nominal
Chad	NFPS	CG, NFPC	C	...	...	...	CG	CG	Face
Congo, Democratic Republic of the	CG	CG, LG	A	...	...	...	CG	CG, LG, NFPC	Nominal
Congo, Republic of	CG	CG	A	...	...	...	CG	CG	Nominal
Côte d'Ivoire	CG	CG, SS	Mixed	...	...	...	CG	CG, NFPC	Nominal
Ethiopia	CG	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	CG	CG, LG, SS	Mixed	GG	CG, LG, SS	...	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	...	CG	CG	Nominal
Madagascar	CG	CG, LG	CB	...	...	...	NFPS	CG, LG, NFPC	Nominal
Malawi	CG	CG	C	...	...	...	CG	CG	...
Mali	CG	CG	Mixed	...	...	...	CG	CG	Nominal
Moldova	GG	CG, LG, SS	C	GG	CG, LG, SS	...	GG	CG, LG, SS	Nominal
Mozambique	CG	CG, SG	Mixed	CG	CG, SG	...	CG	CG, SG	Nominal
Myanmar ⁵	NFPS	CG, NFPC	C	...	...	...	NFPS	CG, NFPC	Face
Nepal	CG	CG	C	CG	CG	...	CG	CG	Face
Nicaragua	GG	CG, LG, SS	C	GG	CG, LG, SS	...	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	...	...	...	CG	CG	Nominal
Senegal	CG	CG	C	...	...	...	PS	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	...	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	Current market

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

¹In 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.

³Haiti'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.

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

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

⁶Uzbekistan'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	-2.7	-2.4	-2.4	-2.9	-10.4	-7.2	-3.6	-3.7	-3.8	-4.0	-4.0	-3.8
Euro Area	-3.1	-2.5	-2.0	-1.5	-0.9	-0.4	-0.7	-7.0	-5.1	-3.8	-3.3	-2.8	-2.6	-2.5	-2.5
G7	-4.3	-3.6	-3.0	-3.3	-3.2	-3.3	-3.6	-11.9	-8.7	-4.4	-4.6	-4.8	-5.1	-5.1	-4.9
G20 Advanced	-4.0	-3.4	-2.9	-3.1	-2.9	-3.0	-3.5	-11.4	-8.3	-4.3	-4.4	-4.5	-4.8	-4.7	-4.5
Australia	-2.8	-2.9	-2.8	-2.4	-1.7	-1.3	-4.4	-8.8	-6.5	-3.4	-3.0	-2.6	-1.8	-1.0	-0.7
Austria	-2.0	-2.7	-1.0	-1.5	-0.8	0.2	0.6	-8.0	-5.9	-2.7	-1.6	-1.2	-1.1	-1.2	-1.3
Belgium	-3.1	-3.1	-2.4	-2.4	-0.7	-0.9	-2.0	-9.0	-5.5	-4.7	-4.8	-5.0	-5.0	-5.3	-5.4
Canada	-1.5	0.2	-0.1	-0.5	-0.1	0.4	0.0	-11.4	-5.0	-2.2	-1.2	-0.9	-0.6	-0.6	-0.5
Cyprus ¹	-5.2	-0.2	0.2	0.2	2.0	-3.6	1.3	-5.8	-1.7	-0.5	0.9	1.3	1.6	1.7	1.7
Czech Republic	-1.3	-2.1	-0.6	0.7	1.5	0.9	0.3	-5.8	-5.9	-4.0	-3.3	-2.9	-2.7	-2.4	-2.3
Denmark	-1.2	1.1	-1.3	-0.1	1.8	0.8	4.1	0.2	2.6	1.2	0.8	0.5	0.0	-0.1	-0.1
Estonia	0.2	0.7	0.1	-0.4	-0.7	-0.6	0.1	-5.5	-2.3	-2.9	-2.3	-1.7	-1.1	-0.6	-0.1
Finland	-2.5	-3.0	-2.4	-1.7	-0.7	-0.9	-0.9	-5.5	-2.6	-2.1	-1.7	-2.1	-2.7	-2.7	-2.9
France	-4.1	-3.9	-3.6	-3.6	-3.0	-2.3	-3.1	-8.9	-6.4	-5.1	-5.6	-5.0	-5.0	-5.0	-5.0
Germany	0.0	0.6	1.0	1.2	1.3	1.9	1.5	-4.3	-3.7	-3.3	-2.5	-1.5	-0.9	-0.6	-0.5
Greece	-3.8	-4.1	-3.0	0.3	0.9	0.8	0.2	-10.9	-8.0	-4.4	-1.9	-1.3	-1.0	-0.8	-0.7
Hong Kong SAR	1.0	3.6	0.6	4.4	5.5	2.3	-0.6	-9.2	0.1	-3.8	-0.9	-0.2	0.5	0.7	0.7
Iceland	-1.2	0.3	-0.4	12.5	1.0	0.9	-1.5	-8.9	-7.9	-5.4	-3.1	-2.1	-0.8	0.0	0.4
Ireland ¹	-6.4	-3.6	-2.0	-0.8	-0.3	0.1	0.4	-5.1	-1.7	0.4	0.5	0.7	0.7	0.7	0.6
Israel	-4.1	-2.3	-1.1	-1.7	-1.1	-3.6	-3.9	-10.7	-3.8	0.1	-0.4	-1.3	-2.4	-2.5	-2.6
Italy	-2.9	-3.0	-2.6	-2.4	-2.4	-2.2	-1.5	-9.6	-7.2	-5.4	-3.9	-3.5	-3.0	-3.0	-3.0
Japan	-7.6	-5.6	-3.7	-3.6	-3.1	-2.5	-3.0	-9.0	-6.7	-7.9	-3.6	-2.5	-2.5	-2.6	-2.6
Korea	0.8	0.6	0.5	1.6	2.2	2.6	0.4	-2.2	0.0	-1.8	0.1	0.2	0.2	0.3	0.2
Latvia	-0.6	-1.7	-1.5	-0.4	-0.8	-0.7	-0.4	-3.8	-5.6	-6.0	-2.7	-2.0	-2.0	-0.8	-0.4
Lithuania	-2.6	-0.7	-0.2	0.3	0.5	0.6	0.3	-7.3	-1.0	-2.0	-1.7	-1.5	-1.4	-1.3	-1.0
Luxembourg	0.8	1.3	1.3	1.9	1.4	3.0	2.3	-3.4	0.9	-1.1	-0.4	-0.3	-0.2	-0.3	-0.4
Malta	-2.3	-1.7	-1.0	1.1	3.3	2.1	0.6	-9.5	-7.9	-5.6	-4.6	-3.0	-2.7	-2.3	-2.1
Netherlands, The	-3.0	-2.3	-2.1	0.0	1.3	1.4	1.7	-3.7	-2.6	-0.8	-1.3	-1.9	-2.5	-2.7	-2.7
New Zealand	-1.3	-0.4	0.3	0.9	1.3	1.3	-2.5	-4.0	-4.8	-4.7	-2.2	-1.6	-0.4	0.2	0.2
Norway	10.7	8.6	6.0	4.1	5.0	7.9	6.6	-2.8	9.1	20.3	17.8	16.0	14.3	13.2	12.2
Portugal	-5.1	-7.3	-4.4	-1.9	-3.0	-0.3	0.1	-5.8	-2.8	-1.9	-1.4	-1.1	-1.0	-1.1	-1.2
Singapore	6.0	4.6	2.9	3.3	5.2	3.7	3.8	-6.9	-0.2	1.4	1.4	2.5	3.0	3.4	3.5
Slovak Republic	-2.9	-3.1	-2.7	-2.6	-1.0	-1.0	-1.3	-5.5	-6.2	-4.0	-4.2	-3.7	-3.3	-3.1	-3.2
Slovenia	-14.6	-5.5	-2.8	-1.9	-0.1	0.7	0.4	-7.9	-5.2	-3.1	-2.8	-2.3	-1.9	-1.8	-1.7
Spain ¹	-7.5	-6.1	-5.3	-4.3	-3.1	-2.6	-3.1	-10.3	-6.9	-4.9	-4.4	-4.2	-4.1	-4.3	-4.3
Sweden	-1.5	-1.5	0.0	1.0	1.4	0.8	0.6	-2.8	-0.3	0.1	-0.4	0.7	0.6	0.4	0.3
Switzerland	-0.4	-0.2	0.5	0.2	1.1	1.3	1.3	-3.0	-0.7	-0.1	0.3	0.4	0.4	0.4	0.4
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	-4.4	-4.6	-5.3	-5.5	-14.5	-10.9	-4.0	-5.7	-6.6	-7.4	-7.3	-7.1

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.

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

²For 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	-0.9	-1.4	-9.2	-5.8	-2.4	-2.3	-2.1	-2.2	-2.0	-1.9
Euro Area	-0.6	-0.2	0.1	0.4	0.8	1.2	0.8	-5.7	-3.8	-2.4	-2.0	-1.5	-1.2	-1.1	-1.1
G7	-2.4	-1.8	-1.3	-1.6	-1.5	-1.6	-1.9	-10.3	-6.8	-2.8	-2.9	-2.7	-2.8	-2.6	-2.4
G20 Advanced	-2.3	-1.7	-1.3	-1.5	-1.3	-1.4	-1.9	-9.9	-6.5	-2.8	-2.8	-2.5	-2.6	-2.4	-2.2
Australia	-2.1	-2.1	-1.9	-1.5	-0.8	-0.4	-3.6	-7.9	-5.5	-2.3	-1.5	-1.0	-0.3	0.4	0.6
Austria	0.2	-0.7	0.9	0.1	0.6	1.4	1.6	-7.1	-5.2	-2.2	-0.8	-0.4	-0.2	-0.2	-0.3
Belgium	-0.2	-0.2	0.2	0.0	1.4	1.0	-0.2	-7.4	-4.1	-3.6	-3.6	-3.7	-3.6	-3.7	-3.7
Canada	-1.0	0.5	0.6	0.1	0.1	0.4	0.1	-10.9	-5.5	-2.6	-1.4	-0.9	-0.7	-0.8	-0.7
Cyprus ¹	-1.9	2.8	3.1	2.7	4.3	-1.3	3.4	-3.8	0.1	1.2	2.3	2.6	2.8	2.7	2.7
Czech Republic	-0.2	-1.0	0.3	1.5	2.1	1.5	0.8	-5.2	-5.3	-3.4	-2.4	-2.0	-1.7	-1.4	-1.3
Denmark	-0.8	1.6	-0.6	0.4	1.7	0.4	3.9	-0.1	2.2	0.8	0.5	0.3	0.0	-0.2	-0.2
Estonia	0.1	0.7	0.1	-0.5	-0.8	-0.6	0.1	-5.5	-2.3	-2.9	-2.2	-1.6	-1.0	-0.5	0.0
Finland	-2.4	-2.8	-2.3	-1.4	-0.4	-0.7	-0.8	-5.4	-2.6	-2.0	-1.7	-2.0	-2.4	-2.3	-2.6
France	-1.9	-1.8	-1.8	-1.9	-1.3	-0.7	-1.7	-7.7	-5.1	-3.4	-4.1	-3.6	-3.5	-3.3	-3.1
Germany	1.5	1.8	2.0	2.1	2.2	2.7	2.1	-3.9	-3.3	-2.7	-1.8	-0.8	-0.1	0.1	0.2
Greece	0.3	-0.2	0.5	3.5	4.1	4.2	3.2	-7.9	-5.5	-1.8	0.9	1.4	1.6	1.9	2.0
Hong Kong SAR	-0.7	3.6	0.6	3.6	4.7	1.0	-2.2	-11.1	-2.6	-7.4	-3.1	-2.0	-1.3	-0.9	-0.8
Iceland	1.9	3.8	3.2	15.5	3.9	3.1	0.5	-6.7	-6.3	-0.3	2.0	1.8	2.6	3.1	3.2
Ireland ¹	-2.9	-0.3	0.3	1.5	1.6	1.7	1.7	-4.1	-0.9	1.1	1.2	1.3	1.3	1.2	1.1
Israel	-1.1	-0.2	0.6	0.1	0.8	-1.4	-2.0	-8.9	-1.8	2.4	2.0	1.0	0.0	-0.1	-0.2
Italy	1.8	1.4	1.4	1.3	1.2	1.3	1.7	-6.3	-3.8	-2.1	-0.7	-0.4	0.1	0.1	0.1
Japan	-6.5	-4.5	-2.6	-2.5	-2.2	-1.7	-2.4	-8.3	-6.1	-7.6	-3.6	-2.4	-2.4	-2.5	-2.6
Korea	0.4	0.2	0.2	1.4	1.8	2.1	-0.1	-2.7	-0.4	-2.0	0.0	0.2	0.2	0.3	0.3
Latvia	0.9	-0.2	0.3	0.8	0.3	0.2	0.5	-2.9	-4.8	-5.4	-2.1	-1.5	-1.5	-0.3	0.1
Lithuania	-0.9	1.0	1.3	1.6	1.6	1.5	1.1	-6.7	-0.8	-2.1	-1.9	-1.6	-1.4	-1.1	-0.9
Luxembourg	0.7	1.1	1.1	1.6	1.1	2.8	2.1	-3.7	0.6	-1.9	-2.3	-1.7	-1.6	-1.7	-1.7
Malta	0.4	0.9	1.2	3.2	5.1	3.6	1.9	-8.1	-6.8	-4.4	-3.5	-1.9	-1.5	-1.1	-0.9
Netherlands, The	-1.9	-1.2	-1.1	0.9	2.1	2.1	2.3	-3.2	-2.2	-0.6	-1.3	-1.9	-2.4	-2.5	-2.5
New Zealand	-0.6	0.3	1.0	1.6	1.9	1.9	-1.8	-3.4	-4.1	-3.8	-1.2	-0.6	0.6	1.2	1.2
Norway	8.8	6.3	3.5	1.5	2.6	5.7	4.5	-4.9	7.9	18.6	16.1	14.4	12.7	11.6	10.6
Portugal	-0.9	-3.0	-0.1	1.9	0.7	2.9	2.9	-3.1	-0.5	0.1	0.7	0.8	0.8	0.8	0.9
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovak Republic	-1.2	-1.4	-1.2	-1.2	0.2	0.1	-0.2	-4.4	-5.2	-3.1	-3.4	-3.0	-2.6	-2.4	-2.4
Slovenia	-12.6	-2.7	0.0	0.7	2.1	2.5	1.9	-6.5	-4.1	-2.3	-2.1	-1.5	-1.1	-1.0	-0.9
Spain ¹	-4.5	-3.1	-2.7	-1.9	-0.9	-0.4	-1.0	-8.2	-4.9	-2.9	-2.4	-2.0	-1.9	-2.0	-2.0
Sweden	-1.2	-1.4	0.0	1.0	1.4	0.8	0.5	-2.9	-0.4	0.0	-0.5	0.6	0.5	0.3	0.2
Switzerland	-0.2	0.0	0.8	0.4	1.3	1.4	1.4	-3.0	-0.6	0.0	0.4	0.5	0.5	0.5	0.5
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	-2.4	-2.6	-3.1	-3.2	-12.4	-8.4	-2.2	-3.5	-3.6	-4.0	-3.7	-3.5

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.

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

²For 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	-2.5	-3.1	-7.9	-6.4	-3.8	-3.6	-3.6	-4.0	-4.0	-3.9
Euro Area	-1.1	-0.9	-0.7	-0.6	-0.6	-0.4	-0.7	-4.4	-3.9	-3.6	-2.9	-2.6	-2.6	-2.6	-2.6
G7	-3.1	-2.6	-2.3	-2.7	-3.0	-3.2	-3.7	-9.1	-7.5	-4.3	-4.2	-4.3	-4.8	-4.9	-4.7
G20 Advanced	-3.0	-2.4	-2.1	-2.6	-2.7	-2.9	-3.6	-8.7	-7.2	-4.2	-4.0	-4.0	-4.5	-4.5	-4.4
Australia ¹	-2.7	-2.7	-2.6	-2.2	-1.6	-1.1	-4.0	-7.9	-6.2	-3.5	-3.1	-2.6	-1.8	-1.0	-0.7
Austria	-1.7	-2.2	-0.5	-1.2	-0.9	-0.8	-0.6	-4.8	-4.5	-2.6	-1.2	-1.1	-1.1	-1.2	-1.3
Belgium	-2.1	-2.1	-1.7	-1.6	-0.1	-0.5	-2.0	-7.4	-5.2	-4.8	-4.7	-5.0	-5.0	-5.3	-5.5
Canada	-1.5	-0.2	0.0	-0.1	-0.3	0.1	-0.1	-9.6	-4.4	-2.4	-1.2	-0.7	-0.6	-0.6	-0.5
Cyprus	-2.0	2.3	2.3	1.2	1.7	2.4	0.4	-3.9	-1.1	-0.5	0.7	1.0	1.2	1.3	1.3
Czech Republic	0.3	-0.6	-0.4	0.7	0.8	0.1	-0.8	-5.5	-6.3	-4.3	-3.4	-2.9	-2.7	-2.4	-2.3
Denmark	0.4	2.5	-0.5	-0.5	0.7	-0.5	3.2	1.9	2.1	0.1	0.6	0.4	0.1	-0.1	-0.1
Estonia	0.9	1.2	0.8	0.1	-1.1	-1.1	-0.3	-4.9	-3.0	-2.8	-2.0	-1.7	-1.2	-0.6	-0.1
Finland	-0.9	-0.7	0.1	-0.4	-0.9	-1.0	-1.2	-3.3	-2.4	-2.0	-1.6	-1.9	-2.5	-2.6	-2.8
France	-2.8	-2.5	-2.1	-2.0	-2.0	-1.8	-3.1	-5.8	-5.2	-4.6	-4.8	-4.3	-4.6	-4.8	-4.9
Germany	0.5	0.8	1.2	1.1	0.8	1.5	1.3	-2.9	-3.1	-3.0	-1.8	-1.1	-0.7	-0.6	-0.6
Greece	5.3	3.4	3.4	5.9	5.2	4.3	3.5	-2.9	-4.6	-2.3	-1.9	-1.6	-1.5	-1.2	-1.1
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	-1.3	1.1	0.2	12.0	0.2	-0.8	-3.4	-7.3	-7.7	-5.8	-3.6	-2.6	-1.2	-0.3	0.2
Ireland ²	-4.8	-3.1	-1.4	-1.4	-0.8	-0.1	0.3	-4.5	-2.0	0.2	0.5	0.7	0.7	0.7	0.6
Israel	-4.2	-2.5	-0.8	-1.6	-1.2	-3.8	-4.2	-9.4	-3.6	-0.7	-0.9	-1.6	-2.5	-2.5	-2.6
Italy	-0.7	-0.8	-0.7	-1.0	-1.6	-1.6	-0.9	-6.0	-5.1	-5.7	-3.6	-3.6	-3.6	-3.4	-3.3
Japan	-7.2	-5.5	-4.2	-4.0	-3.4	-2.5	-2.6	-8.2	-6.3	-7.3	-3.2	-2.3	-2.5	-2.6	-2.6
Korea	0.9	0.7	0.7	1.8	2.3	2.6	0.5	-1.5	0.2	-1.6	0.3	0.4	0.2	0.3	0.2
Latvia	-0.8	-1.1	-1.1	-0.3	-1.2	-1.5	-1.1	-2.5	-4.8	-5.5	-2.2	-1.6	-1.7	-0.7	-0.4
Lithuania	-2.1	-0.5	-0.1	0.4	0.3	0.3	-0.1	-7.3	-1.6	-2.2	-1.5	-1.4	-1.3	-1.3	-1.0
Luxembourg	0.9	1.3	1.5	1.1	1.2	3.0	1.9	-2.0	0.7	-0.7	-0.1	-0.2	-0.3	-0.3	-0.4
Malta	-1.1	-1.3	-2.1	0.7	3.1	1.5	0.3	-6.5	-7.3	-6.0	-4.9	-3.1	-2.8	-2.4	-2.1
Netherlands, The	-1.2	-0.6	-0.9	0.8	1.3	0.9	1.1	-1.3	-1.9	-1.2	-1.4	-2.1	-2.6	-2.7	-2.7
New Zealand	-0.3	0.4	0.6	1.0	1.1	0.9	-2.0	-3.5	-5.0	-4.8	-2.2	-1.4	-0.1	0.5	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	-0.2	-0.7	-1.0	-1.0	-1.1	-1.1	-1.2
Singapore	1.5	1.0	-0.7	0.8	1.8	0.7	1.7	-7.9	-2.3	-0.5	-0.5	0.6	1.2	1.5	1.7
Slovak Republic	-1.5	-2.3	-3.3	-3.1	-1.5	-1.6	-1.8	-3.6	-5.1	-3.1	-3.6	-3.5	-3.3	-3.1	-3.2
Slovenia	-12.8	-4.4	-1.9	-1.8	0.0	0.6	0.0	-6.5	-6.0	-4.8	-3.6	-2.8	-2.2	-1.9	-1.7
Spain ²	-1.7	-1.2	-2.1	-2.5	-2.4	-2.2	-3.1	-5.4	-4.3	-4.5	-4.2	-4.3	-4.3	-4.5	-4.4
Sweden ²	-0.9	-0.9	-0.7	0.7	0.9	0.3	-0.2	-1.6	-0.3	-0.3	0.1	1.1	0.8	0.4	0.3
Switzerland ²	-0.3	-0.2	0.6	0.2	1.2	1.1	1.2	-2.3	-0.5	-0.2	0.3	0.4	0.4	0.4	0.4
United Kingdom ²	-3.2	-3.9	-3.6	-2.8	-2.3	-2.4	-2.7	-10.7	-7.1	-4.3	-1.7	-0.4	-0.6	-1.1	-1.0
United States ^{2,3}	-3.2	-2.7	-2.5	-3.6	-4.1	-5.1	-5.7	-10.8	-9.5	-4.0	-5.3	-6.0	-6.9	-7.0	-6.8

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 B.

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

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

³For 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	-1.0	-1.7	-6.7	-4.9	-2.6	-2.2	-2.0	-2.1	-2.1	-1.9
Euro Area	1.2	1.3	1.3	1.3	1.1	1.3	0.7	-3.1	-2.6	-2.2	-1.6	-1.3	-1.2	-1.2	-1.1
G7	-1.3	-0.8	-0.6	-1.0	-1.3	-1.5	-2.0	-7.5	-5.7	-2.8	-2.5	-2.2	-2.4	-2.4	-2.3
G20 Advanced	-1.3	-0.8	-0.6	-0.9	-1.1	-1.3	-1.9	-7.3	-5.4	-2.7	-2.4	-2.1	-2.3	-2.2	-2.1
Australia ¹	-2.0	-1.9	-1.7	-1.3	-0.7	-0.3	-3.2	-7.1	-5.3	-2.4	-1.7	-1.1	-0.3	0.4	0.7
Austria	0.4	-0.2	1.4	0.4	0.5	0.4	0.4	-3.9	-3.8	-2.0	-0.5	-0.2	-0.2	-0.2	-0.3
Belgium	0.7	0.7	0.8	0.7	2.0	1.3	-0.3	-5.8	-3.8	-3.7	-3.5	-3.7	-3.6	-3.7	-3.7
Canada	-1.0	0.1	0.6	0.5	-0.1	0.2	0.0	-9.2	-4.9	-2.9	-1.4	-0.7	-0.7	-0.8	-0.7
Cyprus	0.4	4.4	4.3	3.0	3.4	4.1	2.0	-2.4	0.2	0.8	1.8	2.0	2.1	2.1	2.1
Czech Republic	1.4	0.4	0.5	1.5	1.5	0.7	-0.3	-4.9	-5.7	-3.7	-2.5	-2.0	-1.7	-1.4	-1.3
Denmark	0.8	3.0	0.2	0.1	0.6	-0.8	2.9	1.6	1.7	-0.3	0.3	0.2	0.0	-0.2	-0.2
Estonia	0.9	1.2	0.8	0.0	-1.1	-1.1	-0.4	-4.9	-3.0	-2.8	-1.9	-1.6	-1.1	-0.5	0.0
Finland	-0.8	-0.5	0.3	-0.1	-0.7	-0.8	-1.0	-3.2	-2.4	-2.0	-1.6	-1.8	-2.2	-2.3	-2.5
France	-0.7	-0.5	-0.3	-0.3	-0.4	-0.2	-1.7	-4.6	-3.9	-2.9	-3.4	-3.0	-3.2	-3.2	-3.0
Germany	1.9	2.0	2.2	2.0	1.7	2.3	1.9	-2.5	-2.6	-2.5	-1.1	-0.4	0.0	0.2	0.2
Greece	8.8	6.8	6.4	8.7	8.1	7.4	6.3	-0.3	-2.3	0.6	1.2	1.6	1.7	2.0	2.2
Hong Kong SAR	-0.7	3.6	0.7	3.8	4.7	0.9	-1.3	-6.9	-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	-1.4	-5.1	-6.0	-0.6	1.5	1.3	2.2	2.8	3.0
Ireland ²	-1.4	0.3	1.0	0.8	1.2	1.4	1.6	-3.5	-1.3	1.0	1.2	1.3	1.3	1.2	1.1
Israel	-1.2	-0.4	0.9	0.3	0.7	-1.7	-2.3	-7.6	-1.6	1.7	1.5	0.7	-0.1	-0.1	-0.2
Italy	3.7	3.4	3.0	2.6	2.0	1.9	2.2	-3.0	-1.8	-2.4	-0.4	-0.4	-0.4	-0.4	-0.3
Japan	-6.1	-4.4	-3.2	-3.0	-2.4	-1.7	-1.9	-7.6	-5.7	-7.0	-3.1	-2.2	-2.4	-2.5	-2.6
Korea	0.5	0.3	0.4	1.5	2.0	2.2	0.0	-2.0	-0.1	-1.8	0.2	0.3	0.2	0.3	0.3
Latvia	0.6	0.4	0.6	0.9	-0.1	-0.5	-0.2	-1.6	-4.0	-5.0	-1.6	-1.1	-1.2	-0.2	0.1
Lithuania	-0.4	1.1	1.4	1.8	1.5	1.2	0.7	-6.7	-1.4	-2.3	-1.7	-1.5	-1.3	-1.1	-0.8
Luxembourg	0.7	1.1	1.3	0.9	1.0	2.8	1.7	-2.3	0.4	-1.4	-2.0	-1.6	-1.6	-1.6	-1.7
Malta	1.6	1.3	0.2	2.9	4.9	3.0	1.6	-5.3	-6.2	-4.9	-3.8	-2.0	-1.6	-1.2	-0.9
Netherlands, The	0.0	0.4	0.1	1.7	2.1	1.6	1.6	-0.8	-1.5	-1.0	-1.5	-2.2	-2.6	-2.6	-2.5
New Zealand	0.5	1.0	1.3	1.6	1.7	1.5	-1.4	-2.9	-4.3	-4.0	-1.2	-0.3	0.9	1.5	1.5
Norway ²	-7.3	-8.6	-10.0	-11.0	-11.0	-9.9	-9.8	-14.6	-11.5	-10.6	-10.1	-10.1	-10.1	-10.1	-10.2
Portugal	3.9	1.4	2.9	3.9	1.3	2.7	2.2	1.2	2.0	1.3	1.1	1.0	0.8	0.8	0.9
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovak Republic	0.1	-0.7	-1.8	-1.7	-0.3	-0.5	-0.7	-2.6	-4.2	-2.2	-2.7	-2.7	-2.5	-2.4	-2.4
Slovenia	-10.9	-1.6	0.8	0.8	2.1	2.4	1.5	-5.2	-5.0	-3.9	-2.8	-2.0	-1.4	-1.2	-0.9
Spain ²	1.0	1.6	0.4	-0.2	-0.2	0.0	-1.0	-3.5	-2.4	-2.5	-2.1	-2.2	-2.1	-2.2	-2.2
Sweden ²	-0.7	-0.8	-0.7	0.7	0.9	0.3	-0.2	-1.7	-0.5	-0.4	-0.1	1.0	0.7	0.3	0.2
Switzerland ²	-0.1	0.0	0.8	0.4	1.3	1.2	1.3	-2.3	-0.4	-0.1	0.4	0.5	0.5	0.5	0.5
United Kingdom ²	-2.0	-2.2	-2.2	-1.2	-0.6	-0.7	-1.3	-9.7	-5.1	-1.8	-0.2	0.8	0.6	0.1	0.2
United States ^{2,3}	-1.3	-0.8	-0.7	-1.6	-2.1	-2.9	-3.4	-8.8	-7.0	-2.2	-3.1	-3.1	-3.5	-3.4	-3.2

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.

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

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

³For 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	35.7	36.1	36.9	37.4	36.4	36.1	35.9	36.0	36.1
Euro Area	46.9	46.8	46.4	46.3	46.2	46.4	46.3	46.4	47.2	46.9	46.4	46.1	45.9	45.7	45.6
G7	36.2	36.4	36.3	36.0	35.9	35.8	35.6	36.1	36.7	37.4	36.4	36.0	35.8	35.9	36.1
G20 Advanced	35.6	35.7	35.6	35.4	35.3	35.2	35.1	35.6	36.3	36.9	35.9	35.6	35.4	35.5	35.6
Australia	33.7	33.9	34.6	34.9	35.1	35.7	34.6	36.0	35.9	35.0	34.8	34.7	34.7	35.0	34.9
Austria	49.7	49.6	50.0	48.5	48.5	48.9	49.2	49.0	50.1	49.4	49.3	48.7	48.8	48.8	48.8
Belgium	53.0	52.5	51.3	50.8	51.3	51.4	49.9	50.2	49.4	49.0	50.0	50.4	50.5	50.5	50.4
Canada	38.5	38.5	40.0	40.3	40.3	41.0	40.7	41.6	41.0	40.8	40.8	40.8	40.9	41.0	41.1
Cyprus	37.0	40.2	39.7	37.7	38.4	39.1	39.7	39.3	42.4	41.9	41.9	42.2	41.8	41.1	40.7
Czech Republic	41.4	40.5	41.3	40.5	40.5	41.5	41.3	41.5	40.6	40.3	40.1	39.7	39.5	39.4	39.4
Denmark	54.6	56.4	53.2	52.4	52.3	51.3	53.8	53.8	53.4	51.7	50.9	50.3	50.0	49.9	49.8
Estonia	38.6	38.5	39.7	39.0	38.5	38.7	39.5	39.4	39.0	38.9	39.2	39.8	40.2	40.5	40.7
Finland	54.3	54.3	54.1	53.9	53.0	52.5	52.3	51.6	52.7	51.9	52.3	51.8	51.6	51.5	51.5
France	53.1	53.3	53.2	53.0	53.5	53.4	52.3	52.5	52.6	53.3	52.1	51.4	51.1	51.0	51.0
Germany	45.0	44.9	45.1	45.5	45.5	46.3	46.5	46.1	47.5	46.4	46.2	46.3	46.4	46.5	46.5
Greece	48.2	46.6	48.1	50.3	49.4	49.3	48.0	49.0	48.9	47.6	45.9	45.9	45.0	44.5	43.6
Hong Kong SAR	21.0	20.8	18.6	22.6	22.9	20.7	20.4	20.7	23.8	23.7	23.6	24.0	24.4	24.2	24.2
Iceland	44.7	46.1	43.1	59.0	45.4	44.8	41.8	41.9	41.3	43.1	42.9	42.1	42.2	42.0	41.8
Ireland	34.2	34.0	27.0	27.3	25.9	25.5	24.7	22.3	23.2	22.8	22.5	22.3	22.3	22.0	21.7
Israel	35.8	36.1	36.4	36.1	37.2	35.5	34.6	34.0	36.6	37.9	37.0	36.2	35.3	35.3	35.3
Italy	48.1	47.9	47.8	46.7	46.3	46.2	46.9	47.4	48.3	48.6	48.3	48.0	47.9	47.6	47.1
Japan	31.2	32.8	33.6	33.6	33.6	34.3	34.2	35.6	35.9	35.5	35.2	35.2	35.1	35.0	35.0
Korea	20.7	20.4	20.3	21.1	21.8	22.9	22.9	22.9	25.8	25.8	25.2	25.2	25.0	25.2	25.0
Latvia	36.8	36.1	35.9	35.7	35.7	37.3	37.2	38.5	38.3	35.8	35.9	35.4	35.0	35.0	35.0
Lithuania	32.0	33.4	34.2	33.6	32.9	33.7	34.1	34.9	36.8	37.4	36.1	35.7	35.3	35.1	35.1
Luxembourg	42.1	41.9	41.7	41.9	42.6	45.1	45.2	43.7	43.2	42.7	43.3	43.1	43.3	43.3	43.4
Malta	38.0	38.2	37.2	37.5	37.7	37.9	36.6	36.8	37.1	37.2	37.1	37.0	36.9	36.9	37.0
Netherlands, The	43.6	43.6	42.6	43.6	43.7	43.7	43.7	44.1	44.0	43.9	43.4	43.1	43.4	43.7	43.9
New Zealand	37.3	37.3	37.6	37.4	37.0	37.4	36.3	37.7	37.6	37.2	37.4	37.8	38.2	38.3	37.4
Norway	54.4	54.2	54.5	54.8	54.6	55.9	57.3	54.5	57.3	63.7	63.3	62.6	62.0	61.7	61.5
Portugal	44.8	44.4	43.8	42.9	42.4	42.9	42.6	43.5	45.3	43.2	43.5	43.3	43.1	42.6	42.4
Singapore	16.9	17.2	17.3	18.6	18.9	17.6	17.8	17.9	18.4	17.6	16.6	17.7	18.3	18.6	18.7
Slovak Republic	39.7	40.3	43.0	40.1	38.6	38.8	39.4	39.9	40.7	41.3	40.6	38.4	38.0	37.9	37.5
Slovenia	45.7	45.3	45.9	44.2	44.0	44.2	43.6	43.3	43.8	43.0	43.3	43.7	43.8	43.9	44.1
Spain	38.9	39.2	38.8	38.2	38.2	39.2	39.3	41.5	43.7	44.0	43.8	42.8	41.7	40.9	40.9
Sweden	49.1	48.1	48.4	49.8	49.7	49.6	48.6	48.1	49.6	49.2	48.4	49.0	48.7	48.6	48.6
Switzerland	32.1	31.9	33.0	32.7	33.6	33.0	33.3	34.1	34.3	33.4	33.0	32.6	32.5	32.5	32.5
United Kingdom	36.2	35.4	35.5	35.9	36.4	36.3	36.0	36.2	36.9	37.0	36.3	36.2	36.1	34.5	35.1
United States	31.3	31.4	31.7	31.2	30.8	30.1	30.3	30.8	31.5	33.4	32.0	31.5	31.2	31.6	31.8

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	44.1	41.0	40.1	39.9	40.0	39.9	39.9
Euro Area	50.0	49.3	48.4	47.7	47.1	46.9	46.9	53.4	52.3	50.7	49.7	48.9	48.5	48.3	48.1
G7	40.5	40.0	39.3	39.3	39.1	39.1	39.2	48.0	45.4	41.8	41.0	40.8	41.0	41.0	41.0
G20 Advanced	39.6	39.1	38.4	38.5	38.2	38.3	38.6	47.0	44.6	41.2	40.3	40.1	40.2	40.2	40.2
Australia	36.5	36.9	37.4	37.4	36.9	37.0	39.0	44.7	42.3	38.4	37.8	37.2	36.5	35.9	35.6
Austria	51.6	52.3	51.0	50.1	49.3	48.7	48.6	57.0	56.0	52.1	50.8	49.9	49.9	49.9	50.0
Belgium	56.1	55.6	53.7	53.1	52.0	52.3	51.9	59.2	54.9	53.6	54.7	55.4	55.5	55.8	55.8
Canada	40.0	38.4	40.0	40.8	40.5	40.7	40.7	53.0	46.0	43.0	42.0	41.7	41.5	41.6	41.6
Cyprus	42.2	40.4	39.5	37.5	36.5	42.7	38.4	45.1	44.1	42.4	41.0	40.9	40.2	39.4	39.0
Czech Republic	42.7	42.6	41.9	39.8	39.0	40.6	41.1	47.2	46.5	44.3	43.4	42.6	42.1	41.8	41.7
Denmark	55.8	55.2	54.5	52.5	50.5	50.5	49.7	53.5	50.8	50.5	50.0	49.8	49.9	49.9	49.8
Estonia	38.4	37.8	39.5	39.4	39.2	39.3	39.4	44.8	41.3	41.7	41.4	41.4	41.3	41.0	40.8
Finland	56.8	57.3	56.5	55.6	53.6	53.3	53.3	57.1	55.3	54.0	54.0	53.9	54.2	54.2	54.4
France	57.2	57.2	56.8	56.7	56.5	55.6	55.4	61.4	59.1	58.4	57.7	56.3	56.1	56.0	56.0
Germany	44.9	44.3	44.1	44.4	44.2	44.3	45.0	50.4	51.3	49.7	48.7	47.8	47.3	47.1	47.1
Greece	52.0	50.7	51.2	49.9	48.5	48.5	47.8	59.9	56.9	52.0	47.8	47.1	46.0	45.3	44.3
Hong Kong SAR	20.0	17.3	18.0	18.3	17.4	18.4	21.0	29.9	23.7	27.5	24.5	24.2	23.8	23.5	23.5
Iceland	46.0	45.8	43.5	46.4	44.4	43.8	43.3	50.8	49.2	48.6	46.0	44.2	43.0	42.1	41.5
Ireland	40.6	37.6	29.1	28.1	26.2	25.3	24.3	27.4	24.8	22.4	22.1	21.7	21.6	21.3	21.1
Israel	39.9	38.4	37.5	37.8	38.3	39.1	38.5	44.7	40.4	37.8	37.4	37.5	37.7	37.8	37.9
Italy	51.0	50.9	50.3	49.1	48.8	48.4	48.5	57.0	55.4	54.0	52.2	51.6	50.9	50.6	50.1
Japan	38.8	38.4	37.3	37.2	36.7	36.7	37.3	44.6	42.5	43.4	38.8	37.6	37.5	37.6	37.6
Korea	19.9	19.8	19.7	19.5	19.6	20.4	22.6	25.1	25.8	27.6	25.1	24.9	24.9	24.9	24.9
Latvia	37.3	37.8	37.4	36.1	36.5	38.1	37.6	42.3	43.8	41.7	38.5	37.4	37.0	35.8	35.4
Lithuania	34.6	34.0	34.4	33.3	32.4	33.2	33.8	42.2	37.8	39.3	37.9	37.2	36.7	36.4	36.1
Luxembourg	41.2	40.6	40.4	40.0	41.3	42.1	42.9	47.2	42.3	43.8	43.7	43.5	43.5	43.7	43.9
Malta	40.4	39.9	38.2	36.4	34.4	35.8	36.1	46.3	45.1	42.7	41.7	40.0	39.6	39.2	39.1
Netherlands, The	46.6	45.9	44.7	43.6	42.4	42.2	42.0	47.9	46.6	44.6	44.7	45.0	45.9	46.3	46.6
New Zealand	38.6	37.7	37.2	36.5	35.6	36.1	38.7	41.7	42.4	41.9	39.6	39.5	38.6	38.2	37.2
Norway	43.7	45.5	48.5	50.7	49.6	48.0	50.7	57.3	48.2	43.4	45.5	46.6	47.6	48.5	49.3
Portugal	49.9	51.7	48.2	44.8	45.4	43.2	42.5	49.3	48.1	45.0	44.9	44.5	44.1	43.6	43.6
Singapore	10.9	12.6	14.4	15.3	13.6	13.9	14.1	24.8	18.6	16.2	15.2	15.2	15.2	15.2	15.2
Slovak Republic	42.6	43.4	45.7	42.7	39.6	39.8	40.7	45.3	46.8	45.3	44.8	42.1	41.3	41.0	40.7
Slovenia	60.3	50.8	48.7	46.2	44.1	43.5	43.2	51.2	48.9	46.2	46.1	46.0	45.7	45.7	45.7
Spain	46.4	45.3	44.1	42.5	41.3	41.8	42.3	51.8	50.6	48.9	48.2	47.0	45.8	45.2	45.2
Sweden	50.6	49.7	48.4	48.7	48.2	48.8	48.1	50.9	49.9	49.1	48.8	48.3	48.2	48.2	48.2
Switzerland	32.5	32.2	32.5	32.4	32.4	31.7	32.0	37.1	35.0	33.6	32.7	32.2	32.1	32.1	32.0
United Kingdom	41.7	40.9	40.0	39.2	38.8	38.4	38.2	48.9	44.9	41.3	38.5	37.7	37.4	35.7	36.1
United States ¹	35.8	35.4	35.2	35.6	35.4	35.5	35.7	45.3	42.4	37.5	37.7	38.0	38.6	38.9	38.9

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 ¹	104.1	103.7	103.3	105.7	103.3	102.8	103.9	123.2	117.9	112.4	111.3	111.8	112.7	113.3	114.0
Euro Area	93.0	93.1	91.2	90.4	87.9	85.9	83.8	96.9	95.3	93.0	91.3	89.8	88.8	88.1	87.8
G7	118.4	117.4	116.4	119.5	117.4	117.1	118.1	140.8	134.7	128.3	127.1	128.1	129.5	130.6	131.8
G20 Advanced	112.0	111.3	110.8	113.9	111.6	111.4	112.8	134.4	128.7	122.9	122.0	122.9	124.3	125.3	126.3
Australia ²	30.5	34.0	37.8	40.6	41.2	41.8	46.7	57.2	58.4	56.7	58.6	60.5	60.4	59.6	58.5
Austria	81.0	83.8	84.4	82.5	78.6	74.0	70.6	83.3	82.9	78.5	77.3	75.6	74.7	72.8	71.6
Belgium	105.5	107.0	105.2	105.0	102.0	99.8	97.7	112.8	108.4	103.9	105.1	107.2	109.7	112.3	115.1
Canada ²	86.1	85.6	91.2	91.8	88.9	88.9	87.2	117.8	112.9	102.2	98.7	96.3	93.3	90.9	88.7
Cyprus	102.9	109.1	107.2	103.1	92.9	98.4	91.1	115.0	103.6	93.6	87.5	80.2	76.0	71.0	66.2
Czech Republic	44.4	41.9	39.7	36.6	34.2	32.1	30.0	37.6	42.0	41.5	41.2	41.4	41.8	42.3	42.7
Denmark	44.0	44.3	39.8	37.2	35.9	34.0	33.7	42.2	36.6	31.8	32.1	31.4	31.1	31.2	31.4
Estonia	10.2	10.6	10.1	10.0	9.1	8.2	8.5	18.6	17.6	18.3	19.4	20.3	20.6	20.4	19.7
Finland	56.2	59.8	63.6	63.2	61.2	59.8	59.6	69.0	66.2	66.7	67.4	69.6	71.5	73.2	75.1
France	93.4	94.9	95.6	98.0	98.1	97.8	97.4	114.7	112.6	111.8	112.5	113.5	114.9	116.5	118.5
Germany	78.3	75.3	71.9	69.0	64.6	61.3	58.9	68.0	69.6	71.1	68.3	65.6	63.1	61.0	59.7
Greece	178.8	181.8	179.1	183.7	183.2	190.7	185.6	212.4	199.4	177.6	169.8	163.8	159.1	154.4	149.9
Hong Kong SAR ²	0.5	0.1	0.1	0.1	0.1	0.1	0.3	1.0	2.1	3.3	4.3	4.7	4.8	4.7	5.4
Iceland	122.0	115.2	97.2	82.4	71.6	63.1	66.2	77.2	74.6	68.2	63.1	60.0	56.7	56.1	48.6
Ireland	120.0	104.3	76.7	74.3	67.6	63.0	57.2	58.4	55.3	47.0	42.8	39.2	36.5	34.0	31.3
Israel	66.0	64.9	63.1	61.4	59.7	59.9	58.8	70.7	68.0	61.5	57.6	55.7	55.1	54.7	54.4
Italy	132.5	135.4	135.3	134.8	134.2	134.4	134.1	155.3	150.9	147.2	147.1	146.1	144.9	143.5	142.5
Japan	229.6	233.5	228.4	232.5	231.4	232.3	236.3	259.4	262.5	263.9	261.1	260.3	260.7	262.0	263.4
Korea	37.7	39.7	40.8	41.2	40.1	40.0	42.1	48.7	51.3	54.1	54.4	55.2	56.1	56.9	57.7
Latvia	40.4	41.6	37.1	40.4	39.0	37.1	36.7	43.3	45.7	46.0	44.6	43.7	43.0	41.2	39.1
Lithuania	38.7	40.5	42.7	39.9	39.3	33.7	35.9	46.6	44.7	42.2	39.5	37.9	36.6	35.5	34.4
Luxembourg	22.4	21.9	21.1	19.6	21.8	20.8	22.3	24.8	24.3	25.4	25.8	26.0	26.1	26.2	26.2
Malta	66.4	62.1	56.2	54.7	47.8	43.7	40.7	53.4	56.4	57.0	58.2	58.4	58.3	58.1	57.8
Netherlands, The	67.8	68.0	64.6	61.9	56.9	52.4	48.5	54.6	52.3	48.3	46.4	45.6	46.2	47.2	48.1
New Zealand	34.6	34.2	34.2	33.4	31.1	28.1	31.8	43.2	50.8	56.6	58.6	57.9	56.1	53.9	51.0
Norway	31.6	29.9	34.5	38.1	38.6	39.7	40.9	46.8	43.4	40.3	39.5	39.2	38.7	38.2	37.7
Portugal	131.4	132.9	131.2	131.5	126.1	121.5	116.6	135.2	127.4	114.7	111.2	106.7	102.9	99.8	97.0
Singapore	98.2	97.7	102.2	106.6	107.7	109.4	128.2	152.0	159.9	141.1	140.0	139.9	140.6	141.2	141.8
Slovak Republic	54.9	53.7	51.8	52.4	51.6	49.6	48.1	59.7	63.1	60.5	57.4	56.2	54.4	54.7	55.4
Slovenia	70.0	80.3	82.6	78.5	74.2	70.3	65.4	79.6	74.4	69.5	66.7	63.6	61.8	60.2	58.8
Spain	100.5	105.1	103.3	102.8	101.9	100.5	98.3	120.0	118.5	113.6	112.1	110.1	109.0	109.0	109.6
Sweden	40.2	44.9	43.7	42.3	40.7	38.9	34.9	39.2	36.8	33.5	31.2	28.8	26.9	25.5	24.2
Switzerland	42.0	42.1	42.2	40.9	41.8	39.8	39.6	43.3	42.1	40.3	39.1	37.5	36.1	34.6	33.2
United Kingdom	83.6	85.5	86.0	85.8	85.1	84.5	83.9	102.6	95.3	87.0	79.9	76.7	73.7	70.6	68.0
United States ²	104.6	104.6	105.2	107.2	106.2	107.5	108.8	134.5	128.1	122.1	122.9	126.0	129.4	132.2	134.9

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 The average does not include the debt incurred by the European Union and used to finance the grants portion of the Next Generation EU (NGEU) package. This totaled €58 billion (0.4 percent of European Union GDP) as of December 31, 2021, and €115 billion (0.7 percent of European Union GDP) as of August 26, 2022. Debt incurred by the EU and used to on-lend to member states is included within member state debt data and regional aggregates.

² 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 ¹	74.9	75.2	75.2	76.9	74.5	74.4	75.2	87.6	86.2	82.7	82.9	84.5	85.8	87.0	88.0
Euro Area	76.0	76.3	75.1	74.6	72.5	70.7	69.1	79.4	78.6	76.7	76.2	75.6	75.2	75.1	75.2
G7	86.8	86.7	86.2	88.1	85.9	86.1	86.8	100.9	100.0	95.6	96.1	98.3	100.2	101.8	103.4
G20 Advanced	81.1	81.2	81.1	82.9	80.7	80.9	82.0	95.5	94.5	90.7	91.2	93.4	95.2	96.7	98.1
Australia ²	16.0	19.1	22.1	23.4	23.3	24.1	27.9	34.5	34.6	34.2	36.1	37.4	37.6	37.1	36.3
Austria	60.4	59.1	58.3	56.9	55.9	50.7	48.0	59.6	60.6	58.2	57.8	56.9	56.7	55.5	55.0
Belgium ³	92.5	93.4	92.0	91.2	88.3	86.4	84.8	98.1	93.7	90.6	92.3	94.9	97.7	100.7	103.8
Canada ²	29.7	28.5	28.6	28.5	25.8	25.7	23.1	33.6	31.6	30.5	30.3	30.2	29.7	28.4	27.3
Cyprus	78.9	90.6	90.9	85.7	77.1	50.7	44.6	53.9	51.0	...	...	...	...	...	...
Czech Republic	29.0	29.4	28.1	25.0	21.5	19.6	18.1	23.6	26.4	27.4	27.3	27.3	27.4	27.8	28.1
Denmark	18.3	18.1	16.2	17.5	15.8	13.4	12.3	14.7	11.0	9.0	7.8	7.0	6.6	6.4	6.2
Estonia	-4.4	-3.8	-2.0	-1.9	-1.8	-1.8	-2.2	3.0	4.4	7.1	9.2	10.7	11.6	11.9	11.6
Finland ⁴	12.9	17.2	18.4	21.2	21.8	24.4	27.0	33.3	34.1	34.3	34.7	35.9	37.4	38.9	40.6
France	83.0	85.5	86.3	89.2	89.4	89.2	88.9	102.3	101.1	100.3	101.0	102.0	103.3	105.0	106.9
Germany	58.4	54.9	52.2	49.3	45.4	42.6	40.4	45.8	47.0	47.7	47.8	47.0	46.0	45.0	44.1
Greece	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong SAR ²	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Iceland ⁵	99.2	88.1	78.0	67.6	60.2	50.7	54.1	60.6	59.5	55.3	51.1	48.7	45.9	42.4	38.8
Ireland ⁶	90.0	85.8	65.7	65.4	58.8	54.2	48.9	52.4	50.4	42.8	38.9	35.6	33.2	30.9	28.3
Israel	62.5	62.3	60.6	59.0	57.1	57.6	57.5	67.6	65.1	58.9	55.2	53.4	53.0	52.7	52.5
Italy	119.2	121.4	122.2	121.6	121.3	121.8	121.7	141.8	138.3	135.4	135.6	135.0	134.1	133.0	132.3
Japan	142.9	145.1	144.6	149.6	148.1	151.0	151.5	162.6	168.1	172.6	172.4	172.0	172.4	173.7	175.1
Korea	5.8	7.5	9.5	9.7	9.6	9.6	11.7	18.3	20.9	23.6	24.0	24.7	25.7	26.4	27.3
Latvia	30.6	30.3	31.4	31.2	30.5	28.8	28.2	33.4	34.5	36.4	35.8	35.4	35.2	33.7	32.1
Lithuania	34.1	32.5	35.4	32.9	32.9	27.7	30.3	41.1	39.8	38.0	35.7	34.3	33.2	32.3	31.4
Luxembourg	-9.0	-10.9	-12.1	-11.7	-11.4	-11.9	-14.2	-10.5	-10.8	-7.6	-5.5	-3.7	-2.2	-0.9	0.4
Malta	57.4	52.7	47.8	41.8	35.4	32.9	29.5	42.9	46.2	50.0	51.7	52.2	52.4	52.6	52.5
Netherlands, The	54.0	55.2	53.3	51.5	46.6	42.9	39.7	44.7	42.8	39.5	38.0	37.3	37.9	38.6	39.4
New Zealand	8.6	7.9	7.3	6.6	5.6	4.7	6.9	10.2	14.5	19.9	22.5	23.1	22.2	20.0	17.9
Norway ⁷	-60.1	-74.6	-85.6	-84.2	-79.3	-71.4	-74.9	-80.2	-86.7	-75.9	-86.6	-95.3	-103.4	-111.3	-118.5
Portugal	118.9	120.6	121.0	119.4	116.0	113.4	109.9	123.2	120.1	108.3	105.1	100.9	97.4	94.5	91.9
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovak Republic	48.0	49.7	47.4	47.1	45.9	43.6	43.3	49.6	51.3	50.6	49.3	49.0	48.6	49.3	50.2
Slovenia	45.2	46.5	50.3	52.2	51.9	45.8	42.6	49.7	49.5	45.2	43.3	41.4	40.1	39.1	38.2
Spain	81.8	86.4	86.1	87.2	86.2	85.0	83.9	103.0	102.8	99.1	98.4	97.1	96.6	97.1	98.1
Sweden	11.4	11.2	11.1	8.9	6.2	5.9	4.3	8.6	8.5	7.6	7.4	6.3	5.4	4.8	4.3
Switzerland	20.7	20.8	21.0	21.6	20.8	18.7	17.3	20.5	21.6	19.8	18.6	17.0	15.7	14.1	12.8
United Kingdom	75.4	77.3	77.6	76.9	75.7	74.8	74.1	90.2	84.3	75.3	68.5	65.1	62.2	59.1	56.5
United States ²	80.4	81.1	80.9	81.9	80.3	81.2	83.0	99.1	99.6	94.7	96.9	101.6	105.5	108.8	112.0

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 The average does not include the debt incurred by the European Union and used to finance the grants portion of the Next Generation EU (NGEU) package. This totaled €58 billion (0.4 percent of European Union GDP) as of December 31, 2021, and €115 billion (0.7 percent of European Union GDP) as of August 26, 2022. Debt incurred by the EU and used to on-lend to member states is included within member state debt data and regional aggregates.

² 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.

³ 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.

⁴ Net debt figures were revised to include only categories of assets corresponding to the liabilities covered by the Maastricht definition of "gross debt."

⁵ "Net debt" for Iceland is defined as gross debt minus currency and deposits.

⁶ "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.

⁷ Norway's net debt series was 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	-4.1	-4.5	-3.9	-3.6	-4.6	-8.8	-5.3	-6.2	-5.4	-5.5	-5.4	-5.3	-5.2
Asia	-1.8	-1.7	-3.1	-3.7	-3.6	-4.2	-5.8	-9.7	-6.6	-8.6	-7.0	-7.2	-7.0	-6.8	-6.7
Europe	-1.6	-1.6	-2.7	-2.8	-1.8	0.3	-0.6	-5.5	-1.9	-3.0	-2.8	-2.7	-2.5	-2.4	-2.3
Latin America	-3.2	-4.8	-6.3	-5.8	-5.1	-5.1	-4.1	-8.8	-4.5	-4.2	-4.7	-4.0	-3.4	-3.2	-2.9
MENA	2.9	-1.7	-7.6	-9.0	-5.3	-2.0	-3.0	-8.3	-3.1	0.8	-0.6	-1.2	-1.7	-2.1	-2.3
G20 Emerging	-1.8	-2.5	-4.3	-4.6	-4.1	-4.1	-5.2	-9.4	-5.6	-7.3	-6.3	-6.4	-6.1	-6.0	-5.9
Algeria	-0.9	-8.0	-15.7	-13.4	-8.4	-6.8	-9.6	-12.0	-7.2	-12.3	-11.3	-10.8	-9.9	-10.2	-9.8
Angola	-0.3	-5.7	-2.9	-4.5	-6.6	2.3	0.8	-1.9	3.8	2.7	0.0	0.0	-0.5	-1.0	-1.5
Argentina	-3.3	-4.3	-6.0	-6.7	-6.7	-5.4	-4.4	-8.6	-4.3	-3.5	-3.3	-3.5	-2.6	-2.0	-1.5
Belarus	-1.0	0.1	-3.0	-1.7	-0.3	1.8	0.9	-2.9	-1.7	-4.3	-2.1	-0.8	0.1	0.2	0.3
Brazil	-3.0	-6.0	-10.2	-9.0	-7.8	-7.0	-5.9	-13.3	-4.4	-5.8	-7.5	-6.8	-5.9	-5.4	-4.8
Bulgaria	-1.8	-3.7	-2.8	1.5	0.8	0.1	-1.0	-2.9	-2.9	-3.3	-2.0	-1.3	-1.1	0.1	0.5
Chile	-0.5	-1.5	-2.1	-2.7	-2.6	-1.5	-2.7	-7.1	-7.5	0.9	-1.2	-0.9	-0.4	-0.2	-0.2
China	-0.8	-0.7	-2.5	-3.4	-3.4	-4.3	-6.1	-9.7	-6.1	-8.9	-7.2	-7.5	-7.3	-7.2	-7.1
Colombia	-1.0	-1.7	-3.5	-2.3	-2.5	-4.7	-3.5	-7.0	-6.8	-6.4	-2.9	-2.1	-1.5	-1.7	-1.8
Croatia	-5.5	-5.5	-3.4	-0.9	0.8	0.0	0.2	-7.3	-2.9	-2.8	-2.1	-1.7	-1.2	-1.0	-0.8
Dominican Republic	-3.5	-2.8	0.0	-3.1	-3.1	-2.2	-2.2	-7.9	-2.9	-3.5	-3.1	-3.0	-2.9	-2.9	-2.8
Ecuador ¹	-7.8	-7.9	-6.7	-9.6	-6.1	-4.7	-3.4	-7.1	-1.5	0.9	1.9	1.8	1.9	2.0	1.4
Egypt ²	-12.9	-11.1	-10.7	-12.0	-9.9	-9.0	-7.6	-7.5	-7.0	-6.2	-7.4	-7.5	-7.3	-6.8	-6.3
Hungary	-2.6	-2.8	-2.0	-1.8	-2.5	-2.1	-2.1	-7.8	-6.8	-4.9	-3.1	-2.6	-1.6	-0.7	0.5
India	-7.0	-7.1	-7.2	-7.1	-6.2	-6.4	-7.5	-12.8	-10.0	-9.9	-9.0	-8.5	-7.9	-7.5	-7.3
Indonesia	-2.2	-2.1	-2.6	-2.5	-2.5	-1.8	-2.2	-6.1	-4.6	-3.9	-2.9	-2.9	-2.7	-2.5	-2.5
Iran	-0.8	-1.0	-1.5	-1.8	-1.6	-1.6	-4.5	-5.8	-4.3	-4.2	-6.0	-6.5	-6.7	-7.0	-7.3
Kazakhstan	4.9	2.5	-6.3	-4.5	-4.3	2.6	-0.6	-7.0	-5.0	-2.0	-1.9	-0.9	-0.7	-0.8	-1.0
Kuwait	33.8	21.5	4.5	0.8	2.3	7.1	2.9	-12.9	-0.4	14.1	14.1	10.1	7.5	4.4	1.7
Lebanon	-8.8	-6.2	-7.5	-8.9	-8.7	-11.3	-10.4	-3.5	...	...	...	...	...	...	...
Malaysia ³	-3.5	-2.6	-2.5	-2.6	-2.4	-2.6	-2.0	-4.6	-5.5	-4.9	-3.8	-3.6	-3.5	-3.4	-3.4
Mexico	-3.7	-4.5	-4.0	-2.8	-1.1	-2.2	-2.3	-4.4	-3.8	-3.8	-4.1	-2.7	-2.7	-2.7	-2.7
Morocco	-4.7	-4.8	-4.5	-4.4	-3.2	-3.4	-3.6	-7.1	-5.9	-5.3	-5.1	-4.4	-3.6	-3.0	-2.7
Oman	2.8	-1.6	-13.5	-19.6	-10.5	-6.7	-4.8	-16.1	-3.2	5.5	2.3	2.8	1.8	1.6	1.3
Pakistan ⁴	-7.4	-4.3	-4.7	-3.9	-5.2	-5.7	-7.8	-7.0	-6.0	-7.8	-4.8	-4.1	-3.8	-3.6	-3.3
Peru	0.7	-0.2	-2.1	-2.2	-2.9	-2.0	-1.4	-8.3	-2.5	-2.3	-2.3	-1.9	-1.2	-0.5	-0.2
Philippines	0.2	0.8	0.6	-0.4	-0.4	-1.6	-1.7	-5.7	-6.5	-5.4	-4.7	-3.7	-2.8	-2.0	-1.6
Poland	-4.2	-3.6	-2.6	-2.4	-1.5	-0.2	-0.7	-6.9	-1.9	-4.1	-3.1	-4.2	-4.2	-4.0	-3.9
Qatar	21.6	15.4	21.7	-4.8	-2.5	5.9	4.9	1.3	4.4	12.5	16.0	13.7	9.9	9.0	11.0
Romania	-2.6	-2.1	-1.5	-2.5	-3.0	-2.9	-4.9	-9.8	-6.9	-6.4	-5.3	-5.0	-4.9	-4.8	-4.4
Russia	-1.2	-1.1	-3.4	-3.7	-1.5	2.9	1.9	-4.0	0.8	-2.3	-2.1	-1.2	-0.4	-0.1	0.0
Saudi Arabia	5.6	-3.5	-15.8	-14.1	-9.2	-5.7	-4.4	-11.2	-2.3	5.5	3.9	4.1	4.1	4.0	4.1
South Africa	-3.9	-3.9	-4.4	-3.7	-4.0	-3.7	-4.7	-9.7	-6.0	-4.9	-5.4	-6.2	-6.6	-7.0	-7.5
Sri Lanka	-5.0	-6.0	-6.6	-5.0	-5.1	-5.0	-7.5	-12.1	-11.6	...	...	...	...	...	...
Thailand	0.5	-0.8	0.1	0.6	-0.4	0.1	-0.8	-4.7	-7.0	-5.6	-3.2	-3.2	-3.4	-3.3	-3.5
Türkiye	-1.5	-1.4	-1.3	-2.3	-2.2	-3.8	-4.8	-5.1	-3.9	-4.2	-5.6	-6.0	-5.9	-6.1	-6.1
Ukraine	-4.8	-4.5	-1.2	-2.2	-2.3	-1.9	-1.9	-5.9	-3.3	...	...	...	...	...	...
United Arab Emirates	8.4	1.9	-3.3	-2.8	-1.7	1.1	0.4	-5.2	2.1	7.7	4.9	4.3	3.7	3.2	2.7
Uruguay ⁵	-1.7	-2.6	-1.9	-2.7	-2.5	-1.9	-2.8	-4.7	-2.7	-2.9	-2.0	-2.3	-1.8	-2.0	-1.7
Venezuela	-10.3	-9.8	-8.1	-8.5	-13.3	-30.3	-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 of the nonfinancial public sector. The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.

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 The 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

⁵ 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 2018–22 are affected by these transfers, which amounted to 1.2 percent of GDP in 2018, 1.1 percent of GDP in 2019, 0.6 percent of GDP in 2020, and 0.3 percent of GDP in 2021 and are projected to be 0.1 percent of GDP in 2022 and 0 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	-2.4	-2.8	-2.1	-1.8	-2.8	-7.1	-3.5	-4.3	-3.3	-3.3	-3.1	-3.0	-2.9
Asia	-0.6	-0.5	-1.9	-2.4	-2.2	-2.8	-4.3	-8.0	-5.0	-6.9	-5.3	-5.3	-5.1	-4.9	-4.7
Europe	-0.3	-0.4	-1.5	-1.6	-0.7	1.4	0.4	-4.5	-0.9	-2.1	-1.6	-1.3	-1.0	-0.9	-0.8
Latin America	-0.1	-1.5	-2.1	-2.0	-1.3	-1.4	-0.5	-5.5	-1.0	0.0	-0.4	0.4	0.8	1.1	1.2
MENA	3.4	-1.2	-7.2	-8.7	-5.1	-1.2	-2.0	-7.5	-2.0	1.7	1.2	0.9	0.6	0.3	0.3
G20 Emerging	-0.2	-0.8	-2.5	-2.9	-2.2	-2.3	-3.4	-7.7	-3.8	-5.3	-4.3	-4.2	-3.9	-3.8	-3.6
Algeria	-0.9	-8.1	-16.3	-13.5	-8.1	-7.0	-10.2	-11.7	-7.1	-12.1	-10.1	-8.9	-7.6	-7.2	-6.2
Angola	0.4	-4.7	-1.1	-1.7	-3.0	7.0	6.4	4.9	8.9	6.6	3.9	3.8	3.1	2.5	1.9
Argentina	-2.6	-3.5	-4.4	-4.8	-4.2	-2.2	-0.4	-6.2	-2.5	-1.9	-1.4	-0.5	0.5	1.4	2.0
Belarus	0.0	1.1	-1.3	0.3	1.6	3.8	2.6	-1.2	-0.2	-2.8	-0.8	0.5	1.4	1.5	1.4
Brazil	1.7	-0.6	-1.9	-2.5	-1.8	-1.6	-0.9	-9.1	0.7	0.8	-0.8	-0.3	0.2	0.6	1.0
Bulgaria	-1.3	-3.4	-2.4	1.8	1.2	0.3	-0.8	-2.8	-2.9	-3.2	-1.9	-1.0	-0.8	0.4	0.8
Chile	-0.4	-1.4	-1.9	-2.4	-2.3	-1.1	-2.4	-6.6	-6.9	1.1	-0.7	-0.2	0.3	0.7	0.6
China	-0.3	-0.1	-2.0	-2.7	-2.6	-3.5	-5.2	-8.8	-5.2	-7.9	-6.1	-6.3	-6.1	-6.0	-5.8
Colombia	0.9	-0.2	-1.7	-0.4	-0.5	-2.5	-1.0	-4.4	-3.9	-3.1	0.4	1.1	1.7	1.7	1.2
Croatia	-2.8	-2.6	-0.3	1.9	3.2	2.0	2.2	-5.6	-1.6	-1.6	-1.1	-0.9	-0.5	-0.3	-0.2
Dominican Republic	-1.2	-0.4	2.3	-0.6	-0.5	0.4	0.6	-4.7	0.2	-0.4	0.0	0.3	0.5	0.5	0.6
Ecuador ¹	-6.9	-6.9	-5.4	-8.1	-4.1	-2.3	-0.7	-4.3	-0.2	2.3	3.4	3.5	3.8	4.0	3.5
Egypt ²	-5.9	-4.2	-4.0	-4.2	-2.4	-0.4	1.3	1.2	1.2	1.0	1.1	1.5	1.6	1.5	1.5
Hungary	1.7	1.0	1.3	1.2	0.1	0.2	0.1	-5.6	-4.6	-2.7	-0.1	0.0	0.8	1.7	2.7
India	-2.4	-2.6	-2.7	-2.5	-1.5	-1.7	-2.8	-7.6	-4.9	-4.6	-3.5	-2.9	-2.3	-2.0	-1.7
Indonesia	-1.0	-0.9	-1.2	-1.0	-0.9	0.0	-0.5	-4.1	-2.6	-1.7	-0.8	-0.9	-0.8	-0.7	-0.6
Iran	-0.8	-1.0	-1.4	-1.3	-1.0	-1.0	-4.0	-5.3	-3.7	-3.6	-3.6	-3.5	-3.5	-3.4	-3.2
Kazakhstan	4.4	2.0	-5.9	-4.3	-5.2	1.8	-0.8	-7.7	-4.4	-1.3	-1.2	-0.2	0.1	0.0	-0.1
Kuwait ³	25.8	12.7	-7.5	-14.2	-9.4	-3.8	-7.9	-27.5	-13.7	3.2	2.4	-1.5	-3.8	-6.5	-8.9
Lebanon	-0.7	2.5	1.4	0.4	0.8	-1.4	-0.3	-0.5	...	...	...	...	...	...	...
Malaysia	-2.1	-0.9	-0.9	-0.8	-0.6	-0.8	0.0	-2.9	-3.4	-2.7	-1.8	-1.5	-1.2	-0.9	-0.8
Mexico	-0.9	-1.7	-1.2	0.4	2.6	1.6	1.4	-0.5	0.0	0.8	0.3	1.9	1.9	1.8	1.7
Morocco	-2.3	-2.2	-2.0	-2.0	-0.9	-1.2	-1.4	-4.6	-3.8	-3.3	-3.0	-2.3	-1.6	-1.0	-0.7
Oman	2.2	-1.9	-14.1	-20.0	-11.1	-5.2	-4.6	-13.3	-1.0	7.7	4.4	4.8	3.8	3.3	2.8
Pakistan ⁴	-3.5	-0.3	-0.4	-0.1	-1.4	-1.8	-3.0	-1.5	-1.1	-3.0	0.2	0.6	0.7	0.7	0.7
Peru	1.7	0.7	-1.2	-1.3	-1.9	-0.9	-0.2	-6.9	-1.2	-1.0	-1.2	-0.9	-0.3	0.4	0.5
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	-0.6	0.0	0.4
Poland	-1.7	-1.7	-0.8	-0.7	0.1	1.2	0.6	-5.6	-0.8	-2.9	-1.8	-2.9	-2.7	-2.5	-2.4
Qatar	22.8	16.6	23.2	-3.3	-1.1	7.4	6.6	3.7	6.2	14.0	17.4	15.0	11.2	10.2	12.1
Romania	-0.9	-0.6	-0.3	-1.2	-1.9	-1.6	-3.8	-8.5	-5.4	-4.7	-3.4	-3.2	-3.1	-2.9	-2.4
Russia	-0.8	-0.7	-3.1	-3.2	-1.0	3.4	2.2	-3.8	1.1	-2.0	-1.7	-0.8	0.0	0.3	0.3
Saudi Arabia	5.2	-4.2	-17.9	-17.1	-11.7	-6.3	-4.4	-13.0	-2.1	5.8	4.2	4.4	4.4	4.4	4.5
South Africa	-1.2	-1.2	-1.4	-0.6	-0.8	-0.4	-1.1	-5.6	-1.8	-0.3	-0.2	-0.6	-0.5	-0.2	-0.1
Sri Lanka	-0.5	-1.9	-2.1	-0.2	0.0	0.6	-1.9	-5.9	-5.7	...	...	...	...	...	...
Thailand	1.3	-0.1	0.7	1.0	0.1	0.6	-0.3	-4.2	-6.2	-4.4	-1.6	-1.4	-1.4	-1.4	-1.5
Türkiye	0.8	0.5	0.6	-1.0	-0.9	-2.3	-2.9	-3.2	-2.2	-2.5	-2.8	-2.7	-2.5	-2.3	-2.2
Ukraine	-2.3	-1.2	3.0	1.9	1.5	1.4	1.1	-3.0	-0.5	...	...	...	...	...	...
United Arab Emirates	8.8	2.2	-3.1	-2.7	-1.5	1.4	0.7	-4.9	2.6	8.5	6.3	5.7	4.8	4.2	3.7
Uruguay ⁵	0.4	-0.5	0.2	-0.2	-0.1	0.6	-0.5	-2.1	-0.7	-0.7	0.1	-0.2	0.3	0.3	0.6
Venezuela	-7.5	-7.5	-6.8	-7.7	-13.1	-30.3	-10.0	-4.9	-4.5	...	...	...	...	...	...

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 of the nonfinancial public sector. The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.

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 The 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

⁵ 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 2018–22 are affected by these transfers, which amounted to 1.2 percent of GDP in 2018, 1.1 percent of GDP in 2019, 0.6 percent of GDP in 2020, and 0.3 percent of GDP in 2021 and are projected to be 0.1 percent of GDP in 2022 and 0 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	-2.7	-3.7	-3.9	-3.6	-3.7	-4.6	-7.2	-5.2	-6.7	-5.7	-5.8	-5.7	-5.7	-5.7
Asia	-1.8	-1.7	-2.8	-3.5	-3.5	-4.2	-5.5	-7.8	-5.8	-7.6	-6.4	-6.7	-6.7	-6.7	-6.7
Europe	-2.1	-1.2	-2.3	-2.3	-1.6	-0.2	-0.9	-4.8	-2.1	-3.7	-2.8	-2.8	-2.5	-2.5	-2.4
Latin America	-3.6	-5.3	-6.4	-5.4	-4.9	-4.3	-3.5	-6.8	-4.4	-4.4	-4.8	-4.0	-3.5	-3.3	-3.0
MENA	-7.9	-9.4	-10.7	-10.3	-8.2	-7.4	-8.1	-8.2	-8.4	-7.4	-7.8	-7.3	-6.6	-5.8	-5.3
G20 Emerging	-2.4	-2.5	-3.8	-4.1	-3.8	-3.9	-4.9	-7.6	-5.2	-7.0	-6.1	-6.2	-6.1	-6.1	-6.1
Algeria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angola	-3.2	-6.2	0.3	-1.8	-3.9	3.5	1.9	0.5	3.3	1.9	-0.2	-0.2	-0.6	-0.9	-1.3
Argentina	-3.6	-3.4	-6.2	-6.0	-7.2	-5.0	-3.4	-5.1	-3.6	-3.5	-3.3	-3.5	-2.6	-2.0	-1.5
Belarus	-1.5	-0.8	-2.2	0.0	0.4	1.5	0.3	-3.1	-2.7	-2.9	-0.6	0.1	0.9	0.9	0.8
Brazil	-4.6	-7.8	-10.3	-7.7	-6.8	-6.3	-5.4	-11.7	-4.0	-5.7	-7.5	-6.8	-5.9	-5.4	-4.8
Bulgaria	-1.2	-3.1	-2.7	1.4	0.7	0.1	-1.0	-1.7	-2.4	-3.3	-1.9	-1.4	-1.1	0.1	0.5
Chile ¹	-0.5	-0.5	0.5	-1.0	-2.0	-1.5	-1.7	-2.2	-12.1	-2.6	-2.0	-1.4	-0.9	-0.3	-0.3
China	-0.9	-0.7	-2.2	-3.1	-3.2	-4.1	-5.7	-8.1	-5.5	-8.0	-6.5	-6.9	-7.0	-7.0	-7.1
Colombia	-1.5	-2.4	-3.9	-2.6	-2.3	-4.2	-2.1	-5.0	-7.0	-7.7	-3.5	-2.5	-1.9	-2.2	-2.4
Croatia	-6.5	-5.4	-3.0	-0.9	0.8	0.2	-0.8	-5.1	-2.8	-3.4	-2.5	-1.9	-1.3	-1.1	-0.9
Dominican Republic	-3.1	-4.3	-4.2	-3.8	-3.7	-3.3	-3.2	-7.6	-3.4	-4.3	-4.1	-4.0	-3.9	-3.9	-3.8
Ecuador ²	-8.5	-8.6	-8.4	-10.1	-5.7	-5.2	-3.4	-5.1	-1.1	0.2	1.4	1.6	2.2	2.5	1.8
Egypt ³	-13.2	-11.4	-11.1	-11.6	-10.1	-9.1	-7.4	-6.7	-7.2	-6.1	-7.3	-7.4	-7.3	-6.7	-6.2
Hungary	-0.4	-1.7	-1.4	-1.2	-2.6	-3.1	-3.4	-7.3	-7.3	-6.0	-3.6	-3.0	-1.9	-0.9	0.7
India	-6.5	-6.6	-7.0	-7.4	-6.2	-6.8	-7.4	-8.7	-8.3	-8.5	-8.3	-8.2	-7.7	-7.5	-7.3
Indonesia	-2.5	-2.3	-2.7	-2.5	-2.4	-1.7	-2.2	-5.0	-3.7	-3.3	-2.7	-2.7	-2.7	-2.5	-2.5
Iran	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kuwait	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lebanon	-13.5	-13.5	-11.6	-11.5	-13.7	-12.7	-18.4	-12.2	...	...	...	...	...	...	...
Malaysia	-3.2	-2.5	-2.7	-2.7	-2.6	-3.6	-1.6	-3.5	-4.6	-4.1	-3.1	-3.1	-3.3	-3.2	-3.4
Mexico	-3.6	-4.5	-4.2	-4.1	-2.6	-2.4	-2.1	-3.3	-3.4	-3.6	-3.8	-2.5	-2.5	-2.6	-2.7
Morocco	-5.9	-6.6	-5.2	-5.3	-4.6	-3.9	-3.8	-5.2	-5.9	-5.1	-5.2	-4.5	-3.7	-3.1	-2.8
Oman	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan ⁴	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peru	0.1	-0.1	-1.5	-1.8	-2.1	-1.6	-0.6	-6.0	-3.7	-2.8	-2.6	-2.3	-1.8	-1.2	-1.2
Philippines	0.2	0.7	0.6	-0.4	-0.5	-1.6	-1.6	-3.5	-5.6	-5.4	-4.7	-3.7	-2.8	-2.1	-1.6
Poland	-3.5	-3.0	-2.3	-1.8	-1.6	-1.2	-2.3	-5.5	-2.1	-4.9	-2.7	-4.0	-4.1	-4.0	-3.9
Qatar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Romania	-1.8	-1.1	-0.7	-1.9	-3.6	-3.9	-5.9	-8.9	-6.7	-6.5	-5.2	-5.0	-4.9	-4.8	-4.4
Russia	-1.6	-0.1	-3.1	-3.2	-1.0	2.9	2.0	-4.4	0.5	-2.4	-1.6	-1.0	-0.3	-0.1	0.0
Saudi Arabia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Africa	-4.0	-4.0	-4.2	-3.6	-3.8	-3.8	-4.5	-5.7	-5.3	-5.5	-5.7	-5.8	-6.2	-6.6	-7.1
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	0.1	-0.7	0.3	0.7	-0.4	-0.1	-1.0	-3.8	-5.9	-4.9	-2.7	-3.1	-3.3	-3.6	-3.7
Türkiye	-2.0	-1.6	-1.6	-2.1	-2.9	-4.2	-4.0	-3.6	-4.3	-4.9	-5.4	-5.7	-5.6	-5.9	-5.9
Ukraine	-4.6	-3.2	0.0	-0.9	-1.6	-3.0	-1.8	-4.5	-3.5	...	...	...	...	...	...
United Arab Emirates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay ⁵	-2.7	-3.4	-1.9	-2.6	-2.5	-1.9	-2.5	-3.3	-1.9	-2.7	-2.0	-2.3	-1.8	-2.0	-1.7
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 economies include adjustments beyond the output cycle.

² The data for Ecuador reflect net lending/borrowing of the nonfinancial public sector. The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.

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 The 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

⁵ 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 2018–22 are affected by these transfers, which amounted to 1.2 percent of GDP in 2018, 1.1 percent of GDP in 2019, 0.6 percent of GDP in 2020, and 0.3 percent of GDP in 2021 and are projected to be 0.1 percent of GDP in 2022 and 0 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	-5.4	-3.3	-4.7	-3.6	-3.6	-3.4	-3.4	-3.3
Asia	-0.6	-0.5	-1.6	-2.2	-2.0	-2.7	-4.0	-6.2	-4.3	-6.0	-4.6	-4.9	-4.8	-4.7	-4.7
Europe	-0.8	0.0	-1.0	-1.1	-0.5	1.0	0.2	-3.8	-1.0	-2.8	-1.6	-1.4	-1.1	-0.9	-0.8
Latin America	-0.5	-1.9	-2.0	-1.6	-1.0	-0.6	0.1	-3.7	-0.9	-0.2	-0.4	0.4	0.8	1.1	1.2
MENA	-3.6	-5.0	-6.2	-5.2	-3.6	-2.4	-2.8	-3.0	-3.3	-2.7	-2.2	-1.2	-0.4	0.3	0.6
G20 Emerging	-0.7	-0.7	-1.9	-2.2	-1.8	-2.0	-3.0	-5.8	-3.3	-5.0	-4.0	-4.0	-3.9	-3.8	-3.8
Algeria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angola	-2.4	-5.2	1.8	0.6	-0.8	7.8	7.0	6.3	8.7	6.0	3.7	3.7	3.1	2.6	2.0
Argentina	-3.0	-2.7	-4.6	-4.1	-4.7	-1.8	0.5	-2.9	-1.8	-1.9	-1.4	-0.5	0.5	1.4	2.0
Belarus	-0.5	0.2	-0.6	1.9	2.4	3.5	2.0	-1.5	-1.1	-1.4	0.7	1.3	2.1	2.1	2.0
Brazil	0.3	-2.1	-2.0	-1.4	-0.9	-1.0	-0.5	-7.7	1.1	0.8	-0.8	-0.3	0.2	0.6	1.0
Bulgaria	-0.8	-2.8	-2.3	1.7	1.0	0.3	-0.8	-1.6	-2.3	-3.2	-1.8	-1.2	-0.8	0.4	0.8
Chile ¹	-0.4	-0.4	0.7	-0.7	-1.7	-1.2	-1.4	-1.7	-11.4	-2.4	-1.5	-0.7	-0.1	0.5	0.5
China	-0.4	-0.2	-1.7	-2.4	-2.4	-3.3	-4.9	-7.2	-4.6	-7.0	-5.4	-5.8	-5.8	-5.8	-5.8
Colombia	0.5	-0.8	-2.1	-0.6	-0.3	-2.0	0.4	-2.4	-3.9	-3.9	0.5	1.3	2.1	2.2	1.7
Croatia	-3.7	-2.4	0.1	1.9	3.2	2.2	1.2	-3.5	-1.5	-2.2	-1.4	-1.0	-0.6	-0.4	-0.2
Dominican Republic	-0.9	-2.0	-1.9	-1.3	-1.2	-0.7	-0.5	-4.6	-0.3	-1.3	-0.9	-0.7	-0.6	-0.5	-0.4
Ecuador ²	-7.6	-7.6	-7.1	-8.6	-3.6	-2.8	-0.8	-2.4	0.2	1.7	3.1	3.4	4.3	4.6	3.9
Egypt ³	-6.1	-4.5	-4.5	-3.7	-2.6	-0.5	1.5	2.0	0.9	1.1	1.2	1.5	1.7	1.6	1.6
Hungary	3.7	2.0	1.9	1.7	0.0	-0.7	-1.1	-5.1	-4.9	-3.3	0.2	0.3	1.2	2.2	3.5
India	-2.0	-2.2	-2.5	-2.8	-1.4	-2.0	-2.7	-3.9	-3.4	-3.3	-2.9	-2.6	-2.2	-1.9	-1.7
Indonesia	-1.3	-1.1	-1.3	-1.0	-0.8	0.0	-0.4	-3.0	-1.8	-1.2	-0.6	-0.8	-0.8	-0.7	-0.6
Iran	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kuwait	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lebanon	-5.5	-4.9	-2.8	-2.1	-3.9	-2.1	-7.4	-9.4	...	...	...	...	...	...	...
Malaysia	-1.9	-0.8	-1.1	-0.9	-0.8	-1.7	0.4	-1.8	-2.6	-2.0	-1.2	-1.0	-1.0	-0.8	-0.8
Mexico	-0.9	-1.7	-1.4	-0.9	1.1	1.4	1.6	0.5	0.4	0.9	0.6	2.1	2.0	1.9	1.7
Morocco	-3.3	-3.8	-2.5	-2.6	-2.1	-1.6	-1.7	-2.9	-3.1	-3.1	-3.1	-2.4	-1.7	-1.1	-0.8
Oman	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan ⁴	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peru	1.1	0.8	-0.6	-0.9	-1.1	-0.5	0.5	-4.7	-2.4	-1.5	-1.5	-1.3	-0.8	-0.4	-0.5
Philippines	2.6	2.8	2.6	1.4	1.2	0.1	-0.1	-1.8	-3.8	-3.4	-2.6	-1.5	-0.6	0.0	0.4
Poland	-1.0	-1.0	-0.5	-0.1	0.0	0.3	-0.9	-4.2	-1.0	-3.7	-1.4	-2.7	-2.7	-2.5	-2.4
Qatar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Romania	-0.1	0.4	0.5	-0.7	-2.5	-2.5	-4.8	-7.6	-5.2	-4.9	-3.3	-3.2	-3.1	-2.9	-2.4
Russia	-1.2	0.3	-2.8	-2.8	-0.5	3.4	2.3	-4.1	0.9	-2.1	-1.3	-0.6	0.1	0.3	0.3
Saudi Arabia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Africa	-1.4	-1.2	-1.2	-0.5	-0.6	-0.4	-0.9	-1.9	-1.3	-1.0	-0.7	-0.3	0.0	0.2	0.3
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	0.8	0.1	0.9	1.1	0.1	0.4	-0.4	-3.4	-5.1	-3.7	-1.1	-1.4	-1.4	-1.7	-1.6
Türkiye	0.3	0.4	0.3	-0.8	-1.6	-2.6	-2.2	-1.8	-2.6	-3.1	-2.6	-2.4	-2.3	-2.2	-2.3
Ukraine	-2.2	0.0	3.9	3.1	2.1	0.4	1.2	-1.7	-0.7	...	...	...	...	...	...
United Arab Emirates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay ⁵	-0.4	-1.2	0.2	-0.2	-0.2	0.6	-0.2	-0.9	0.1	-0.5	0.1	-0.2	0.3	0.3	0.6
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.

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

²The data for Ecuador reflect net lending/borrowing of the nonfinancial public sector. The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.

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

⁴The 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

⁵Data 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 2018–22 are affected by these transfers, which amounted to 1.2 percent of GDP in 2018, 1.1 percent of GDP in 2019, 0.6 percent of GDP in 2020, and 0.3 percent of GDP in 2021 and are projected to be 0.1 percent of GDP in 2022 and 0 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	28.9	28.3	27.2	26.8	27.1	27.6	27.0	25.0	25.8	25.1	25.3	25.3	25.3	25.3	25.3
Asia	25.4	25.6	26.3	26.1	26.2	26.3	25.6	23.6	24.6	23.3	23.9	24.0	24.1	24.2	24.4
Europe	34.4	34.4	33.4	33.8	33.8	35.2	35.2	34.5	35.0	33.6	33.7	33.8	34.0	34.0	33.9
Latin America	29.6	28.4	26.5	27.2	27.1	26.9	27.1	25.8	26.9	27.9	27.2	27.1	26.9	26.8	26.8
MENA	36.0	32.8	27.6	24.0	25.8	28.6	27.4	22.4	22.3	24.4	24.0	23.5	22.9	22.6	22.4
G20 Emerging	28.6	28.2	27.5	27.5	27.7	27.8	27.3	25.4	26.4	25.3	25.6	25.6	25.7	25.7	25.8
Algeria	35.8	33.3	30.5	28.6	32.0	33.4	32.2	30.7	29.9	31.4	29.6	29.6	29.5	29.5	29.8
Angola	36.7	30.7	24.1	17.5	17.5	22.9	21.2	21.0	23.2	23.7	20.2	19.3	18.6	18.0	17.4
Argentina	34.3	34.6	35.4	34.9	34.4	33.5	33.3	33.5	33.5	33.0	32.3	33.2	34.0	34.7	35.2
Belarus	39.8	38.9	38.8	39.0	38.7	39.6	38.3	35.2	35.4	32.3	33.0	33.7	34.6	34.7	34.7
Brazil	34.5	32.5	28.2	30.7	30.5	30.7	31.5	29.5	31.5	31.8	30.0	29.7	29.2	29.2	29.2
Bulgaria	33.7	33.4	34.5	34.2	32.8	34.4	34.9	35.0	37.5	36.4	37.5	36.6	35.4	35.7	35.4
Chile	22.6	22.4	22.9	22.7	22.9	24.2	23.7	22.1	26.0	26.6	24.6	25.0	25.2	25.0	25.1
China	27.7	28.2	29.0	28.9	29.2	29.0	28.1	25.7	26.6	24.9	25.7	25.8	25.9	26.0	26.1
Colombia	29.0	29.5	27.8	27.7	26.8	30.0	29.4	26.6	27.7	28.9	31.2	30.7	30.1	29.6	29.3
Croatia	42.8	43.2	44.8	45.9	45.5	45.5	46.3	47.2	46.4	47.0	46.6	45.1	44.6	43.7	42.4
Dominican Republic	14.2	14.2	16.6	13.9	14.0	14.2	14.4	14.2	15.6	14.5	14.5	14.5	14.5	14.5	14.5
Ecuador ¹	36.2	34.9	32.9	30.1	32.3	34.3	33.7	29.4	34.0	36.1	36.2	35.2	34.7	34.2	33.5
Egypt ²	21.7	24.1	21.5	19.5	20.7	19.7	19.3	18.2	19.0	19.6	19.7	20.0	20.5	20.8	21.2
Hungary	47.6	47.4	48.4	45.0	44.3	44.0	43.9	43.4	41.1	43.3	42.7	42.8	42.9	42.8	43.2
India	19.6	19.1	19.9	20.1	20.0	20.0	19.9	18.3	20.2	19.0	19.2	19.6	19.9	20.1	20.4
Indonesia	16.9	16.5	14.9	14.3	14.1	14.9	14.2	12.5	13.6	14.6	13.4	13.6	13.8	14.0	14.1
Iran	12.5	13.1	14.8	15.3	15.5	13.6	9.7	7.2	8.1	8.3	8.3	8.4	8.5	8.6	8.8
Kazakhstan	24.8	23.7	16.6	17.0	19.8	21.4	19.7	17.5	17.1	20.5	19.7	19.7	19.8	19.6	19.6
Kuwait	72.0	65.8	58.9	54.5	53.8	58.2	55.2	52.8	52.0	54.9	59.1	56.8	55.2	52.9	51.1
Lebanon	20.1	22.6	19.2	19.4	21.9	21.0	20.8	16.0	...	...	...	...	...	...	...
Malaysia	24.3	23.3	22.2	20.3	19.6	20.2	21.6	20.6	18.3	17.4	15.6	15.5	15.4	15.5	15.5
Mexico	24.1	23.4	23.5	24.6	24.6	23.5	23.6	24.2	23.3	24.6	24.4	24.2	24.0	24.0	24.1
Morocco	25.7	25.9	23.9	24.1	24.6	24.2	23.8	27.0	24.2	24.8	24.3	24.6	24.6	24.6	24.6
Oman	42.1	39.8	31.1	25.0	29.0	31.6	33.9	29.6	33.9	36.2	33.2	33.2	32.6	31.8	30.9
Pakistan ³	12.0	13.5	12.9	13.8	14.0	13.4	11.3	13.3	12.4	12.1	12.4	12.8	12.9	12.9	12.9
Peru	22.2	22.3	20.2	18.7	18.2	19.3	19.8	17.8	21.0	21.0	21.2	21.2	21.2	21.3	21.3
Philippines	18.0	18.1	18.5	18.3	18.7	19.3	20.0	20.6	20.4	20.3	20.6	21.2	21.9	22.1	22.4
Poland	38.8	39.0	39.1	38.7	39.8	41.3	41.0	41.3	42.3	39.3	40.5	40.3	40.2	40.0	39.6
Qatar	49.9	47.7	60.3	35.3	32.2	34.8	37.4	36.0	33.8	40.2	43.0	41.5	37.4	36.0	36.6
Romania	31.6	31.7	32.8	28.9	28.0	29.2	28.9	28.8	30.6	31.2	31.1	31.5	32.4	32.0	31.7
Russia	33.5	33.9	31.9	32.9	33.4	35.5	35.7	35.3	36.7	33.2	33.6	34.1	34.8	35.1	35.4
Saudi Arabia	41.2	36.7	25.0	21.5	24.1	29.6	30.8	29.6	30.9	32.3	31.6	31.8	31.8	31.5	31.5
South Africa	25.0	25.4	25.8	26.2	25.8	26.5	26.7	25.0	26.9	27.9	27.7	26.9	26.7	26.7	26.7
Sri Lanka	11.6	11.2	12.6	13.2	12.8	12.6	11.9	8.7	8.3	...	...	...	...	...	...
Thailand	22.2	21.4	22.3	21.9	21.1	21.4	21.0	20.7	20.2	20.0	20.5	20.6	20.6	20.6	20.6
Türkiye	32.5	31.6	31.9	32.5	31.2	30.8	31.0	28.9	27.3	29.1	27.8	28.1	28.2	28.2	28.1
Ukraine	43.3	40.3	41.9	38.3	39.3	39.8	39.4	39.7	36.9	...	...	...	...	...	...
United Arab Emirates	38.7	35.1	29.0	28.9	28.6	30.0	30.7	27.9	31.0	37.3	34.9	33.9	32.8	31.8	31.0
Uruguay ⁴	27.2	26.6	26.6	27.1	27.5	28.8	28.3	28.1	28.2	27.1	27.4	27.3	27.8	27.8	28.1
Venezuela	26.1	21.8	14.9	11.2	8.5	6.4	8.7	4.3	6.0	...	...	...	...	...	...

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 The data for Ecuador reflect net lending/borrowing of the nonfinancial public sector. The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.

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 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

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 2018–22 are affected by these transfers, which amounted to 1.2 percent of GDP in 2018, 1.1 percent of GDP in 2019, 0.6 percent of GDP in 2020, and 0.3 percent of GDP in 2021 and are projected to be 0.1 percent of GDP in 2022 and 0 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	30.5	30.6	31.4	31.3	31.0	31.1	31.6	33.8	31.1	31.2	30.7	30.8	30.7	30.6	30.5
Asia	27.1	27.3	29.4	29.8	29.9	30.5	31.3	33.3	31.2	31.9	30.9	31.1	31.1	31.0	31.0
Europe	36.0	35.9	36.1	36.5	35.6	34.9	35.8	40.0	36.9	36.6	36.5	36.5	36.5	36.4	36.3
Latin America	32.8	33.2	32.8	32.9	32.3	31.9	31.2	34.6	31.4	32.0	31.9	31.1	30.3	30.0	29.7
MENA	33.1	34.6	35.2	33.0	31.1	30.6	30.4	30.7	25.3	23.6	24.6	24.7	24.7	24.7	24.7
G20 Emerging	30.4	30.6	31.8	32.1	31.7	31.9	32.5	34.8	32.0	32.6	31.9	32.0	31.8	31.8	31.7
Algeria	36.6	41.3	46.2	42.0	40.5	40.2	41.8	42.6	37.1	43.7	40.9	40.4	39.4	39.6	39.6
Angola	37.0	36.5	27.1	22.0	24.1	20.6	20.4	22.9	19.4	21.0	20.2	19.3	19.1	19.0	18.9
Argentina	37.6	38.9	41.4	41.5	41.1	38.9	37.7	42.1	37.8	36.5	35.6	36.7	36.6	36.7	36.7
Belarus	40.8	38.8	41.8	40.7	39.0	37.8	37.4	38.0	37.1	36.6	35.1	34.5	34.4	34.5	34.5
Brazil	37.4	38.5	38.5	39.6	38.3	37.7	37.4	42.9	35.9	37.6	37.5	36.5	35.1	34.5	33.9
Bulgaria	35.5	37.1	37.3	32.7	32.0	34.3	35.9	38.0	40.4	39.6	39.4	37.8	36.5	35.5	34.9
Chile	23.1	23.9	25.0	25.4	25.5	25.6	26.5	29.3	33.5	25.7	25.8	25.8	25.6	25.2	25.3
China	28.6	28.9	31.6	32.3	32.6	33.3	34.2	35.4	32.7	33.8	32.9	33.2	33.2	33.2	33.2
Colombia	30.0	31.3	31.3	30.0	29.3	34.7	32.9	33.6	34.5	35.3	34.2	32.8	31.7	31.3	31.0
Croatia	48.3	48.7	48.2	46.9	44.7	45.5	46.1	54.5	49.2	49.8	48.8	46.8	45.9	44.7	43.2
Dominican Republic	17.7	17.0	16.7	17.0	17.1	16.4	16.6	22.1	18.5	18.0	17.6	17.5	17.4	17.4	17.3
Ecuador ¹	44.0	42.8	39.6	39.7	38.4	39.0	37.1	36.5	35.5	35.2	34.3	33.4	32.9	32.2	32.1
Egypt ²	34.6	35.2	32.1	31.5	30.6	28.6	26.9	25.7	26.0	25.8	27.1	27.5	27.8	27.6	27.5
Hungary	50.2	50.1	50.4	46.8	46.7	46.1	46.0	51.2	47.9	48.1	45.8	45.3	44.4	43.6	42.6
India	26.6	26.2	27.1	27.2	26.2	26.3	27.4	31.1	30.1	28.9	28.3	28.1	27.8	27.7	27.6
Indonesia	19.1	18.6	17.5	16.8	16.6	16.6	16.4	18.6	18.2	18.5	16.3	16.5	16.5	16.6	16.5
Iran	13.3	14.2	16.3	17.0	17.1	15.3	14.1	13.0	12.4	12.5	14.3	14.9	15.3	15.6	16.1
Kazakhstan	19.8	21.3	22.9	21.5	24.1	18.8	20.2	24.5	22.1	22.5	21.6	20.7	20.4	20.5	20.6
Kuwait	38.1	44.3	54.4	53.8	51.5	51.2	52.3	65.6	52.4	40.7	45.0	46.7	47.7	48.5	49.4
Lebanon	28.9	28.8	26.7	28.3	30.6	32.3	31.2	19.6	...	...	...	...	...	...	...
Malaysia	27.8	26.0	24.7	22.9	22.0	22.8	23.6	25.2	23.8	22.3	19.4	19.1	19.0	18.9	18.9
Mexico	27.8	28.0	27.5	27.4	25.7	25.7	26.0	28.6	27.1	28.4	28.5	26.9	26.7	26.7	26.7
Morocco	30.4	30.7	28.4	28.6	27.8	27.7	27.4	34.1	30.1	30.1	29.4	29.0	28.2	27.6	27.3
Oman	39.3	41.4	44.5	44.6	39.4	38.3	38.8	45.7	37.1	30.7	30.8	30.3	30.8	30.2	29.6
Pakistan ³	19.4	17.9	17.6	17.7	19.1	19.1	19.1	20.3	18.5	19.9	17.2	17.0	16.7	16.5	16.2
Peru	21.5	22.6	22.3	20.9	21.1	21.3	21.1	26.2	23.6	23.3	23.5	23.1	22.5	21.7	21.5
Philippines	17.9	17.3	17.9	18.7	19.1	20.9	21.7	26.4	26.8	25.7	25.2	24.9	24.7	24.2	24.0
Poland	43.0	42.6	41.7	41.1	41.3	41.5	41.8	48.2	44.2	43.4	43.5	44.5	44.3	44.0	43.6
Qatar	28.3	32.3	38.6	40.1	34.7	28.9	32.5	34.7	29.4	27.6	27.0	27.9	27.5	27.0	25.6
Romania	34.1	33.9	34.3	31.3	30.9	32.2	33.8	38.6	37.5	37.6	36.4	36.5	37.3	36.8	36.0
Russia	34.7	34.9	35.3	36.6	34.8	32.6	33.8	39.3	35.9	35.5	35.7	35.2	35.2	35.2	35.3
Saudi Arabia	35.5	40.2	40.8	35.6	33.3	35.2	35.1	40.8	33.2	26.9	27.7	27.7	27.7	27.5	27.3
South Africa	28.9	29.3	30.2	29.9	29.9	30.2	31.5	34.6	33.0	32.8	33.0	33.0	33.3	33.8	34.2
Sri Lanka	16.6	17.2	19.3	18.2	17.9	17.5	19.5	20.7	19.9	...	...	...	...	...	...
Thailand	21.6	22.2	22.2	21.3	21.5	21.4	21.8	25.4	27.3	25.6	23.7	23.8	24.0	24.0	24.1
Türkiye	33.9	33.1	33.2	34.8	33.4	34.6	35.7	34.0	31.2	33.3	33.5	34.1	34.1	34.3	34.2
Ukraine	48.1	44.8	43.0	40.6	41.6	41.7	41.3	45.6	40.3	...	...	...	...	...	...
United Arab Emirates	30.3	33.1	32.4	31.7	30.2	28.9	30.3	33.1	28.9	29.6	30.0	29.6	29.0	28.6	28.3
Uruguay ⁴	28.9	29.2	28.5	29.8	30.1	30.7	31.1	32.8	30.9	29.9	29.4	29.6	29.6	29.8	29.8
Venezuela	36.4	31.6	22.9	19.7	21.8	36.7	18.7	9.3	10.5	...	...	...	...	...	...

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 of the nonfinancial public sector. The authorities are undertaking revisions of the historical fiscal data with technical support from the IMF.

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 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

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 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 ¹	38.7	40.7	44.6	49.1	50.9	52.2	54.5	64.7	64.4	65.1	68.5	71.6	74.3	76.6	78.5
Asia	41.3	43.4	45.0	50.0	52.8	54.5	57.6	68.7	71.2	75.4	80.8	85.2	88.9	92.0	94.7
Europe	26.6	28.9	31.1	31.9	30.0	29.7	29.2	37.9	35.8	31.6	31.9	32.7	33.5	34.0	34.1
Latin America	49.7	51.7	57.7	61.3	63.6	67.4	68.2	77.8	72.2	68.0	68.1	68.9	69.5	69.4	69.0
MENA	23.8	23.8	34.4	42.6	42.7	40.6	44.0	52.8	48.0	40.6	39.5	39.5	39.9	40.1	40.3
G20 Emerging	38.5	40.9	44.0	48.8	51.4	53.1	55.9	66.4	67.0	69.4	74.2	78.2	81.6	84.5	86.8
Algeria	7.1	7.7	8.7	20.4	26.8	38.3	46.0	52.3	63.0	62.7	70.3	75.6	78.9	81.8	84.8
Angola	33.1	39.8	57.1	75.7	69.3	93.0	113.6	136.5	86.4	56.6	52.5	47.9	44.3	40.9	37.4
Argentina	43.5	44.7	52.6	53.1	57.0	85.2	88.8	102.8	80.9	76.0	69.5	69.6	70.0	67.1	63.8
Belarus	36.9	38.8	53.0	53.5	53.2	47.5	41.0	47.5	41.2	35.0	34.3	33.1	31.9	30.7	29.3
Brazil ²	60.2	62.3	72.6	78.3	83.6	85.6	87.9	98.7	93.0	88.2	88.9	90.6	92.2	93.2	93.3
Bulgaria	17.2	26.3	25.4	27.0	22.9	20.1	18.3	23.3	23.8	22.8	25.2	26.9	28.8	27.8	26.4
Chile	12.8	15.0	17.4	21.1	23.7	25.8	28.3	32.6	36.3	36.2	36.9	37.8	38.4	38.8	38.5
China	37.0	40.0	41.5	48.2	51.7	53.8	57.2	68.1	71.5	76.9	84.1	89.8	94.8	99.2	102.8
Colombia	37.6	43.3	50.4	49.8	49.4	53.6	52.4	65.7	64.6	61.1	60.0	59.2	58.6	57.1	55.9
Croatia	80.3	83.8	83.3	79.8	76.7	73.3	71.1	87.3	79.8	72.6	68.6	65.9	63.5	61.7	60.0
Dominican Republic	46.7	44.9	44.9	46.6	48.9	50.5	53.6	71.5	63.1	58.4	57.6	57.2	56.9	56.6	56.1
Ecuador ³	23.3	28.0	35.2	44.6	47.0	49.1	51.4	60.9	62.2	58.9	56.2	54.5	51.4	47.7	45.1
Egypt ⁴	84.0	84.0	86.1	93.2	97.8	88.0	80.1	85.3	89.2	89.2	85.6	84.6	83.7	82.0	79.9
Hungary	77.4	76.7	75.8	74.8	72.1	69.1	65.5	79.6	76.8	74.8	73.7	71.9	69.0	65.6	61.2
India	67.7	67.1	69.0	68.9	69.7	70.4	75.1	89.2	84.2	83.4	83.8	84.1	83.8	83.4	83.0
Indonesia	24.9	24.7	27.0	28.0	29.4	30.4	30.6	39.8	41.2	40.9	40.4	40.4	40.3	40.1	39.8
Iran	11.8	12.6	37.0	47.9	45.0	40.6	42.7	44.1	42.4	34.2	31.9	32.2	33.5	34.8	36.0
Kazakhstan	12.6	14.5	21.9	19.7	19.9	20.3	19.9	26.4	25.1	23.3	24.4	25.7	27.2	28.9	30.3
Kuwait	3.1	3.4	4.7	10.0	20.5	15.1	11.6	11.7	8.7	7.1	6.9	6.5	6.3	8.2	13.9
Lebanon	135.4	138.4	140.8	146.4	150.0	155.1	172.3	150.6	...	...	...	...	...	...	...
Malaysia	55.7	55.4	57.0	55.8	54.4	55.6	57.1	67.7	69.0	69.6	70.0	70.0	70.2	70.2	70.6
Mexico	45.9	48.9	52.8	56.7	54.0	53.6	53.3	60.1	57.6	56.8	58.7	59.0	59.3	59.6	59.9
Morocco	57.1	58.6	58.4	60.1	60.3	60.5	60.3	72.2	68.9	70.3	70.1	70.6	70.4	69.5	68.2
Oman	4.7	4.0	13.9	29.3	40.1	44.7	52.5	69.7	62.9	45.4	41.1	38.1	35.8	33.4	31.0
Pakistan ⁵	57.9	57.1	57.0	60.8	60.9	64.8	77.5	79.6	74.9	77.8	71.1	66.0	63.7	60.9	58.9
Peru	19.9	20.6	24.0	24.3	25.2	26.0	26.9	35.0	36.4	34.8	35.7	35.7	35.7	35.2	34.3
Philippines	43.8	40.2	39.6	37.3	38.1	37.1	37.0	51.6	57.0	59.3	61.0	61.2	60.4	59.1	57.5
Poland	56.5	51.1	51.3	54.2	50.6	48.8	45.6	57.1	53.8	48.7	45.1	46.2	47.3	48.6	49.9
Qatar	30.9	24.9	35.5	46.7	51.6	52.2	62.1	72.6	58.4	46.9	43.4	42.4	41.2	38.8	36.7
Romania	39.1	40.4	39.4	39.0	36.8	36.5	36.8	49.6	51.4	49.7	51.6	52.9	54.2	55.8	56.9
Russia	12.3	15.1	15.3	14.8	14.3	13.6	13.7	19.2	17.0	16.2	16.9	16.4	15.3	13.9	12.5
Saudi Arabia	2.1	1.6	5.8	13.1	17.2	18.3	22.5	32.4	30.0	24.8	25.1	24.6	24.0	23.2	22.4
South Africa	40.4	43.3	45.2	47.1	48.6	51.7	56.2	69.0	69.0	68.0	70.7	73.7	76.8	80.2	83.8
Sri Lanka	69.5	69.6	76.3	75.0	72.3	83.6	82.6	95.7	103.1	...	...	...	...	...	...
Thailand	42.2	43.3	42.6	41.7	41.8	41.9	41.1	49.5	58.4	61.5	61.4	61.3	60.9	59.3	59.5
Türkiye	31.1	28.4	27.3	27.9	27.9	30.1	32.6	39.7	41.8	37.5	37.7	39.6	42.2	44.6	45.3
Ukraine	40.5	70.3	79.5	79.5	71.6	60.4	50.5	60.6	47.6	...	...	...	...	...	...
United Arab Emirates	16.0	14.2	16.7	19.4	21.6	20.9	27.1	39.7	34.7	30.7	29.5	29.0	28.3	27.5	26.6
Uruguay ⁶	50.1	50.8	57.8	55.8	56.7	58.3	61.0	68.3	65.1	61.2	62.6	63.9	64.1	64.9	64.7
Venezuela	85.4	84.8	129.8	138.4	133.6	174.5	201.4	319.1	240.5	...	...	...	...	...	...

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 average does not include the debt incurred by the European Union and used to finance the grants portion of the Next Generation EU (NGEU) package. This totaled €58 billion (0.4 percent of European Union GDP) as of December 31, 2021, and €115 billion (0.7 percent of European Union GDP) as of August 26, 2022. Debt incurred by the EU and used to on-lend to member states is included within member state debt data and regional aggregates.

² "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.

³ 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.

⁴ 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.

⁵ The 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

⁶ 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 ¹	23.1	24.5	28.9	34.6	35.8	36.5	38.0	45.1	44.0	41.6	41.3	41.9	42.5	43.0	43.1
Asia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Europe	31.6	30.2	29.4	31.2	29.9	30.2	29.0	36.1	36.6	33.3	32.2	33.5	34.8	36.1	36.5
Latin America	29.1	31.7	34.9	40.3	42.5	42.9	44.2	51.7	49.1	49.4	51.1	52.6	53.5	54.2	54.4
MENA	-6.6	-3.0	12.7	27.3	27.9	28.9	33.3	41.1	40.3	33.5	31.5	31.0	31.0	30.9	30.7
G20 Emerging	21.6	23.1	26.0	31.9	34.9	35.8	37.4	44.6	43.9	42.3	43.3	44.3	45.1	45.6	45.7
Algeria	-30.0	-21.8	-7.6	13.3	21.2	25.6	30.5	44.1	51.9	57.3	64.9	70.4	73.9	77.0	79.6
Angola	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Argentina	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Belarus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brazil	30.5	32.6	35.6	46.1	51.4	52.8	54.7	62.5	57.2	58.4	61.0	64.0	66.2	67.8	68.5
Bulgaria	6.5	13.1	15.4	11.3	10.3	9.0	8.4	13.4	13.7	13.9	16.8	18.9	21.1	20.1	18.8
Chile	-5.6	-4.4	-3.5	0.9	4.4	5.7	8.0	13.4	20.1	18.7	19.6	20.1	20.1	19.8	19.6
China	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Colombia	26.9	32.9	42.1	38.6	38.6	43.1	43.1	54.6	56.8	53.7	53.4	52.2	50.8	49.5	48.3
Croatia	65.0	69.0	70.0	67.9	64.7	61.4	...	...	...	...	...	...	...	...	...
Dominican Republic	39.0	37.6	37.5	38.5	40.3	41.4	43.4	57.4	49.3	45.2	44.4	43.9	43.6	43.3	42.9
Ecuador	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Egypt ²	73.7	76.1	77.4	83.0	86.6	80.7	74.6	79.7	84.5	84.5	80.9	80.0	79.0	77.3	75.2
Hungary	71.1	70.4	70.6	67.9	65.2	62.1	58.5	72.6	69.8	67.9	66.7	65.0	62.0	58.6	54.0
India	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	20.6	20.4	22.0	23.5	25.3	26.7	27.0	36.1	37.9	38.0	37.8	38.0	38.0	38.0	37.9
Iran	-3.4	-3.4	21.6	36.4	32.9	29.1	32.9	36.1	36.1	28.6	26.6	26.8	28.0	29.2	30.4
Kazakhstan	-17.6	-19.1	-30.8	-23.8	-15.8	-15.8	-13.9	-8.6	-3.3	-1.9	-0.9	-0.8	-0.8	-0.6	-0.1
Kuwait	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lebanon	126.1	130.0	134.4	140.7	144.4	150.8	167.1	147.9	...	...	...	...	...	...	...
Malaysia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mexico	40.0	42.6	46.5	48.7	45.7	44.9	44.5	51.6	49.9	49.1	51.0	51.3	51.6	51.9	52.2
Morocco	56.6	58.1	57.8	59.6	59.9	60.2	60.0	71.6	68.4	69.8	69.6	70.1	69.9	68.9	67.7
Oman	-38.7	-39.3	-37.0	-24.2	-10.4	6.4	11.2	28.5	25.5	15.4	11.0	7.3	4.5	2.0	-0.3
Pakistan ³	54.6	52.2	52.5	55.1	55.9	59.9	70.2	72.9	67.4	71.5	66.1	61.6	59.9	57.5	55.8
Peru	1.5	2.7	5.3	6.9	8.7	10.2	11.1	20.3	19.2	19.9	21.2	22.0	22.1	21.5	20.7
Philippines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poland	51.7	45.1	46.4	47.6	44.3	41.6	38.3	45.1	40.8	35.7	32.2	33.2	34.3	35.6	36.9
Qatar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Romania	28.4	28.3	28.3	26.4	25.7	26.5	28.7	40.2	42.3	41.0	43.1	44.5	46.0	47.7	48.9
Russia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saudi Arabia	-50.9	-47.1	-35.9	-17.1	-7.7	-0.1	4.9	15.9	17.7	9.1	5.4	1.2	-2.9	-6.9	-10.8
South Africa	35.2	38.1	41.0	42.1	43.8	46.7	50.7	62.2	63.2	64.8	68.2	71.5	74.9	78.5	82.4
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Türkiye	25.8	23.7	22.8	23.3	22.1	24.0	25.4	30.1	33.8	30.4	30.0	32.4	35.1	37.6	38.1
Ukraine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
United Arab Emirates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay ⁴	39.6	40.6	44.4	43.9	45.0	46.9	51.0	57.5	54.7	51.0	52.4	53.8	54.1	55.0	54.9
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 The average does not include the debt incurred by the European Union and used to finance the grants portion of the Next Generation EU (NGEU) package. This totaled €58 billion (0.4 percent of European Union GDP) as of December 31, 2021, and €115 billion (0.7 percent of European Union GDP) as of August 26, 2022. Debt incurred by the EU and used to on-lend to member states is included within member state debt data and regional aggregates.

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 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

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 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	-3.3	-3.2	-3.8	-3.7	-3.7	-3.3	-3.5	-4.9	-4.6	-5.0	-4.7	-4.4	-4.2	-4.1	-4.1
Oil Producers	-3.0	-2.9	-4.6	-5.3	-5.4	-4.1	-4.5	-5.4	-5.8	-5.6	-5.2	-5.3	-5.6	-5.7	-5.8
Asia	-4.0	-3.5	-3.8	-3.2	-3.1	-2.8	-3.1	-4.3	-4.1	-5.2	-5.3	-5.0	-4.6	-4.4	-4.2
Latin America	-3.9	-2.7	-1.2	-0.7	-0.6	-1.0	-0.6	-3.4	-2.6	-2.2	-2.6	-1.8	-1.3	-1.3	-1.4
Sub-Saharan Africa	-3.2	-3.3	-4.1	-4.5	-4.5	-3.9	-4.0	-5.6	-5.4	-5.2	-4.5	-4.3	-4.3	-4.3	-4.3
Others	-2.2	-1.7	-3.1	-2.5	-2.3	-1.9	-3.0	-3.5	-2.4	-3.2	-2.7	-2.5	-2.4	-2.4	-2.4
Afghanistan	-0.6	-1.7	-1.4	0.1	-0.7	1.6	-1.1	-2.2	...	...	...	...	...	...	...
Bangladesh	-2.9	-2.6	-3.3	-3.2	-4.2	-4.1	-5.4	-4.8	-3.6	-5.1	-5.5	-5.3	-5.1	-5.0	-5.0
Benin	-1.4	-1.7	-5.6	-4.3	-4.2	-3.0	-0.5	-4.7	-5.7	-5.5	-4.3	-2.9	-2.9	-2.9	-2.9
Burkina Faso	-3.5	-1.7	-2.1	-3.1	-6.9	-4.4	-3.4	-5.7	-6.4	-6.1	-5.3	-4.3	-3.0	-3.0	-3.0
Cambodia	-2.6	-1.6	-0.6	-0.3	-0.8	0.7	3.0	-3.5	-5.9	-4.5	-4.5	-3.2	-3.1	-2.8	-2.7
Cameroon	-3.6	-4.1	-4.2	-5.9	-4.7	-2.4	-3.2	-3.2	-2.4	-2.0	-0.2	-0.1	-0.2	-1.0	-1.0
Chad	-2.1	-4.2	-4.4	-1.9	-0.2	1.9	-0.2	2.1	-1.8	5.4	7.8	4.2	3.8	4.9	3.8
Congo, Democratic Republic of the	1.9	0.0	-0.4	-0.5	1.4	0.0	-2.0	-1.4	-1.0	-3.6	-2.8	-2.4	-2.2	-1.7	-1.2
Congo, Republic of	-2.8	-10.7	-17.8	-15.6	-5.9	5.7	4.7	-1.2	1.7	9.0	6.4	6.4	3.9	2.6	3.0
Côte d'Ivoire	-1.6	-1.6	-2.0	-3.0	-3.3	-2.9	-2.3	-5.6	-5.0	-5.3	-4.0	-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	-3.1	-3.0	-3.0	-3.0	-3.0	-3.0
Ghana	-9.1	-7.8	-4.0	-6.7	-4.0	-6.8	-7.3	-15.3	-11.4	-9.2	-8.6	-8.9	-8.7	-9.7	-9.6
Guinea	-3.9	-3.2	-6.6	-0.1	-2.1	-1.1	-0.3	-3.1	-1.7	-1.9	-2.8	-3.1	-3.0	-2.6	-2.1
Haiti	-4.0	-3.6	-1.5	0.0	0.1	-1.0	-2.1	-2.4	-2.5	-1.6	-2.2	-2.5	-2.7	-2.6	-2.7
Honduras	-5.7	-2.9	-0.8	-0.4	-0.4	0.2	0.1	-4.7	-3.1	...	...	...	...	...	...
Kenya	-5.2	-5.8	-6.7	-7.5	-7.4	-6.9	-7.4	-8.1	-8.0	-7.0	-5.3	-4.4	-4.2	-3.9	-3.7
Kyrgyz Republic	-3.7	-3.1	-2.5	-5.8	-3.7	-0.6	-0.1	-3.3	-0.4	-3.3	-5.9	-5.9	-6.2	-6.9	-7.2
Lao P.D.R.	-4.0	-3.1	-5.6	-4.9	-5.5	-4.7	-3.3	-5.6	-3.6	-5.1	-4.8	-4.7	-4.6	-4.4	-4.0
Madagascar	-3.4	-2.0	-2.9	-1.1	-2.1	-1.3	-1.4	-4.0	-2.9	-6.5	-4.8	-4.7	-4.1	-3.7	-3.4
Malawi	-3.7	-3.1	-4.2	-4.9	-5.2	-4.3	-4.5	-8.2	-8.9	-7.1	-8.0	-6.8	-6.2	-5.2	-4.1
Mali	-2.4	-2.9	-1.8	-3.9	-2.9	-4.7	-1.7	-5.4	-5.0	-5.0	-4.7	-4.0	-3.0	-3.0	-3.0
Moldova	-1.6	-1.6	-1.9	-1.5	-0.7	-0.9	-1.5	-5.3	-2.6	-6.2	-6.0	-4.9	-4.0	-3.6	-3.3
Mozambique	-2.5	-9.9	-6.7	-5.1	-2.0	-5.6	0.1	-5.4	-3.7	-3.4	-4.3	-3.4	-2.2	0.0	1.5
Myanmar	-1.7	-1.3	-2.8	-3.9	-2.9	-3.4	-3.9	-5.6	-7.8	-7.8	-7.2	-7.2	-6.8	-6.3	-5.9
Nepal	1.6	1.3	0.6	1.2	-2.7	-5.8	-5.0	-5.4	-4.0	-3.7	-5.1	-4.1	-3.1	-2.9	-2.9
Nicaragua	-0.7	-1.2	-1.5	-1.8	-1.8	-3.0	-0.3	-2.2	-1.7	-2.9	-1.9	-1.5	-1.5	-1.1	-1.7
Niger	-1.9	-6.1	-6.7	-4.5	-4.1	-3.0	-3.6	-5.3	-5.9	-6.6	-4.7	-3.0	-3.0	-3.0	-3.0
Nigeria	-2.7	-2.4	-3.8	-4.6	-5.4	-4.3	-4.7	-5.6	-6.0	-6.2	-5.8	-5.9	-6.0	-6.2	-6.3
Papua New Guinea	-6.9	-6.3	-4.5	-4.7	-2.5	-2.6	-4.4	-8.6	-6.6	-5.5	-4.2	-3.1	-1.8	-0.6	0.0
Rwanda	-1.3	-3.9	-2.7	-2.3	-2.5	-2.6	-5.1	-9.5	-7.0	-6.4	-5.7	-5.2	-4.2	-3.8	-3.6
Senegal	-4.3	-3.9	-3.7	-3.3	-3.0	-3.7	-3.9	-6.4	-6.3	-6.2	-4.5	-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	-2.2	-1.8	-1.4	-1.2	-1.2	-1.2
Tajikistan	-0.9	0.8	-2.0	-9.0	-5.7	-2.7	-2.1	-4.3	-0.7	-2.5	-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	-3.1	-3.1	-3.3	-2.9	-2.6	-2.5	-2.5
Uganda	-3.2	-2.7	-2.5	-2.6	-3.6	-3.0	-4.8	-7.5	-7.7	-5.5	-4.7	-4.0	-3.2	-1.5	-3.8
Uzbekistan	2.2	1.9	-0.3	0.7	1.1	2.0	-0.3	-3.3	-4.7	-4.0	-2.9	-2.9	-2.9	-3.0	-3.0
Vietnam	-6.0	-5.0	-5.0	-3.2	-2.0	-1.0	-0.4	-2.9	-3.5	-4.7	-4.7	-4.4	-4.0	-3.8	-3.4
Yemen	-6.9	-4.1	-8.7	-8.5	-4.9	-7.8	-5.9	-4.8	-2.2	-2.2	-1.3	-0.6	-0.2	0.1	0.0
Zambia	-6.2	-5.8	-9.5	-5.7	-7.5	-8.3	-9.4	-13.8	-8.4	-9.5	-9.1	-8.1	-6.5	-6.7	-3.9
Zimbabwe	-1.3	-1.1	-1.8	-6.6	-10.6	-5.4	-1.0	0.8	-2.3	-0.2	-0.1	0.0	0.2	0.3	0.3

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.

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	-1.9	-2.5	-2.3	-2.2	-1.7	-1.9	-3.1	-2.7	-3.1	-2.6	-2.3	-2.1	-1.9	-1.8
Oil Producers	-1.7	-1.6	-3.1	-3.7	-4.1	-2.5	-2.9	-3.3	-3.5	-3.4	-2.8	-2.7	-2.7	-2.6	-2.4
Asia	-2.7	-2.0	-2.3	-1.7	-1.7	-1.3	-1.6	-2.8	-2.5	-3.7	-3.5	-3.1	-2.8	-2.5	-2.3
Latin America	-3.7	-2.4	-0.7	-0.2	-0.1	-0.4	0.1	-2.6	-1.8	-1.5	-2.0	-1.2	-0.6	-0.6	-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	-2.0	-1.7	-1.5	-1.4	-1.4
Others	-1.1	-0.4	-1.8	-1.6	-2.1	-1.7	-2.8	-3.2	-2.2	-2.9	-2.4	-2.2	-2.0	-2.0	-2.0
Afghanistan	-0.5	-1.7	-1.3	0.2	-0.6	1.7	-1.0	-2.2	...	...	...	...	...	...	...
Bangladesh	-1.2	-0.9	-1.6	-1.6	-2.6	-2.5	-3.7	-3.0	-1.6	-3.3	-2.9	-2.8	-2.8	-2.7	-2.7
Benin	-1.0	-1.4	-5.0	-3.4	-2.8	-1.4	1.1	-2.7	-3.5	-3.6	-2.8	-1.3	-1.3	-1.3	-1.4
Burkina Faso	-3.0	-1.1	-1.5	-2.2	-6.1	-3.3	-2.2	-4.3	-4.5	-4.3	-3.4	-2.9	-1.6	-1.5	-1.6
Cambodia	-2.3	-1.3	-0.3	0.1	-0.5	1.0	3.3	-3.1	-5.5	-4.3	-4.2	-2.9	-2.7	-2.4	-2.2
Cameroon	-3.2	-3.7	-3.9	-5.2	-3.9	-1.5	-2.2	-2.3	-1.4	-1.1	0.5	0.6	0.6	-0.2	-0.3
Chad	-1.5	-3.6	-2.7	0.1	1.3	3.0	0.8	3.0	-0.6	6.3	8.6	5.2	4.5	5.4	4.3
Congo, Democratic Republic of the	2.4	0.3	-0.1	-0.2	1.6	0.4	-1.8	-1.2	-0.8	-3.1	-2.4	-1.9	-1.7	-1.1	-0.6
Congo, Republic of	-2.7	-10.6	-17.2	-13.7	-4.3	7.5	7.9	0.1	3.9	11.0	8.8	8.6	6.1	4.8	5.0
Côte d'Ivoire	-0.6	-0.7	-0.9	-1.7	-2.1	-1.6	-0.8	-3.7	-2.9	-3.4	-1.9	-1.0	-0.9	-0.9	-0.9
Ethiopia	-1.6	-2.2	-1.5	-1.8	-2.8	-2.5	-2.0	-2.4	-2.2	-2.4	-2.3	-2.2	-2.2	-2.2	-2.2
Ghana	-5.6	-3.3	0.9	-1.5	1.2	-1.4	-1.7	-9.0	-4.1	-2.1	-1.1	0.0	0.9	-0.1	-0.1
Guinea	-3.0	-2.2	-5.7	0.9	-1.2	-0.3	0.2	-2.4	-1.2	-0.9	-1.7	-2.0	-1.9	-1.6	-1.2
Haiti	-3.8	-3.4	-1.4	0.2	0.3	-0.8	-1.8	-2.1	-2.2	-1.2	-2.0	-2.3	-2.4	-2.4	-2.4
Honduras	-5.6	-2.6	0.0	0.2	0.2	0.8	0.8	-3.8	-2.1	...	...	...	...	...	...
Kenya	-3.2	-3.4	-4.2	-4.6	-4.2	-3.4	-3.8	-4.2	-3.9	-2.5	-0.7	0.1	0.3	0.5	0.7
Kyrgyz Republic	-2.9	-2.3	-1.7	-4.9	-2.9	0.4	0.8	-2.3	0.4	-2.5	-4.9	-4.5	-4.3	-4.6	-4.5
Lao P.D.R.	-3.2	-2.4	-4.8	-4.0	-4.7	-3.5	-2.0	-4.1	-2.6	-2.1	-1.6	-1.4	-1.2	-1.0	-1.1
Madagascar	-2.8	-1.5	-2.2	-0.4	-1.4	-0.6	-0.7	-3.2	-2.2	-5.7	-4.0	-3.9	-3.3	-2.9	-2.6
Malawi	-1.2	0.0	-1.9	-1.8	-2.4	-1.6	-1.5	-5.0	-4.8	-2.3	-1.8	-0.3	0.5	1.3	1.8
Mali	-1.9	-2.3	-1.2	-3.3	-2.0	-3.9	-0.7	-4.2	-3.6	-3.5	-2.9	-2.1	-1.1	-1.1	-1.1
Moldova	-1.1	-1.1	-1.2	-0.4	0.5	0.0	-0.7	-4.5	-1.8	-5.2	-4.3	-3.9	-3.0	-2.5	-2.1
Mozambique	-1.7	-8.9	-5.5	-2.7	1.0	-1.2	3.3	-2.3	-1.0	0.2	-1.2	-0.2	0.8	2.6	3.6
Myanmar	-0.4	-0.1	-1.6	-2.6	-1.5	-1.6	-2.4	-4.0	-5.7	-5.4	-4.6	-4.4	-4.0	-3.4	-2.9
Nepal	2.2	1.8	0.9	1.5	-2.4	-5.4	-4.5	-4.7	-3.3	-2.8	-4.1	-3.1	-2.0	-1.8	-1.7
Nicaragua	-0.5	-0.9	-1.1	-1.2	-0.9	-1.9	0.9	-1.0	-0.5	-1.7	-0.8	-0.5	-0.5	-0.2	-0.2
Niger	-1.7	-5.8	-6.3	-3.8	-3.4	-2.1	-2.6	-4.3	-4.8	-5.4	-3.3	-1.5	-1.5	-1.5	-1.5
Nigeria	-1.7	-1.5	-2.7	-3.4	-4.1	-2.6	-3.0	-3.5	-3.6	-4.0	-3.2	-3.1	-3.1	-2.9	-2.7
Papua New Guinea	-5.8	-4.6	-2.8	-2.8	-0.4	-0.2	-1.9	-6.0	-4.3	-3.4	-2.2	-0.5	0.7	1.9	2.5
Rwanda	-0.4	-3.1	-1.8	-1.3	-1.5	-1.4	-3.8	-7.9	-5.2	-4.1	-3.6	-3.0	-2.1	-1.7	-2.0
Senegal	-3.1	-2.6	-2.1	-1.6	-1.1	-1.7	-1.9	-4.4	-4.3	-4.1	-2.5	-1.0	-0.9	-0.9	-0.8
Sudan	-5.3	-3.9	-3.2	-3.5	-5.6	-7.7	-10.6	-5.9	-0.2	-2.0	-1.4	-1.0	-0.8	-0.9	-1.0
Tajikistan	0.1	1.4	-1.5	-8.3	-5.2	-1.6	-1.2	-3.4	0.2	-1.7	-1.7	-1.8	-1.8	-1.9	-2.3
Tanzania	-2.6	-1.6	-1.7	-0.6	0.4	-0.2	-0.3	-0.9	-1.5	-1.6	-1.5	-1.0	-0.7	-0.5	-0.5
Uganda	-2.1	-1.5	-1.1	-0.6	-1.5	-1.2	-2.7	-5.2	-4.9	-2.4	-1.6	-1.1	-0.5	1.0	-1.6
Uzbekistan	2.0	1.8	-0.4	0.6	0.9	1.6	-0.5	-3.4	-4.9	-4.1	-3.1	-3.0	-2.9	-2.9	-2.9
Vietnam	-4.8	-3.7	-3.4	-1.6	-0.4	0.5	1.0	-1.6	-2.2	-3.6	-3.6	-3.2	-2.8	-2.5	-2.0
Yemen	-1.5	1.5	-2.6	-3.2	-4.7	-7.8	-5.7	-2.8	-1.1	-1.4	-0.6	0.1	0.5	0.8	0.7
Zambia	-4.7	-3.6	-6.7	-2.2	-3.5	-3.5	-2.5	-7.8	-2.1	-1.8	-1.8	-0.6	0.4	0.5	1.8
Zimbabwe	-0.7	-0.4	-0.9	-6.0	-9.7	-4.4	-0.6	1.0	-1.9	0.1	0.2	0.3	0.6	0.6	0.6

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	15.9	15.7	14.2	13.8	14.2	14.8	14.5	13.8	14.4	...	...	...	...	...	...
Oil Producers	13.6	12.8	8.2	6.1	7.2	9.2	8.6	7.4	8.1	9.7	9.8	9.3	8.9	8.6	8.4
Asia	16.0	15.8	15.5	15.0	14.9	15.4	15.0	14.4	14.6	13.9	14.0	14.1	14.1	14.2	14.3
Latin America	19.7	19.9	20.6	21.8	21.4	20.9	21.2	19.7	20.5	20.3	20.4	20.6	20.7	21.0	21.1
Sub-Saharan Africa	14.6	14.3	12.4	11.8	12.8	13.3	13.0	12.3	13.2	13.6	13.7	13.5	13.4	13.2	13.1
Others	21.9	21.4	18.1	17.2	17.2	20.7	20.4	19.2	20.2	21.5	21.1	21.6	22.0	22.3	22.6
Afghanistan	24.3	23.7	24.6	28.2	27.1	30.6	26.9	25.7	...	...	...	...	...	...	...
Bangladesh	9.2	9.1	8.2	8.4	8.1	8.9	8.1	8.5	9.4	9.6	9.4	9.4	9.2	9.2	9.1
Benin	13.5	12.6	12.6	11.1	13.6	13.6	14.1	14.4	14.1	14.3	15.0	15.5	15.9	16.2	16.6
Burkina Faso	21.7	19.2	18.3	18.5	19.3	19.6	20.1	19.8	21.0	21.1	20.6	20.5	20.6	20.7	21.2
Cambodia	18.7	20.1	19.6	20.8	21.6	23.7	26.8	24.5	22.2	22.5	23.0	23.4	23.5	23.5	23.5
Cameroon	15.7	16.0	15.8	14.3	14.5	15.5	15.4	13.4	14.1	15.3	15.8	15.8	15.7	15.7	15.6
Chad	20.7	17.8	14.0	12.4	14.6	15.3	14.2	21.2	16.6	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	13.8	14.0	14.3	14.7	15.0	15.4	16.0
Congo, Republic of	39.5	37.8	23.5	26.1	22.4	24.9	26.7	22.2	23.9	28.1	28.0	27.7	26.9	26.2	26.8
Côte d'Ivoire	14.2	13.6	14.5	14.7	15.1	14.8	15.0	15.0	15.9	14.8	15.3	15.7	15.5	15.5	15.5
Ethiopia	15.8	14.9	15.4	15.6	14.7	13.1	12.8	11.7	11.0	9.0	10.1	10.3	10.7	10.8	10.8
Ghana	12.4	13.2	14.6	13.1	13.6	14.1	13.9	13.0	14.2	14.1	14.7	15.4	16.1	16.0	16.0
Guinea	14.8	17.0	15.2	16.0	15.3	14.9	14.7	13.9	13.7	12.9	12.7	13.5	14.0	14.1	14.3
Haiti	11.9	11.0	11.3	10.7	9.9	10.1	8.0	7.5	8.3	8.7	8.7	8.9	8.6	9.1	9.2
Honduras	23.8	24.7	25.2	27.0	26.5	26.4	25.8	23.4	25.3	...	...	...	...	...	...
Kenya	18.0	17.7	17.1	17.9	17.8	17.5	17.0	16.7	16.8	17.7	17.8	18.2	18.3	18.3	18.5
Kyrgyz Republic	34.4	35.4	35.6	33.1	33.3	32.5	32.5	30.8	34.0	34.6	33.2	33.2	33.3	33.1	33.0
Lao P.D.R.	20.2	21.9	20.2	16.0	16.3	16.2	15.4	13.0	13.7	14.0	14.5	14.8	15.0	15.2	15.1
Madagascar	9.3	10.6	10.2	12.4	12.8	13.0	13.9	12.4	11.2	14.1	14.2	14.8	14.7	15.1	15.1
Malawi	17.0	15.2	15.4	14.8	15.8	15.0	14.8	14.5	15.6	16.5	17.0	18.0	18.0	18.3	18.0
Mali	17.4	17.1	19.1	18.3	20.1	15.6	21.5	20.7	22.2	19.4	20.5	21.6	22.1	22.3	22.6
Moldova	30.9	31.8	30.0	28.6	30.3	30.7	30.5	31.4	32.0	32.2	31.5	31.6	31.9	32.1	32.1
Mozambique	29.6	30.4	26.0	23.9	27.1	25.8	29.9	27.5	27.6	29.7	28.3	26.4	26.4	25.5	24.3
Myanmar	20.6	22.5	21.4	19.6	17.9	17.6	16.3	16.0	14.1	14.0	14.7	15.0	15.4	15.7	15.9
Nepal	17.1	17.9	18.2	20.1	20.9	22.2	22.4	22.2	23.7	24.0	24.9	25.7	26.4	26.3	26.3
Nicaragua	23.5	23.3	23.8	24.9	25.5	24.6	27.6	26.9	28.9	26.3	25.7	25.9	26.1	26.3	26.3
Niger	18.5	17.5	17.5	14.9	15.4	18.1	18.0	17.6	18.3	17.6	18.5	19.0	19.6	19.5	19.6
Nigeria	11.5	10.9	7.3	5.1	6.6	8.5	7.8	6.5	7.3	8.6	8.8	8.3	7.9	7.6	7.4
Papua New Guinea	20.7	20.8	18.3	16.1	15.9	17.7	16.3	14.2	14.7	15.1	14.8	15.4	15.9	16.2	16.4
Rwanda	24.9	23.6	23.9	22.9	22.6	23.8	23.1	23.9	24.6	26.0	23.5	23.4	23.8	24.2	24.3
Senegal	17.8	19.2	19.3	20.7	19.5	18.9	20.3	20.2	19.4	20.5	21.4	22.0	23.2	22.9	23.4
Sudan	9.6	8.8	8.5	6.1	6.7	8.9	7.8	4.8	9.4	9.2	9.9	10.3	10.5	10.4	10.3
Tajikistan	26.9	28.4	29.9	29.7	28.1	28.2	26.8	24.8	27.6	25.1	24.7	25.0	25.5	25.5	25.5
Tanzania	15.0	14.4	14.0	14.8	15.4	14.7	14.6	14.6	14.4	15.4	15.9	16.3	16.5	16.6	16.6
Uganda	10.1	10.8	12.6	12.4	12.7	13.2	13.5	13.9	14.1	15.1	15.4	15.9	16.9	18.4	19.1
Uzbekistan	27.4	26.8	24.3	24.0	23.5	26.9	27.0	25.6	26.0	29.7	27.6	27.9	28.2	28.5	28.9
Vietnam	18.5	17.7	19.2	19.1	19.6	19.5	19.6	18.6	18.6	16.6	16.7	16.8	17.1	17.4	17.7
Yemen	23.9	23.6	10.7	7.6	3.5	6.4	7.3	6.6	7.1	10.4	11.5	13.6	14.7	15.7	15.9
Zambia	17.6	18.9	18.8	18.2	17.5	19.4	20.4	20.3	23.2	21.3	20.6	21.4	21.6	21.8	22.1
Zimbabwe	19.6	19.3	18.7	17.0	18.1	14.9	12.3	15.4	16.8	16.2	16.2	16.2	16.2	16.2	16.2

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 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	19.2	18.8	18.1	17.5	17.8	18.1	18.0	18.7	19.0	19.3	19.1	18.8	18.6	18.5	18.4
Oil Producers	16.5	15.7	12.7	11.4	12.5	13.3	13.1	12.8	13.9	15.3	15.0	14.7	14.4	14.2	14.2
Asia	20.0	19.2	19.3	18.2	18.0	18.2	18.0	18.7	18.7	19.1	19.3	19.0	18.8	18.6	18.5
Latin America	23.6	22.7	21.8	22.4	22.0	21.9	21.8	23.1	23.1	22.5	23.0	22.5	22.0	22.3	22.4
Sub-Saharan Africa	17.7	17.6	16.5	16.3	17.2	17.2	17.0	17.9	18.6	18.8	18.2	17.8	17.7	17.5	17.4
Others	24.1	23.0	21.2	19.7	19.5	22.6	23.4	22.8	22.6	24.7	23.8	24.0	24.4	24.7	25.0
Afghanistan	25.0	25.4	25.9	28.0	27.7	28.9	28.0	27.9	...	...	...	...	...	...	...
Bangladesh	12.1	11.7	11.5	11.6	12.2	13.0	13.6	13.3	13.0	14.7	14.9	14.7	14.4	14.3	14.1
Benin	14.9	14.2	18.2	15.4	17.8	16.6	14.6	19.1	19.9	19.8	19.3	18.4	18.8	19.1	19.5
Burkina Faso	25.3	20.9	20.4	21.6	26.2	24.0	23.5	25.5	27.4	27.1	25.9	24.8	23.6	23.7	24.2
Cambodia	21.4	21.7	20.3	21.1	22.4	23.0	23.8	28.0	28.1	27.1	27.5	26.6	26.5	26.4	26.2
Cameroon	19.2	20.1	20.1	20.2	19.2	18.0	18.7	16.6	16.5	17.3	16.0	15.9	15.9	16.7	16.6
Chad	22.8	22.0	18.3	14.4	14.9	13.3	14.3	19.1	18.4	17.2	16.9	17.1	16.7	16.2	16.0
Congo, Democratic Republic of the	12.7	18.5	17.2	14.5	10.4	11.1	12.8	10.4	14.8	17.5	17.1	17.1	17.2	17.1	17.2
Congo, Republic of	42.4	48.6	41.3	41.7	28.3	19.3	22.0	23.5	22.2	19.1	21.5	21.3	23.0	23.6	23.8
Côte d'Ivoire	15.9	15.2	16.5	17.7	18.4	17.7	17.3	20.5	20.9	20.2	19.2	18.7	18.5	18.5	18.4
Ethiopia	17.8	17.5	17.3	17.9	18.0	16.1	15.4	14.5	13.8	12.1	13.1	13.3	13.7	13.8	13.8
Ghana	21.6	21.0	18.6	19.9	17.6	20.9	21.1	28.3	25.7	23.3	23.3	24.3	24.8	25.8	25.6
Guinea	18.6	20.2	21.7	16.1	17.3	16.0	15.0	17.0	15.4	14.8	15.5	16.6	17.0	16.7	16.4
Haiti	15.9	14.6	12.7	10.6	9.8	11.1	10.1	9.9	10.8	10.3	10.9	11.4	11.3	11.7	11.9
Honduras	29.6	27.6	26.0	27.4	26.9	26.2	25.7	28.0	28.4	...	...	...	...	...	...
Kenya	23.2	23.4	23.8	25.3	25.2	24.5	24.4	24.8	24.8	24.7	23.1	22.6	22.4	22.3	22.2
Kyrgyz Republic	38.1	38.5	38.1	38.9	37.0	33.1	32.6	34.1	34.4	37.9	39.0	39.2	39.4	40.0	40.3
Lao P.D.R.	24.2	25.0	25.8	20.9	21.8	20.9	18.7	18.6	17.3	19.2	19.3	19.5	19.7	19.6	19.1
Madagascar	12.7	12.6	13.0	13.5	14.9	14.4	15.4	16.3	14.1	20.5	19.0	19.5	18.8	18.8	18.5
Malawi	20.7	18.3	19.5	19.7	21.0	19.4	19.3	22.7	24.6	23.6	24.9	24.9	24.2	23.5	22.1
Mali	19.8	20.0	20.9	22.3	22.9	20.3	23.1	26.1	27.1	24.4	25.2	25.6	25.1	25.3	25.6
Moldova	32.4	33.4	31.9	30.1	31.0	31.5	32.0	36.7	34.6	38.4	37.5	36.5	35.9	35.7	35.4
Mozambique	32.1	40.3	32.7	29.0	29.1	31.3	29.8	32.9	31.3	33.1	32.6	29.7	28.6	25.5	22.8
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	22.0	21.8
Nepal	15.5	16.6	17.7	19.0	23.6	28.0	27.3	27.6	27.7	27.6	30.0	29.8	29.5	29.2	29.2
Nicaragua	24.2	24.6	25.3	26.8	27.3	27.6	27.8	29.1	30.6	29.2	27.6	27.4	27.6	27.5	28.0
Niger	20.4	23.6	24.2	19.4	19.5	21.1	21.6	22.9	24.2	24.2	23.2	22.0	22.6	22.5	22.5
Nigeria	14.1	13.4	11.0	9.8	12.0	12.8	12.5	12.1	13.3	14.8	14.5	14.2	13.9	13.8	13.7
Papua New Guinea	27.6	27.1	22.8	20.9	18.4	20.3	20.7	22.7	21.3	20.6	19.1	18.5	17.7	16.8	16.4
Rwanda	26.2	27.5	26.6	25.1	25.1	26.4	28.2	33.4	31.6	32.3	29.2	28.6	28.0	28.0	27.9
Senegal	22.1	23.1	22.9	24.0	22.5	22.6	24.2	26.6	25.7	26.6	25.8	25.0	26.2	25.9	26.4
Sudan	15.3	13.5	12.4	10.0	12.8	16.8	18.6	10.8	9.6	11.4	11.7	11.7	11.7	11.6	11.5
Tajikistan	27.8	27.5	31.9	38.7	33.8	30.9	28.8	29.2	28.2	27.6	27.2	27.5	28.0	28.0	28.0
Tanzania	18.8	17.3	17.2	16.9	16.6	16.6	16.6	17.1	17.5	18.5	19.2	19.3	19.2	19.1	19.1
Uganda	13.3	13.6	15.1	15.0	16.3	16.2	18.3	21.4	21.8	20.6	20.1	19.8	20.1	20.0	22.9
Uzbekistan	25.2	24.9	24.6	23.3	22.4	24.9	27.3	28.9	30.6	33.6	30.5	30.8	31.2	31.5	31.9
Vietnam	24.5	22.8	24.2	22.2	21.5	20.6	20.0	21.5	22.1	21.3	21.3	21.2	21.1	21.1	21.0
Yemen	30.8	27.8	19.4	16.1	8.4	14.3	13.2	11.4	9.3	12.6	12.8	14.2	15.0	15.5	15.9
Zambia	23.8	24.7	28.3	23.9	25.0	27.7	29.8	34.1	31.6	30.8	29.7	29.4	28.1	28.4	26.0
Zimbabwe	20.9	20.4	20.5	23.7	28.7	20.3	13.3	14.6	19.1	16.5	16.4	16.3	16.0	16.0	15.9

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	30.7	31.2	35.4	38.6	41.3	41.6	42.8	48.6	48.6	48.8	46.6	45.7	45.0	44.5	44.1
Oil Producers	21.1	20.7	24.6	28.8	30.9	31.7	33.1	38.6	40.1	39.4	39.7	40.4	41.5	42.6	43.8
Asia	35.7	36.3	36.6	37.2	37.0	36.9	36.9	39.3	41.1	42.0	42.0	42.1	42.1	42.0	41.6
Latin America	30.8	28.8	30.8	32.0	32.9	34.9	37.8	42.5	41.4	43.8	41.9	41.9	40.8	40.0	38.1
Sub-Saharan Africa	26.0	27.4	33.0	37.1	40.3	41.7	43.5	50.2	51.4	50.8	48.1	46.9	46.1	45.6	45.3
Others	42.3	38.6	44.0	50.9	65.1	65.8	68.5	87.1	72.9	73.5	63.8	58.3	54.0	51.7	49.7
Afghanistan	6.9	8.7	9.2	8.4	8.0	7.4	6.1	7.4	...	...	...	...	...	...	...
Bangladesh	29.9	29.4	28.1	27.8	28.6	29.6	31.7	34.2	35.5	37.5	37.2	36.9	36.9	36.7	36.8
Benin	18.5	22.3	30.9	35.9	39.6	41.1	41.2	46.1	49.9	54.8	55.6	54.3	52.4	50.6	49.0
Burkina Faso	23.8	24.9	31.1	33.4	33.3	37.8	42.5	46.4	52.4	59.6	59.3	58.5	57.1	55.9	55.1
Cambodia	31.7	31.9	31.2	29.1	30.0	28.4	28.2	35.2	36.3	36.8	37.2	37.9	38.4	38.8	39.1
Cameroon	17.5	20.7	31.6	32.1	36.5	38.3	41.6	44.9	45.5	46.8	43.7	40.5	37.6	35.6	33.8
Chad	30.6	38.2	42.5	50.0	48.7	48.4	52.3	54.2	56.0	44.7	38.3	34.3	31.1	27.0	25.7
Congo, Democratic Republic of the	19.1	16.8	17.0	19.5	19.2	15.1	15.0	16.5	16.1	14.7	10.8	9.0	7.3	5.9	4.8
Congo, Republic of	33.9	42.3	74.2	91.0	94.2	77.1	84.8	114.0	103.6	82.0	73.9	64.5	61.9	59.6	55.7
Côte d'Ivoire	24.6	26.7	29.2	31.4	33.2	35.6	38.4	47.6	52.1	56.0	55.1	53.7	52.4	51.5	50.8
Ethiopia	44.1	44.2	50.7	51.8	55.3	58.4	54.7	53.7	52.9	46.4	40.4	37.4	35.6	35.8	35.6
Ghana	42.9	50.1	53.9	55.9	57.0	62.0	62.7	79.1	82.1	90.7	87.8	89.2	90.0	92.0	93.5
Guinea	34.0	35.2	44.4	43.0	41.9	39.3	38.6	47.5	42.5	39.0	37.2	38.2	38.0	36.9	36.8
Haiti	24.4	20.8	21.7	21.6	19.0	21.6	25.8	21.3	24.2	23.1	22.1	22.6	23.2	23.9	24.8
Honduras	37.1	35.0	38.3	39.4	41.3	42.4	42.9	52.4	50.2	...	...	...	...	...	...
Kenya	39.8	41.3	45.8	50.4	53.9	56.4	59.1	68.0	67.8	69.4	67.5	64.6	60.9	57.7	56.1
Kyrgyz Republic	47.1	53.6	67.1	59.1	58.8	54.8	51.6	67.6	61.1	60.4	60.5	60.7	62.0	63.7	65.9
Lao P.D.R.	49.5	53.5	53.1	54.5	57.2	59.7	62.0	82.7	93.5	107.1	108.9	111.1	109.2	107.1	104.4
Madagascar	36.2	37.8	44.1	40.3	40.1	42.9	40.6	50.8	53.1	53.8	53.1	53.6	53.5	53.5	52.9
Malawi	35.3	33.5	35.5	37.1	40.3	43.9	45.3	54.8	63.9	73.3	74.5	75.2	75.2	74.1	72.2
Mali	26.4	26.9	30.7	36.0	36.0	37.5	40.7	47.3	51.9	55.9	55.8	55.3	54.3	53.4	52.7
Moldova	30.0	35.0	42.4	39.2	34.9	31.8	28.8	36.6	33.1	36.0	38.3	41.7	41.7	42.2	42.7
Mozambique	50.1	64.3	87.4	126.2	104.1	106.7	99.0	120.0	106.4	102.4	102.6	99.8	97.5	84.0	70.8
Myanmar	36.1	35.2	36.4	38.3	38.5	40.4	38.8	39.3	62.3	62.5	63.7	67.3	70.6	73.9	73.9
Nepal	31.9	27.6	25.7	25.0	25.0	30.1	33.1	42.4	45.8	49.1	50.5	50.8	50.7	50.3	50.0
Nicaragua	28.8	28.7	28.9	30.9	34.1	37.7	41.7	48.1	49.4	47.0	45.9	46.0	45.3	45.5	45.6
Niger	19.6	22.1	29.9	32.8	36.5	39.4	39.8	45.0	51.2	57.1	57.0	52.7	50.8	50.0	49.2
Nigeria ¹	18.3	17.5	20.3	23.4	25.3	27.7	29.2	34.5	36.6	37.3	38.6	39.8	41.2	42.6	43.9
Papua New Guinea	24.9	26.9	29.9	33.7	32.5	36.7	40.2	47.1	50.9	49.9	49.3	50.9	50.0	47.8	44.6
Rwanda	26.1	28.3	32.4	36.6	41.3	44.9	49.8	65.6	66.6	68.1	68.6	69.4	67.5	66.3	63.3
Senegal ²	36.9	42.4	44.5	47.5	61.1	61.5	63.6	69.2	73.2	77.3	74.3	69.0	67.6	66.3	64.9
Sudan	105.8	84.4	93.2	109.9	149.5	186.7	200.3	263.4	182.0	189.5	155.3	140.1	123.9	116.0	110.4
Tajikistan	29.3	27.9	35.0	42.2	47.7	46.3	43.1	50.4	44.4	39.4	40.5	39.4	38.5	37.8	34.1
Tanzania	32.7	36.1	39.2	39.8	40.7	40.5	39.0	40.5	40.7	39.5	38.1	36.8	35.6	34.5	33.6
Uganda	22.1	24.8	28.5	31.0	33.6	34.9	37.6	46.3	51.8	52.2	51.3	51.0	49.4	46.7	43.1
Uzbekistan	6.2	6.1	6.7	8.2	19.3	19.7	28.4	37.6	35.8	34.1	33.1	30.8	29.8	28.8	27.7
Vietnam	41.4	43.6	46.1	47.5	46.3	43.7	41.3	41.7	39.7	40.2	40.5	40.8	40.9	40.9	40.5
Yemen	48.2	48.7	57.0	72.3	77.4	74.5	76.5	84.0	69.7	54.0	48.4	45.3	44.2	44.3	44.3
Zambia	27.1	36.1	65.8	61.6	66.3	80.5	99.7	140.2	119.1	...	...	...	...	...	...
Zimbabwe	36.9	42.2	47.5	49.1	74.1	51.0	93.2	102.5	66.9	92.6	64.9	57.5	54.5	53.1	51.4

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.

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

²From 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	44.1	46.8	43.4	39.7	36.7	34.7	33.1
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	43.9	38.6	36.1	34.6	34.9	34.9
Ghana	39.9	45.3	49.8	50.9	51.9	60.7	59.0	75.0	77.3	85.9	83.0	84.4	85.1	87.2	88.6
Guinea
Haiti
Honduras
Kenya	35.8	34.8	39.7	47.5	48.1	50.8	54.1	63.0	62.6	60.4	59.5	58.0	56.2	54.6	53.2
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	44.8	45.1	43.2	41.8	40.7	40.0	39.3
Moldova
Mozambique
Myanmar
Nepal
Nicaragua
Niger	15.3	17.2	25.9	29.5	32.3	36.5	35.9	41.0	45.0	51.1	51.4	47.7	46.0	45.4	44.8
Nigeria ¹	11.4	13.8	15.9	19.0	20.9	23.5	25.5	34.1	36.2	37.0	38.2	39.6	41.0	42.4	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	83.3	69.3	53.7	48.1	45.0	44.0	44.1	44.1
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.

¹Debt 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	24.0	7.3	17.8	-2.2	-3.2	-4.3	30.1
G7	0.5	16.6	2.4	90.5	28.0	7.1	20.4	-1.9	-3.9	-5.3	29.1
G20 Advanced	0.6	17.4	2.4	88.1	26.4	7.2	19.3	-2.0	-3.7	-5.0	28.8
Australia	-0.1	-3.6	1.0	38.4	7.2	7.0	8.1	-2.2	-2.7	-2.7	32.4
Austria	1.3	29.7	0.9	39.7	11.6	11.6	7.2	-3.2	-1.2	-2.1	63.2
Belgium	1.5	44.9	1.5	63.7	15.6	9.8	11.5	-2.8	-2.3	-5.1	55.9
Canada	0.8	17.3	1.0	38.8	14.9	5.8	20.4	-1.9	-0.5	-1.6	23.1
Cyprus	0.9	23.3	...	...	8.1	8.1	14.2	-3.9	-1.4	0.7	81.7
Czech Republic	0.5	31.6	0.6	25.1	9.1	2.9	13.2	-4.4	-0.6	-3.3	22.1
Denmark	-0.6	-20.3	0.8	28.9	4.2	8.8	4.8	-2.0	0.2	0.7	23.3
Estonia	-0.7	-21.6	0.5	23.2	...	6.0	3.1	-7.3	-0.1	-1.5	83.4
Finland	0.5	-0.4	1.1	36.1	10.4	7.5	9.2	-2.5	-1.8	-2.4	51.4
France	0.6	4.9	0.9	36.2	16.3	8.3	13.7	-2.3	-3.6	-5.3	49.6
Germany	1.0	29.0	0.7	35.0	11.4	6.4	10.6	-3.1	0.9	-1.9	42.7
Hong Kong SAR	1.3	43.6	...	...	...	...	...	-0.8	2.5	-0.4	...
Iceland	1.4	48.7	1.3	51.8	12.5	4.5	5.8	1.3	1.1	-2.7	15.3
Ireland	1.1	37.9	0.5	22.2	2.7	11.2	5.2	-6.0	-2.6	0.3	53.0
Israel	0.2	11.2	0.3	11.8	...	7.8	9.0	-2.0	-2.8	-1.9	17.8
Italy	1.7	36.7	0.5	25.5	21.2	7.0	22.1	-1.1	-2.5	-4.1	28.8
Japan	-0.9	4.9	1.6	52.0	52.8	8.0	32.3	-1.0	-4.7	-4.0	12.0
Korea	1.3	53.7	1.8	72.9	4.4	9.7	5.0	-3.2	1.3	-0.1	16.3
Latvia	-0.2	-9.9	0.8	30.4	...	8.3	5.2	-6.3	-0.7	-2.8	65.9
Lithuania	0.7	19.0	1.0	42.4	5.7	9.4	5.0	-6.7	-0.6	-1.4	70.8
Luxembourg	1.8	66.2	0.7	33.5	...	7.0	3.5	-3.2	1.6	-0.3	48.8
Malta	-0.5	-4.3	...	...	11.9	8.3	6.4	-4.0	-0.2	-4.0	18.9
Netherlands, The	1.1	35.9	1.7	64.4	6.8	8.5	6.4	-3.9	-0.9	-2.0	36.8
New Zealand	1.2	37.9	1.1	41.8	6.4	7.3	5.9	-3.6	-0.3	-1.9	28.0
Norway	1.1	28.0	1.9	70.9	...	4.4	10.5	-2.5	7.8	14.7	53.4
Portugal	1.3	23.2	0.9	34.9	9.7	6.7	20.0	-3.9	-3.5	-1.5	46.4
Singapore ⁷	0.8	30.6	...	...	13.2	3.3	46.6	...	4.6	2.1	...
Slovak Republic	1.4	54.9	0.4	18.0	5.4	8.6	7.0	-5.5	-2.4	-4.0	47.3
Slovenia	0.8	59.7	0.8	36.4	6.4	9.0	8.0	-5.4	-3.5	-2.7	54.3
Spain	-0.1	6.1	1.0	43.9	15.8	8.0	15.1	-3.1	-5.4	-4.7	43.7
Sweden	-0.3	-10.3	0.4	18.4	4.5	5.9	6.6	-4.8	0.0	0.2	16.0
Switzerland	0.4	14.5	1.5	60.6	2.1	11.2	3.9	-2.1	0.5	0.1	7.7
United Kingdom	0.3	12.6	1.6	62.1	10.2	14.5	7.1	-3.0	-4.1	-2.8	34.5
United States	0.7	17.2	3.5	130.7	31.7	6.1	22.2	-1.8	-5.0	-7.0	27.4

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 on the basis of data availability.

¹ Pension projections rely on authorities' estimates when these are available. When authorities' estimates are not available, IMF staff projections use the method described in Clements, Eich, and Gupta, *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 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 new available underlying health and economic data as well as technical adjustments to the excess cost growth calculation and the age-expenditure profiles. The projections exclude health expenditure growth during the COVID-19 pandemic 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 first quarter of 2022 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,b}	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 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	68.9	0.6	26.8	12.5	7.5	9.5	-4.8	-3.2	-5.4	14.1
G20 Emerging	1.6	72.8	0.6	26.9	12.1	7.6	8.9	-4.4	-3.4	-6.2	10.7
Algeria	2.7	112.1	0.6	30.4	...	7.6	6.8	-5.9	-8.4	-10.2	1.2
Angola	0.1	2.2	0.1	5.7	...	5.9	23.2	-3.4	-1.6	0.5	...
Argentina	0.8	41.6	0.9	40.8	19.5	8.7	11.8	...	-5.0	-1.2	41.7
Belarus	4.0	109.3	0.7	28.3	...	...	...	-5.2	-0.3	-1.2	63.3
Brazil ⁷	0.3	31.0	0.9	38.4	18.9	5.2	18.9	2.2	-6.4	-5.8	11.7
Bulgaria	0.1	6.7	0.8	35.4	...	7.4	3.1	-5.0	-0.9	-1.4	43.9
Chile	1.1	45.4	1.2	51.0	0.2	10.0	3.3	-3.1	-1.6	-1.3	42.7
China	2.1	95.7	0.7	29.6	...	7.3	9.4	-5.0	-2.7	-3.3	3.9
Colombia	1.8	80.6	1.7	74.7	7.5	10.6	6.2	-1.4	-2.4	-3.3	34.6
Croatia	0.6	3.9	1.1	46.6	8.1	5.7	15.4	-5.4	-2.5	-1.8	32.9
Dominican Republic	0.1	2.3	0.5	23.6	4.4	9.2	7.8	-3.7	-2.9	-3.0	55.8
Ecuador	0.8	36.0	0.9	41.6	4.9	12.4	4.9	-0.9	-6.2	1.2	67.9
Egypt	0.8	37.9	0.2	9.3	35.1	3.2	26.7	-10.4	-10.4	-6.9	22.0
Hungary	-0.1	22.7	1.1	46.1	14.0	6.5	12.3	-4.3	-2.3	-2.3	29.4
India	0.6	28.7	0.2	7.4	14.3	9.8	9.1	-4.1	-7.0	-8.6	4.9
Indonesia	0.2	9.8	0.3	12.6	6.4	8.8	4.5	-3.8	-2.2	-3.1	40.2
Iran	1.3	89.4	...	...	...	...	...	-16.6	-1.7	-6.0	...
Kazakhstan	1.7	49.3	0.2	10.3	...	6.3	4.2	-5.0	-0.1	-1.8	32.1
Kuwait	6.3	347.8	0.9	40.0	10.5	1.7	6.9	19.5	13.2	7.4	...
Lebanon	...	...	...	...	...	4.5	33.5	...	-8.8	...	...
Malaysia	1.6	66.8	0.4	15.3	...	8.6	7.9	-2.6	-2.7	-4.0	24.9
Mexico	0.9	42.3	0.5	22.7	12.7	8.6	7.1	2.2	-3.0	-3.2	26.8
Morocco	1.5	56.8	0.4	17.5	13.7	6.4	11.2	-2.7	-4.4	-4.3	22.5
Oman	0.5	24.4	0.6	29.6	8.6	7.4	9.4	1.6	-6.2	1.7	...
Pakistan ⁸	0.2	10.8	0.2	7.0	30.3	2.7	29.0	-7.1	-5.8	-4.8	33.5
Peru	0.3	12.9	0.6	27.7	3.9	14.2	2.5	-2.6	-1.0	-1.0	49.4
Philippines	0.2	8.7	0.2	10.1	12.8	6.2	8.3	-4.9	-0.3	-3.8	24.7
Poland	0.1	-2.3	0.8	34.8	7.2	4.5	12.7	-6.0	-2.4	-3.6	25.7
Qatar	0.9	49.3	0.4	18.1	8.6	9.2	7.9	-2.6	9.1	10.9	8.6
Romania	3.1	94.1	...	...	12.4	7.3	6.8	-4.5	-2.8	-5.4	44.5
Russia	2.6	68.5	0.6	26.3	3.4	6.8	2.8	0.1	-0.7	-0.7	20.8
Saudi Arabia	1.7	81.2	0.8	34.5	11.6	10.2	3.2	-1.2	-4.4	3.3	36.7
South Africa	0.3	11.8	0.8	35.3	13.1	11.8	5.9	2.6	-4.1	-6.2	28.9
Sri Lanka	...	...	...	...	...	...	...	...	-5.7	...	29.8
Thailand	3.2	114.4	0.6	24.5	12.7	7.7	6.4	-2.0	-0.2	-4.2	11.6
Türkiye ⁹	0.4	31.2	0.7	30.5	11.3	5.3	7.1	-17.2	-2.4	-5.2	33.4
Ukraine	0.7	35.1	0.6	25.6	21.5	6.5	9.3	1.0	-2.9	-6.1	53.9
United Arab Emirates	0.8	40.8	0.4	19.4	...	4.4	8.9	-2.5	1.6	4.1	...
Uruguay ¹⁰	0.8	39.0	1.2	51.3	6.9	12.9	5.3	-4.0	-2.3	-2.2	51.0
Venezuela	...	...	...	...	...	...	...	...	-12.5	...	...

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 on the basis of data availability.

¹Pension projections rely on authorities' estimates when these are available. When authorities' estimates are not available, IMF staff projections use the method described in Clements, Eich, and Gupta, *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.

²For 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 new available underlying health and economic data as well as technical adjustments to the excess cost growth calculation and the age-expenditure profiles. The projections exclude health expenditure growth during the COVID-19 pandemic 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.

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

⁶Nonresident holding of general government debt data are the first quarter of 2022 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.

⁷Note that the pension spending projections reported in the first and second column do not include savings from the pension reform approved in October 2019.

⁸The 2022 projections for Pakistan are based on information available as of the end of August 2022 and do not include the impact of the recent floods.

⁹The average-term-to-maturity data for Türkiye is in accordance with the published data for central government debt securities as of July 2021.

¹⁰Data 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 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) ⁵
Average	0.5	21.7	0.2	7.5	7.0	10.5	-7.6	-3.3	-4.5	46.5
Afghanistan	...	...	...	...	...	...	...	-0.4	...	...
Bangladesh	0.2	12.9	0.1	2.9	5.2	7.5	-6.4	-3.5	-5.0	32.3
Benin	0.0	1.1	0.1	2.8	8.1	5.7	-4.8	-2.6	-3.9	...
Burkina Faso	0.0	3.0	0.3	12.3	3.3	13.9	-4.0	-3.5	-4.4	48.7
Cambodia	0.2	8.7	0.2	10.5	...	...	-7.7	-0.9	-3.8	99.5
Cameroon	0.0	2.8	0.0	1.2	4.9	9.2	-5.1	-3.7	-1.0	63.3
Chad	0.0	0.0	0.1	4.0	...	...	-3.8	-1.3	4.0	...
Congo, Democratic Republic of the	...	...	0.1	2.8	...	...	-5.9	0.3	-2.1	...
Congo, Republic of	0.2	10.1	0.1	3.9	...	...	-2.7	-4.4	4.7	...
Côte d'Ivoire	0.0	1.8	0.1	5.3	...	...	-4.0	-2.4	-3.8	...
Ethiopia	0.0	1.0	0.1	4.7	...	...	-20.4	-2.3	-3.0	...
Ghana	0.2	9.6	0.2	9.8	7.0	11.2	-5.3	-6.8	-9.4	...
Guinea	0.0	0.0	0.1	3.6	...	...	-10.5	0.8	-2.4	...
Haiti	...	...	0.1	3.6	...	...	-13.2	-1.8	-2.4	...
Honduras	0.4	20.4	0.4	19.2	4.0	13.2	...	-1.7	...	...
Kenya	0.4	21.8	0.3	14.0	8.6	7.9	-2.8	-6.5	-5.2	47.6
Kyrgyz Republic	4.2	123.5	0.3	14.9	...	...	-8.2	-3.2	-5.1	82.1
Lao P.D.R.	0.1	7.4	0.2	6.8	...	...	-5.9	-4.2	-4.5	...
Madagascar	0.2	9.8	0.2	8.6	...	...	-9.4	-2.1	-4.3	50.2
Malawi	0.0	3.6	0.4	15.6	2.7	20.2	-3.8	-3.9	-6.6	43.0
Mali	-0.1	0.5	0.1	6.5	3.2	15.0	-3.7	-2.7	-4.0	...
Moldova	4.6	134.5	0.8	31.3	...	...	-7.4	-1.4	-4.4	57.5
Mozambique	-0.1	0.7	0.2	10.2	3.1	38.2	-10.7	-4.4	-2.2	...
Myanmar	0.2	10.6	...	...	...	...	-8.0	-2.8	-7.0	...
Nepal	0.2	15.5	0.2	7.8	...	...	-8.3	-1.3	-3.7	...
Nicaragua	0.9	45.6	0.8	34.8	1.3	37.9	-5.9	-1.3	-1.8	84.7
Niger	0.0	-1.0	0.2	9.6	...	...	-6.4	-3.8	-4.2	...
Nigeria	0.0	1.1	0.1	3.0	9.0	3.8	-5.0	-3.5	-6.1	...
Papua New Guinea	0.1	2.4	0.2	10.4	...	...	-1.6	-4.1	-3.1	46.0
Rwanda	0.1	2.6	0.3	15.0	6.7	9.8	-8.8	-2.8	-5.1	78.6
Senegal	0.0	...	0.1	5.6	9.1	7.6	-5.7	-3.7	-4.1	...
Sudan	0.0	1.4	0.2	7.1	...	...	-29.4	-6.3	-1.3	...
Tajikistan	0.5	14.6	0.3	11.3	...	...	-7.9	-2.6	-2.2	...
Tanzania	0.2	11.0	0.2	8.8	9.5	4.3	-5.0	-2.6	-2.9	...
Uganda	0.0	3.7	0.1	4.2	...	...	-5.5	-3.1	-4.4	58.5
Uzbekistan	3.1	105.5	0.3	12.9	...	...	-12.1	1.6	-3.3	71.7
Vietnam	1.8	76.3	0.3	13.2	...	...	-7.6	-3.5	-4.1	...
Yemen	0.1	8.8	0.1	2.9	...	...	-12.8	-6.7	-0.9	...
Zambia	0.1	5.4	0.3	11.6	...	...	-3.8	-6.9	-7.4	...
Zimbabwe	0.0	6.8	0.4	17.5	...	...	-39.7	-3.5	-0.3	...

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 on the basis of data availability.

¹Pension projections rely on authorities' estimates when these are available. When authorities' estimates are not available, IMF staff projections use the method described in Clements, Eich, and Gupta, *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.²For 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 new available underlying health and economic data as well as technical adjustments to the excess cost growth calculation and the age-expenditure profiles. The projections exclude health expenditure growth during the COVID-19 pandemic in the underlying trend expenditure growth estimate.⁴The average-term-to-maturity data refer to government securities; the source is Bloomberg Finance L.P.⁵Nonresident holding of general government debt data are for the first quarter of 2022 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.

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IMF EXECUTIVE BOARD DISCUSSION OF THE OUTLOOK, SEPTEMBER 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 September 29, 2022.

Executive Directors broadly agreed with staff's assessment of the global economic outlook, risks, and policy priorities. They broadly concurred that high inflation and associated tightening financial conditions resulting from policy normalization; the effects of Russia's war in Ukraine, particularly on food and energy prices; and the lingering COVID-19 pandemic, with its related supply chain disruptions, have all contributed to a weakening in global economic prospects. Directors recognized that risks to the outlook are unusually high. They agreed that the most prominent risks—including policy divergence and cross-border tensions, further energy and food price shocks, an entrenchment of inflation dynamics and a de-anchoring of inflation expectations, and debt vulnerabilities in some emerging markets—tilt the distribution of likely growth outcomes to the downside. Moreover, Directors recognized that the current environment of high inflation, slowdown in growth, and heightened uncertainty about the economic and policy outlook poses particularly difficult trade-offs and challenges for policymakers, making the likelihood of a policy mistake higher than usual.

Against this backdrop, Directors agreed that the appropriate policy responses differ across countries, reflecting their local circumstances, their inflation and growth outlooks, and differences in trade and financial exposures. For most economies, they considered that tighter monetary and fiscal policies are necessary to durably reduce inflation. At the same time, they emphasized that these policies should be accompanied by structural reforms that improve productivity, expand economic capacity, and ease supply-side constraints. Directors recognized that many emerging market and developing economies (EMDEs) face tougher policy choices, as higher food and fuel prices, the need to support the recovery and vulnerable populations, and rising costs of market financing from tighter global

financial conditions and US dollar appreciation can pull in different directions, necessitating a difficult balancing act.

Directors stressed that monetary authorities should act decisively and continue to normalize policy to prevent inflationary pressures from becoming entrenched and avoid an unmooring of inflation expectations. They agreed that central banks in most advanced economies and EMDEs would need to continue tightening the monetary policy stance to bring inflation credibly back to target and to anchor inflation expectations. Directors stressed that maintaining central bank independence and policy credibility will be essential to secure price stability. They also emphasized the importance of continuing to assess the impact of the simultaneous monetary tightening by central banks and, in particular, its implications for EMDEs. Directors stressed that clear communication of both policy functions and the unwavering commitment to achieve price objectives is crucial to preserve credibility and avoid unwarranted market volatility. They considered that, should global financial conditions tighten in a disorderly manner, EMDEs could face capital outflows and should be ready to use all available tools, including foreign exchange interventions and capital flow management measures, guided when appropriate by the Integrated Policy Framework and in line with the Institutional View on the Liberalization and Management of Capital Flows and without substituting for exchange rate flexibility and warranted macroeconomic adjustments.

Directors concurred that fiscal policy is operating in a highly uncertain environment of elevated inflation, slowdown in growth, high debt, and tightening borrowing conditions. They stressed that, where inflation is elevated, a tighter fiscal stance would send a powerful signal that policymakers are aligned in their fight against inflation. Such a signal would, in turn, reduce

the size of required interest rate increases to keep inflation expectations anchored and would help keep borrowing costs lower. Directors emphasized that fiscal support to address the surge in cost of living from high food and energy prices should primarily focus on targeted support to the most vulnerable segments, given the criticality of preserving price incentives to promote energy conservation. Some Directors considered that additional but temporary energy policies may be needed in countries that face exceptionally high and volatile energy prices owing to Russia's war in Ukraine.

Directors broadly agreed that fiscal policy has a role in protecting people against loss in real incomes in moments of large adverse shocks, but that requires healthy public finances. Building on the experience of the pandemic, they considered that governments should invest in social safety nets and develop policy strategies and tools that can be readily deployed under various scenarios. Directors concurred that a sound and credible medium-term fiscal framework, including spending prioritization and efforts to raise revenues, can help manage urgent needs from high food and energy prices, rebuild fiscal buffers to cope with future crises, and make progress in long-term development needs, such as investment in renewable energy and health care, which can also foster economic resilience.

Directors noted that, although no material systemic event has materialized so far, financial stability risks have risen along many dimensions, which highlights the importance of containing a further buildup of financial vulnerabilities. Being mindful of country-specific circumstances and near-term economic challenges, they agreed that selected macroprudential tools may need to be adjusted to tackle pockets of elevated vulnerabilities. Directors noted, however, that striking

a balance between containing the buildup of vulnerabilities and avoiding procyclicality and a disorderly tightening of financial conditions is important given heightened economic uncertainty and the ongoing policy normalization process.

Directors reiterated their urgent call for global cooperation and dialogue, which are essential to defuse geopolitical tensions, avoid further economic and trade fragmentation, and respond to challenges in an interconnected world. They agreed on the criticality of multilateral actions to respond to existing and unfolding humanitarian crises, end Russia's war in Ukraine, safeguard global liquidity, manage debt distress, mitigate and adapt to climate change, and end the pandemic. Noting that many countries are contending with tighter financial conditions, high debt levels, and pressures to protect the most vulnerable from surging inflation, Directors called on the multilateral institutions to stand ready to provide emergency liquidity to safeguard essential spending and contain financing crises. They also called for greater debt transparency and better mechanisms to produce orderly debt restructurings—including a more effective Common Framework—in those cases where insolvency issues prevail. Acknowledging that recent energy and food price shocks may have undermined the green transition, Directors stressed that achieving energy security and addressing the climate agenda go hand-in-hand, including by addressing the significant climate financing needs of EMDEs and investing in renewable energy and energy efficiency. Even though the COVID-19 pandemic is starting to fade, Directors called for decisive actions to address the continued inequity in access to health care and vaccinations worldwide and reduce the threat of future pandemics.

INTERNATIONAL MONETARY FUND

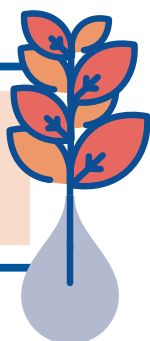


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