

**EXECUTIVE
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MEETING**

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March 20, 2018

To: Members of the Executive Board

From: The Secretary

Subject: **April 2018 Fiscal Monitor—Chapter 1, Executive Summary, and Methodological and Statistical Appendix**

Board Action: Executive Directors' **consideration** (Formal)

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Publication: Yes, it is intended that the full set of the Fiscal Monitor documents will be released to the public at the time of the Fiscal Monitor press conference, tentatively scheduled for **Wednesday, April 18, 2018**.

Questions: Mr. Senhadji, FAD (ext. 38380)
Ms. Pattillo, FAD (ext. 37319)
Ms. Jaramillo Mayor, FAD (ext. 39946)

Additional Information: The paper will be revised for publication in light of the Executive Board discussion. If Executive Directors have additional comments, they should notify Mr. Senhadji, Ms. Pattillo and Ms. Jaramillo Mayor by **5:30 p.m. on Wednesday, March 28, 2018**.

INTERNATIONAL MONETARY FUND

April 2018 Fiscal Monitor—Chapter 1**Capitalizing on Good Times**

Prepared by the Fiscal Affairs Department

In consultation with the other departments

Approved by Vitor Gaspar

March 19, 2018

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EXECUTIVE SUMMARY

Chapter 1: Capitalizing on Good Times

Strong and broad-based growth provides an opportunity to begin rebuilding fiscal buffers now, improve government balances and anchor public debt. Strengthening fiscal buffers in the upswing will create room to provide fiscal support in an eventual downturn and will prevent fiscal vulnerabilities from becoming a source of stress if financial conditions deteriorate.

High debt is a concern

Global debt is at historic highs, reaching the record peak of US\$164 trillion in 2016, equivalent to 225 percent of global GDP. The world is now 12 percent of GDP deeper in debt than the previous peak in 2009, with China as a driving force.

Public debt plays an important role in the surge in global debt, reflecting the economic collapse during the Global Financial Crisis and the policy response, as well as the effects of the 2014 fall in commodity prices and rapid spending growth in the case of emerging and low-income developing countries. Debt in advanced economies is at 106 percent of GDP on average—levels not seen since World War II. In emerging market and middle-income economies, debt is at 50 percent of GDP on average—levels last seen during the 1980s' debt crisis. For low-income developing countries, average debt-to-GDP ratios have been climbing at a rapid pace and exceed 40 percent as of 2017. Moreover, nearly half of this debt is on nonconcessional terms, which has resulted in a doubling of the interest burden as a share of tax revenues in the past 10 years. Underpinning debt dynamics for all countries are large primary deficits, which reached record levels in the case of emerging market and developing economies.

High government debt and deficits are cause for concern. Countries with elevated government debt are vulnerable to a sudden tightening of global financing conditions, which could disrupt market access and put economic activity in jeopardy. Moreover, experience shows that countries can be subject to large unexpected shocks to public debt-to-GDP ratios, which would exacerbate rollover risks. Importantly, large debt and deficits hinder governments' ability to implement a strong fiscal policy response to support the economy in the event of a downturn. Historical experience shows that a weak fiscal position increases the depth and duration of recession—such as in the aftermath of a financial crisis—because governments are unable to deploy sufficient fiscal policy to support growth. Building fiscal room to maneuver is relevant especially now that private sector debt is at record highs and rising. Excessive private debt in some countries puts them at risk of an abrupt and costly deleveraging process.

Enhancing resilience and buttressing growth

Decisive action is needed now to strengthen fiscal buffers, taking full advantage of the cyclical upswing in economic activity. As growth returns to its potential, fiscal stimulus loses its effectiveness while the cost of fiscal consolidation diminishes, making it easier to switch from fiscal expansion to fiscal consolidation. Importantly, building buffers now will help protect the economy, both by creating room for fiscal policy to step in to support economic activity during a downturn and by reducing the risk of financing difficulties if global financial conditions tighten suddenly. In general, countries should allow automatic stabilizers (that is, tax and spending that moves in sync with output and employment) to operate fully, while making efforts to put deficits and debt firmly on a downward path toward their medium-term targets.

The size and pace of adjustment needs to be calibrated to each country's cyclical conditions and available fiscal space, to avoid an undue drag on growth. In economies operating at or near potential output and where debt to GDP is at high levels, fiscal adjustment should be implemented. In the United States—where a fiscal stimulus is happening when the economy is close to full employment, keeping overall deficits above US\$1 trillion (5 percent of GDP) over the next 3 years—fiscal policy should be recalibrated to ensure that the government debt-to-GDP ratio declines over the medium term. Where fiscal space is limited, there is little choice but to undertake consolidation efforts to reduce fiscal risks, based on policies that will support medium-term growth. A few advanced economies that have ample fiscal space and are operating at or close to capacity have room for using fiscal policy to facilitate the implementation of pro-growth structural reforms. Despite the recent partial recovery in commodity prices, commodity exporters should continue to adjust to ensure that spending is aligned with medium-term revenue prospects. Several low-income countries need to make room in their budgets to accommodate the implementation of infrastructure plans by mobilizing revenues, rationalizing spending, and improving spending efficiency.

At the same time, all countries need to keep their sights on policies to lift their medium-term growth outlook. Indeed, recent fiscal adjustment in some countries has not necessarily prioritized growth-friendly measures, as illustrated by the decline in public investment spending as a share of GDP among advanced economies and commodity exporters. Advanced economies should focus on seeking efficiency gains in spending and rationalizing entitlements, to make room for more public investment, incentives for labor market participation, and improvements in the quality of education and health services. Some advanced economies would also benefit from broadening tax bases and upgrading the design of their tax systems. For emerging market and developing economies, the priority is to raise revenue to finance critical spending on physical and human capital and social spending. All countries should promote inclusive growth to avoid excessive inequality that can impede social mobility, erode social cohesion, and ultimately hurt growth.

Chapter 2: Digital Government

The world is becoming digital and so are governments, albeit at sharply different paces. All country governments now have national websites and automated financial management systems. Digitalization presents both opportunities and challenges for fiscal policy. How can digitalization change the design and implementation of policies now and in the future? And what stands in the way?

Greater availability and access to timely and reliable information can transform how governments operate. Digitalization can reduce the private and public costs of tax compliance and improve spending efficiency. For example, governments can use digital tools to tackle cross-border fraud—adopting digital tools could increase indirect tax collection at the border by up to 1–2 percent of GDP per year. Digitalization could also help governments track down taxes on wealth sheltered in low-tax jurisdictions, estimated at an average of 10 percent of world GDP. Although the potential revenue gains from this traditionally inaccessible tax base are low at current tax rates, digitalization could facilitate future tax collection on income at the source, before it escapes the reach of tax authorities. On the spending side, the experiences of India and South Africa show how digitalization can help improve social protection and the delivery of public services.

In the future, the increasing digitalization of businesses—and the emergence of digital giants such as Google, Apple, Facebook, and Amazon—may exacerbate challenges faced by the current international tax system. Digitalization raises new questions, such as how commercially valuable information generated by users of online services should affect taxing rights of countries. Should aspects of destination—that is, where the final consumers reside—play a more prominent role in assigning taxing rights? Efforts to modify the international tax framework should preferably be coordinated and consistent with a long-term vision for the international tax architecture.

Governments will need to mitigate new digital risks. Digital interactions with governments may impose a disproportionate burden on small businesses and vulnerable households with limited access to technology. Digitalization itself also creates new opportunities for fraud and disruption of government functions. This includes the use of digital means to evade taxes or illegally claim benefits. Massive data breaches and intrusions of privacy have increased, highlighting the vulnerabilities of public digital systems.

Digitalization is not a panacea. It calls for a proactive, forward-looking and comprehensive reform agenda. Governments must address multiple political, social and institutional weakness and manage digital risks. They must also budget adequate resources to finance investments in digital infrastructure and cybersecurity. Last but not least, digitalization makes international cooperation even more necessary.

But digitalization is already an overwhelming trend. It is likely to accelerate further. Governments can try to resist it, and adapt late and reluctantly; or they can embrace it, foresee it and even, to some extent, shape it.

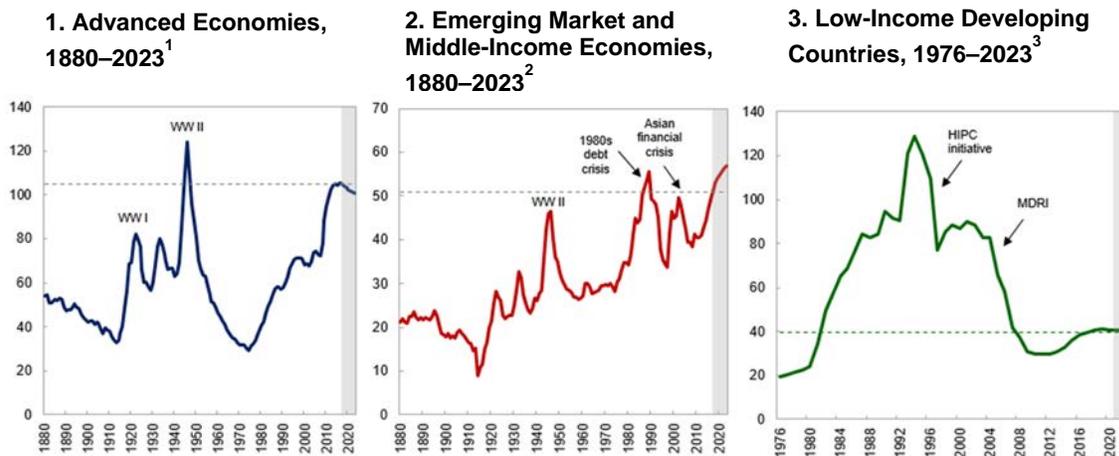
With near-term growth on stronger footing, policymakers can turn their attention to rebuilding buffers and supporting medium-term growth. The pickup in economic activity in 2017 has been broad-based and continues to strengthen in 2018, suggesting that fiscal stimulus to support demand is no longer the priority. Rather, focus should now be on a twofold strategy to support growth over the medium term. First, countries need to build fiscal buffers now by reducing government deficits and putting debt on a steady downward path. This will create room for fiscal support in case of a downturn and prevent fiscal vulnerabilities from becoming a source of stress on the economy if financing conditions tighten suddenly. Second, such a fiscal adjustment needs to be anchored on structural fiscal reforms that support potential growth by promoting human and physical capital, and by increasing productivity.

I. INTRODUCTION

1. Global debt is at historic highs, reaching the record peak of US\$164 trillion in 2016, equivalent to 225 percent of global GDP. The world is now 12 percent of GDP deeper in debt than the previous peak in 2009, with China as a driving force (Box 1.1).

Figure 1.1. General Government Debt
(Percent of GDP)

Average debt-to-GDP is at historic highs.



Sources: Abbas and others (2010); IMF, Historic Public Debt Database; and IMF staff estimates and projections.

Note: Average is calculated using GDP at purchasing power parity. Dashed lines refer to the debt level in 2017. WWI = World War I; WWII = World War II; GFC = Global Financial Crisis; HIPC = Heavily Indebted Poor Countries; MDRI = Multilateral Debt Relief Initiative.

¹ Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong SAR, Ireland, Italy, Japan, Korea, Netherland, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, Taiwan Province of China, United Kingdom, and United States.

² Argentina, Brazil, Bulgaria, Chile, China, Colombia, Egypt, Hungary, India, Indonesia, Iran, Jordan, Kazakhstan, Kenya, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Romania, Russia, South Africa, Sri Lanka, Thailand, Turkey, Ukraine, Uruguay, Venezuela.

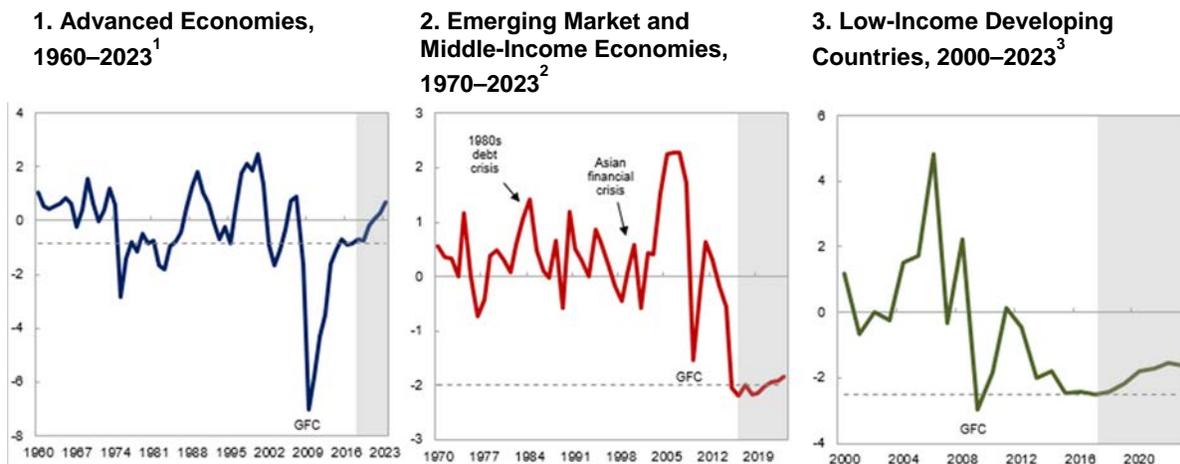
³ Bangladesh, Benin, Burkina Faso, Cameroon, Chad, Democratic Republic of the Congo, Côte d'Ivoire, Ethiopia, Ghana, Haiti, Honduras, Kenya, Madagascar, Mali, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Papua New Guinea, Rwanda, Senegal, Tanzania, Uganda, Vietnam, Zambia, Zimbabwe.

2. Public debt plays an important role in the surge in global debt, with little improvement expected over the medium term. The rise in government debt reflects the economic collapse during the Global Financial Crisis and the policy response, as well as the effects of the 2014 fall in commodity prices and rapid spending growth in the case of emerging and low-income developing countries. For advanced economies, debt-to-GDP ratios have plateaued since 2012

above 105 percent of GDP—levels not seen since World War II—and are expected to fall only marginally over the medium term (Figure 1.1). In emerging market and middle-income economies, debt-to-GDP ratios in 2017 reached almost 50 percent in 2017—a level seen only during the 1980s’ debt crisis—and are expected to continue on an upward trend. For low-income developing countries, average debt-to-GDP ratios exceeded 40 percent in 2017, climbing by more than 10 percentage points since 2012, and are not expected to decline much over the medium term. Although the current level is below historical peaks for these countries, debt reduction from earlier peaks was driven by debt forgiveness and restructuring (IMF 2017a, IMF 2018d). Underpinning debt dynamics are large primary deficits, which are at their highest in decades in the case of emerging market and developing economies (Figure 1.2). In the case of advanced economies, there has been little improvement in primary balances since 2015.

Figure 1.2. General Government Primary Balance
(Percent of GDP)

Average primary balances are at historic lows among emerging market and developing economies.



Sources: Mauro and others (2013); Historical Public Finance Dataset; and IMF staff estimates.

Note: Average is calculated using GDP at purchasing power parity. Dashed lines refer to primary balance in 2017. GFC = Global Financial Crisis.

¹ Australia, Canada, France, Germany, Italy, Japan, Korea, Spain, United Kingdom, United States.

² Argentina, Brazil, China, India, Indonesia, Mexico, Russia, South Africa, Turkey.

³ Bangladesh, Benin, Burkina Faso, Cameroon, Chad, Democratic Republic of the Congo, Côte d'Ivoire, Ethiopia, Ghana, Haiti, Honduras, Kenya, Madagascar, Mali, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Papua New Guinea, Rwanda, Senegal, Tanzania, Uganda, Vietnam, Zambia, Zimbabwe.

3. There are several reasons why high government debt and deficits are a cause for concern and should motivate countries to build buffers by reducing deficits and putting debt on a steady downward path.

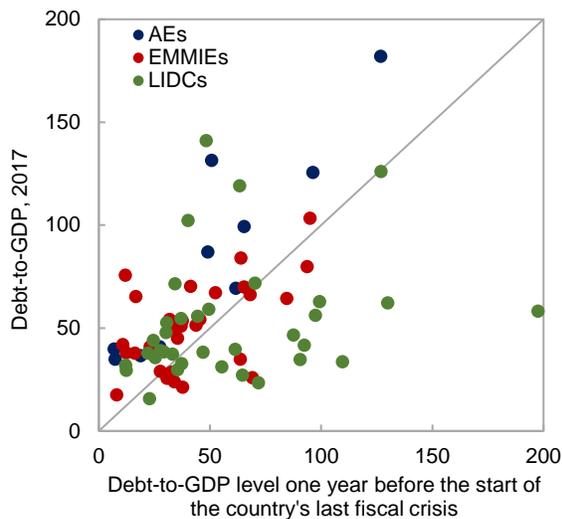
- First, high government debt can make countries vulnerable to rollover risk because of large gross financing needs, particularly when maturities are short.¹ Market access could be disrupted if global financing conditions tighten abruptly or if there is a shift in investor

¹ For a theoretical treatment of rollover crises, see Cole and Kehoe (2000).

sentiment (see the April 2018 *World Economic Outlook* (WEO) and the *Global Financial Stability Report* (GFSR)). Recent bouts of equity market volatility suggest that investors could become fickle. A high debt-to-GDP ratio could cause a spike in risk premiums if investors become skeptical about a country's ability or willingness to pay—including because of concerns with the political feasibility of fiscal policies, in particular in the event of unfavorable growth outcomes or fiscal shocks.² Indeed, Figure 1.3 illustrates that in a number of countries debt is above levels at which fiscal crises occurred in the past.³ Figure 1.4 suggests that some countries may be beyond their comfort levels, as debt-to-GDP ratios in 2017 exceeded the debt ceilings set under their fiscal rules.

Figure 1.3. General Government Debt in 2017 Compared with Debt at Time of Fiscal Crises (Percent of GDP)

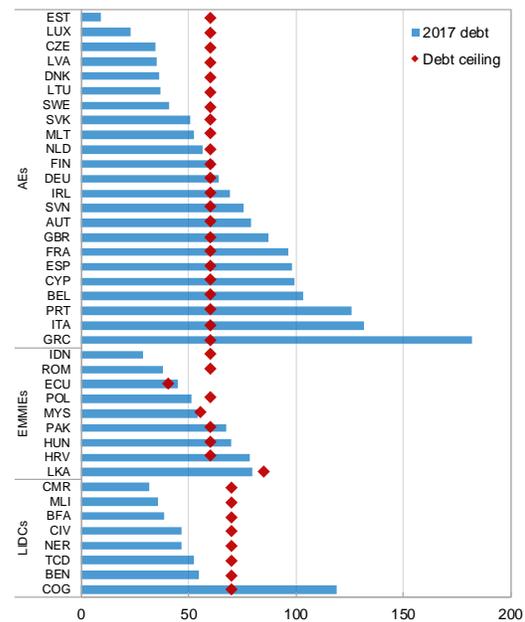
Debt in several countries is close to or above levels at which fiscal crises occurred in the past.



Sources: Gerling and others (2017); and IMF staff calculations.
Note: Fiscal crises are identified as in Gerling and others (2017). AEs = Advanced economies; EMMIEs = Emerging market and middle-income economies; and LIDCs = Low-income developing countries.

Figure 1.4. Debt Levels in 2017 and Debt Ceilings Under Fiscal Rules (Percent of GDP)

In several countries, debt is close to or above debt ceilings defined under their fiscal rule.



Sources: IMF, Fiscal Rules Database; and IMF staff estimates.
Note: Data labels in the figure use International Organization for Standardization (ISO) country codes. AEs = Advanced economies; EMMIEs = Emerging market and middle-income economies; and LIDCs = Low-income developing countries.

² Ghosh and others (2013) show that, historically, large primary surpluses have been difficult to sustain over longer periods. See Eaton and Gersovitz (1981) or Arellano (2008) for a “willingness to pay” perspective on debt sustainability and sovereign spreads. D’Erasmus and Mendoza (2016) and D’Erasmus, Mendoza, and Zhang (2016) emphasize the political economy dimension of debt sustainability.

³ Gerling and others (2017) characterize fiscal crises as periods of extreme fiscal distress, which include credit events (debt default or restructuring), exceptionally large official financing (financial support from the IMF with a fiscal adjustment objective), implicit domestic public debt default (very high inflation or accumulation of domestic arrears), and loss of market confidence (loss of market access or increase in spreads of more than 1,000 basis points). Their study covers 188 countries over 1970 to 2015 and identifies 436 fiscal crisis episodes, with countries facing on average two crises in this period.

- Second, countries can be subject to large unexpected shocks to public debt-to-GDP levels, which would exacerbate rollover risk. Indeed, based on a sample of 179 episodes of debt spikes in 90 advanced, emerging market and low-income developing countries, Jaramillo, Mulas-Granados, and Kimani (2017) find that the biggest driver of public debt spikes is not primary deficits, output contractions, or higher interest payments, but rather a sudden increase in the stock of debt—arising from the realization of contingent liabilities, quasi-fiscal spending, or the correction of previous underreporting of deficits, among others.⁴ Furthermore, IMF (2016) finds that fiscal risks can be highly correlated with each other, with a distinct bunching of contingent liability realizations during crisis periods.⁵ Looking at data for the United States and the United Kingdom as far back as 1790, Escolano and Gaspar (2016) find that these countries have faced infrequent but large negative shocks. They show that the optimal policy in normal times is to reduce debt ratios gradually but persistently in anticipation of future large negative events.
- Third, high government debt levels make it difficult to conduct countercyclical policies, especially in the event of a financial crisis. The combination of excessive public and private debt levels can be dangerous in the event of a downturn because it would prolong the ensuing recession (Box 1.1).⁶ Empirical estimates in the October 2016 *Fiscal Monitor* suggest that entering a financial crisis with a weak fiscal position worsens the depth and duration of the ensuing recession, particularly in emerging market economies. This is because fiscal policy tends to be procyclical in these cases. Romer and Romer (2018) study the postcrisis economic performance of 24 advanced economies since 1967 and show that the decline in output following a financial crisis is less than 1 percent when a country possesses monetary and fiscal policy space, but almost 10 percent when it has neither. In particular, they find that countries with low debt-to-GDP ratios typically engage in aggressively expansionary fiscal policy after a crisis, while those without such space usually pursue highly contractionary policy.⁷ To illustrate, Figure 1.5 shows that the fiscal stabilization coefficient (FISCO)—an indicator introduced in the April 2015

⁴ While some of the factors contributing to debt shocks could be contained through enhanced transparency and more stringent financial regulation, other factors are often not easily anticipated. Bova and others (2016) provide a comprehensive dataset of contingent liability realizations in advanced and emerging market economies for the period 1990–2014.

⁵ IMF (2012) finds that only one third of the deterioration of debt ratios among the hardest hit countries during the Global Financial Crisis was due to standard macro-fiscal dynamics, with the balance arising from the crystallization of an array of other fiscal risks.

⁶ Several studies point out the dangers of excessive credit growth in triggering banking crises and in deepening recessions. Excessive private debt impedes economic recovery because it constrains consumption and investment, and limits the transmission of monetary policy as indebted firms and households may not increase borrowing in reaction to reductions in interest rates. See Mian and Sufi (2010); Jordà, Schularick and Taylor (2013); and Borio (2014).

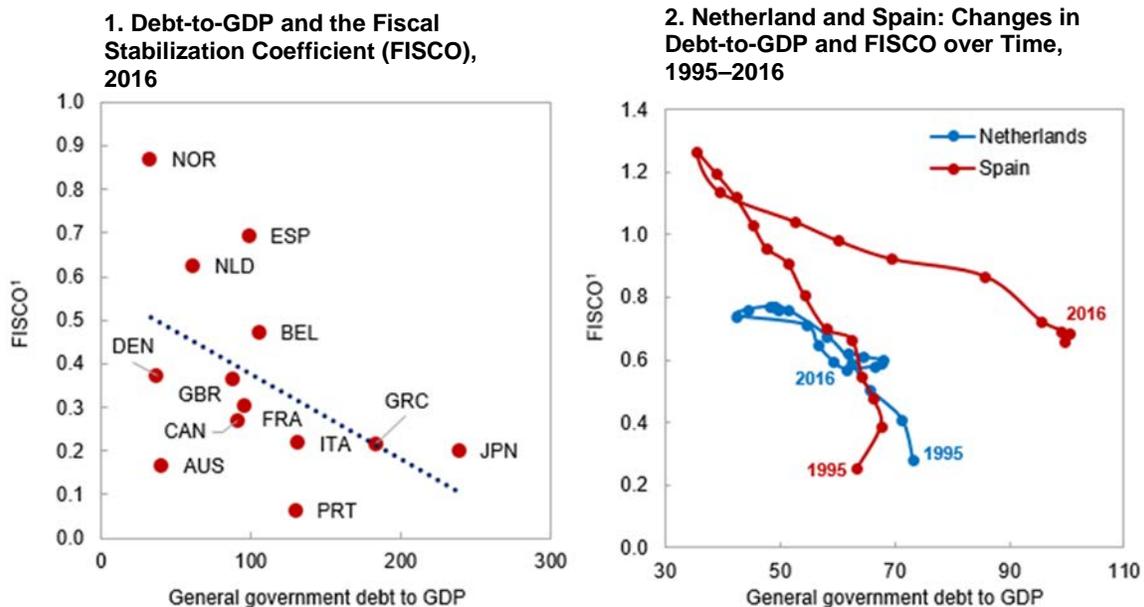
⁷ See also Jordà, Schularick, and Taylor (2016), Corsetti, Kuester, and others (2012), Aghion and Kharroubi (2013), Bernardini and Forni (2017), and Bernardini and Forni (2018).

Fiscal Monitor that measures how much a country’s overall budget balance changes in response to a change in economic slack—tends to be lower in advanced economies with higher ratios of debt-to-GDP.⁸

- Fourth, high government debt levels could constitute a drag on potential growth, although this is very much an open debate.⁹ High debt can result in lower growth because it can crowd out private investment (Gale and Orzag 2003) and create uncertainty about higher future distortionary taxation (Dotsey 1994).

Figure 1.5. General Government Debt and Fiscal Stabilization

Fiscal policy is less stabilizing in countries with higher debt-to-GDP.



Sources: IMF, *Fiscal Monitor* 2015; IMF, *Fiscal Monitor* 2017; and IMF staff calculations.

Note: Data labels in the figure use International Organization for Standardization (ISO) country codes. The Fiscal Stabilization Coefficient (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 counter-cyclical is the conduct of fiscal policy. FISCO was introduced in the April 2015 *Fiscal Monitor*; its sample coverage was expanded and updated in the April 2017 *Fiscal Monitor*. Estimates are based on the time-varying coefficients model proposed by Schlicht (1985, 1988). Technical details on FISCO estimation are in Annex 2.1 of the April 2015 IMF *Fiscal Monitor* and Furceri and Jalles (2018).

⁸ Fiscal policies have generally been more stabilizing in advanced economies than in emerging market and developing economies. This largely reflects the latter’s specific features, such as less potent fiscal instruments, and the prominence of policy objectives other than output stability. See the April 2015 *Fiscal Monitor*.

⁹ For a survey, see IMF (2015b), Panizza and Presbitero (2013), and the April 2013 *Fiscal Monitor*. Several studies have found that beyond a certain threshold—estimates ranging between 67 and 95 percent of GDP—higher public debt lowers potential growth (see Reinhart and Rogoff, 2010; Reinhart, Reinhart, and Rogoff 2012; Cecchetti, Mohanty, and Zampolli 2011; Checherita-Westphal and Rother 2012; Baum, Checherita-Westphal, and Rother 2013; and Kumar and Woo, 2010). By contrast, Irons and Bivens (2010), Panizza and Presbitero (2014), Eberhardt and Presbitero (2015), and Chudik and others (2017) find evidence that thresholds are either inexistent or highly country-specific. Chapter 3 of the October 2012 WEO provides more stylized facts on debt and growth.

4. Decisive action is needed now to strengthen fiscal buffers, taking full advantage of the recent broad-based pick-up in economic activity. Following a countercyclical fiscal policy will allow governments to build fiscal space in the present good times that they can then rely on during future bad times.¹⁰ As growth gains momentum, fiscal stimulus to support demand is no longer the priority. At the same time, fiscal multipliers—which measure the short-term impact of discretionary fiscal policy on output—are expected to be smaller.¹¹ This is especially the case for countries with positive output gaps, where central banks would be expected to raise interest rates to, at least partly, neutralize the inflationary impact of fiscal stimulus.¹² Hence, for these countries, the gains from short-term fiscal stimulus are limited and the economic costs of fiscal adjustment relatively smaller. Although there is some uncertainty about the amount of slack that countries have in their economy (see Box 1.3 of the April 2018 WEO), and therefore the size of fiscal multipliers, economic costs can be minimized if the adjustment is based on policies that raise medium-term growth. Therefore, countries should allow automatic stabilizers (that is, tax and spending that moves in sync with output and employment) to operate fully and should make efforts to put deficits and debt firmly on a downward path toward their medium-term targets.¹³

5. The size and the pace of adjustment would need to be calibrated to the country's cyclical conditions and available fiscal space to avoid becoming a drag on growth. In economies that are operating at or near potential output, and where debt-to-GDP is at high levels, fiscal adjustment should be implemented. Where output gaps remain and fiscal space is constrained, there is little choice but to continue consolidation efforts. Without a sufficiently high growth dividend, fiscal expansions in these countries could exacerbate fiscal risks. For a few advanced economies that have ample fiscal space and are operating at or close to capacity, fiscal policy could be used to facilitate structural reforms to boost potential growth, which would also help, if needed, to narrow unduly large current account surpluses. Despite the recent partial recovery in commodity prices, commodity exporters should continue to adjust to ensure that spending is aligned with medium-term revenue prospects. Several low-income countries need to make room in their budgets to accommodate the implementation of infrastructure plans by mobilizing revenues, rationalizing spending, and improving spending efficiency.

¹⁰ Fiscal space can be defined as the room to raise spending or lower taxes relative to a preexisting baseline, without endangering market access and debt sustainability. See IMF (2018a).

¹¹ See Auerbach and Gorodnichenko (2012, 2017); DeLong and Summers (2012); IMF (2010); Baum, Poplawski-Ribeiro, and Weber (2012); and Jordà and Taylor (2016). Ramey and Zubairy (2014), by contrast, find no evidence of larger multipliers during recessions. Ilzetzki, Mendoza, and Végh (2013) find that multipliers are smaller in times of high debt, although Corsetti, Meier, and Müller (2012) and Auerbach and Gorodnichenko (2017) find little difference in the responses across low- and high-debt states.

¹² Moreover, cross-border output spillovers from fiscal actions are small when there is less economic slack in the source or in the recipient economies. See Blagrove, Koloskova, and Vesperoni (2017).

¹³ Fiscal targets, including those set under formal rules, should be country specific, reflecting exposure to and tolerance for macroeconomic risks, as well as fiscal policy objectives including debt sustainability, economic stabilization, and equity. See Eyraud and others (2018), IMF (2018b, 2018c), and Baunsgaard and others (2012).

6. At the same time, in all countries, policymakers need to keep their sights on lifting medium-term growth prospects. Some of the forces propelling the cyclical upturn will eventually fade, as monetary policy normalizes, investment incentives in the US tax reform expire, and China continues its transition to more balanced growth. Meanwhile, the medium-term growth outlook remains subdued among advanced economies, and emerging market and developing economies need stronger growth to facilitate convergence to higher incomes (April 2018 WEO). It is important to note that past experiences with debt reduction have shown that robust GDP growth and sustained primary balances are necessary to bring down debt-to-GDP ratios.¹⁴ This calls for fiscal adjustment to be underpinned by growth-friendly policies, that is, structural fiscal measures that have a positive effect on medium- to long-term growth by incentivizing human and physical capital accumulation and raising productivity. Recent fiscal adjustment in some countries has not necessarily prioritized growth-friendly measures, as illustrated by the decline in public investment spending as a share of GDP among advanced economies and commodity exporters. In advanced economies, efforts should focus on seeking efficiency gains in spending and rationalizing entitlements to make room for more public investment, incentives for labor market participation, and improvements in the quality of education and health services. Some advanced economies would also benefit from broadening tax bases and upgrading their tax systems. For emerging market and developing economies, the priority is to raise revenue to finance critical investment on physical and human capital and social spending. All countries should seek to avoid excessive inequality, which can erode social cohesion, lead to political polarization, and ultimately lower economic growth. This can be achieved through improved design of transfers to households, more progressive tax systems, and greater access to quality education and health care, tailored to country-specific circumstances (see the October 2017 *Fiscal Monitor*).

7. The rest of the chapter examines fiscal trends and policies aimed at reducing fiscal vulnerabilities and boosting medium-term growth. The next section reviews recent fiscal developments and the fiscal outlook in advanced, emerging market, and low-income developing countries. It revisits recent trends in government debt and provides a more in-depth analysis of changes in fiscal balances, revenue, and spending. It also identifies potential fiscal risks. The third section discusses growth-friendly fiscal policies, touching upon the pace and composition of fiscal adjustment tailored to country-specific circumstances.

¹⁴ See the October 2012 WEO; Abbas and others (2013); Nickel, Rother, and Zimmermann (2010); Cottarelli and Jaramillo (2013); Mauro (2011); and Baldacci, Gupta, and Mulas-Granados (2015).

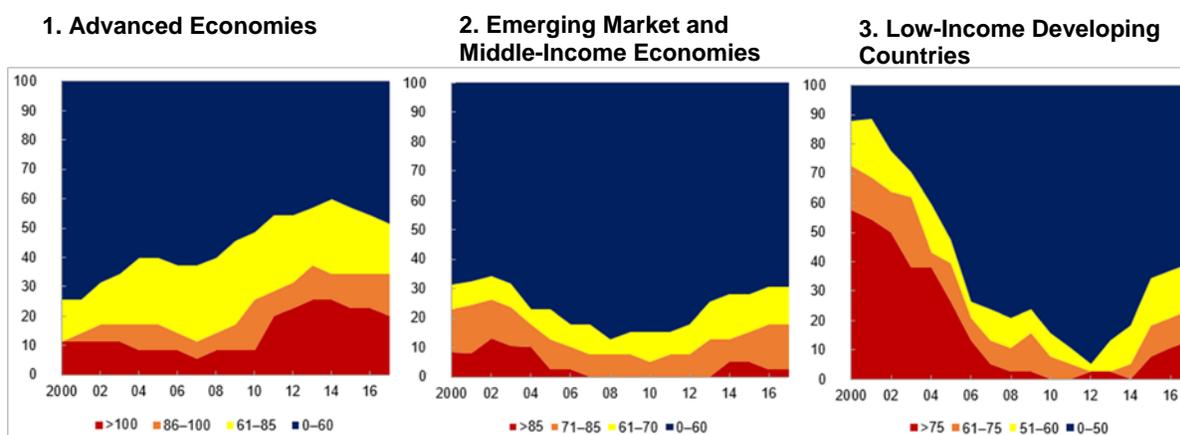
II. RECENT DEVELOPMENTS AND OUTLOOK

High debt is of concern

8. A large number of countries currently have a high debt-to-GDP ratio, as suggested by critical thresholds identified in the IMF's debt sustainability analysis (Table 1.1).¹⁵ In 2017, more than one-third of advanced countries had debt above 85 percent of GDP, three times more countries than in 2000 (Figure 1.6). One-fifth of emerging market and middle-income economies had debt above 70 percent of GDP in 2017, similar to levels in the early 2000s in the aftermath of the Asian financial crisis. One-fifth of low-income developing countries now have debt above 60 percent of GDP, compared with almost none in 2012. Several countries among this last group have debt-to-GDP levels close to those seen when debt relief was decided under the Heavily Indebted Poor Countries (HIPC) initiative (Figure 1.7).¹⁶ A few countries are already facing debt default or restructuring (Chad, Mozambique, Republic of Congo, Sudan).

Figure 1.6. Distribution of Debt-to-GDP Ratios, 2000–17
(Percent)

A large number of countries have debt-to-GDP above critical levels.



Source: IMF staff estimates.

Note: The IMF's Debt Sustainability Analysis for Market Access Countries identifies the critical debt thresholds—beyond which debt sustainability is put at high risk—as 85 percent of GDP for advanced economies and 70 percent of GDP for emerging market economies. The Joint World Bank–IMF Debt Sustainability Framework for Low-income Countries finds critical thresholds to be 49, 62, and 75 percent of GDP depending on the country's institutional quality. For more details on each methodology see <https://www.imf.org/external/pubs/ft/dsa/>.

¹⁵ The IMF's Debt Sustainability Analysis for Market Access Countries identifies the critical debt thresholds—beyond which debt sustainability is put at high risk—as 85 percent of GDP for advanced economies and 70 percent of GDP for emerging market economies. The Joint World Bank–IMF Debt Sustainability Framework for Low-Income Countries finds critical thresholds to be 49, 62, and 75 percent of GDP depending on the country's institutional quality. For more details on each methodology see <https://www.imf.org/external/pubs/ft/dsa/>. Net debt could be an additional metric in countries with sizeable liquid financial assets that can be readily drawn upon to meet debt obligations, and has been used in debt sustainability assessments, for instance, in the case of Angola, Azerbaijan, Canada, Chile, Finland, New Zealand, Saudi Arabia, and Uruguay.

¹⁶ Based on historical episodes of debt decline in low-income developing countries, IMF (2018d) finds that debt was reduced without debt restructuring in only one-fifth of cases.

Table 1.1. General Government Debt, 2012–23
(Percent of GDP)

								Projections					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Gross Debt													
World	79.7	78.5	78.8	80.0	83.1	82.6	82.3	82.0	81.7	81.4	81.1	80.6	
Advanced Economies	106.6	105.3	104.8	104.4	106.9	105.7	104.1	103.3	102.5	101.8	101.3	100.4	
United States ¹	103.5	105.3	105.0	105.2	107.1	108.4	108.5	109.7	111.3	113.0	114.9	116.3	
Euro Area	89.4	91.3	91.8	89.9	88.9	86.8	84.6	82.3	79.9	77.5	74.9	72.3	
France	89.5	92.3	94.9	95.6	96.3	96.5	96.2	96.2	95.1	93.5	91.4	88.8	
Germany	79.8	77.4	74.6	70.9	68.1	64.1	59.8	55.8	52.4	49.1	46.0	43.1	
Italy	123.4	129.0	131.8	131.5	132.0	131.5	129.7	127.5	124.9	122.1	119.3	116.6	
Spain	85.7	95.5	100.4	99.4	99.0	98.3	97.0	95.6	94.4	93.3	92.3	91.4	
Japan	229.0	232.5	236.1	231.3	235.6	236.4	236.0	234.2	232.3	231.4	230.7	229.6	
United Kingdom	84.5	85.6	87.4	88.2	88.2	87.0	86.5	86.2	85.5	84.9	84.1	83.1	
Canada ¹	84.8	85.8	85.0	90.5	91.1	89.7	86.6	83.8	81.2	78.7	76.4	74.3	
Emerging Market and Middle-Income Economies	37.5	38.7	40.8	44.1	47.1	49.1	51.3	53.0	54.4	55.7	56.8	57.7	
Excluding MENAP Oil Producers	39.9	41.2	43.5	46.0	48.6	50.6	52.6	54.3	55.7	57.1	58.2	59.2	
Asia	39.8	41.5	43.6	44.8	47.2	50.1	52.3	54.5	56.6	58.5	60.2	61.6	
China	34.3	37.0	39.9	41.1	44.3	47.8	51.2	54.4	57.6	60.5	63.1	65.5	
India	69.1	68.5	67.8	69.6	68.9	70.2	69.1	67.5	66.0	64.5	63.0	61.6	
Europe	25.5	26.4	28.5	30.9	32.1	31.9	32.1	32.5	32.6	32.4	32.3	32.1	
Russia	11.5	12.7	15.6	15.9	15.7	17.4	18.7	19.5	19.9	20.0	20.1	20.4	
Latin America	48.7	49.3	51.4	55.6	59.1	61.7	66.4	67.4	67.9	68.3	68.5	68.5	
Brazil ²	62.2	60.2	62.3	72.6	78.4	84.0	87.3	90.2	92.7	94.6	95.7	96.3	
Mexico	42.7	45.9	48.9	52.9	56.8	54.2	53.5	53.4	53.4	53.3	53.3	53.3	
MENAP	23.1	23.8	24.1	34.3	42.3	41.5	43.5	44.1	43.9	43.5	42.6	42.2	
Saudi Arabia	3.0	2.1	1.6	5.8	13.1	17.3	20.0	23.8	26.0	27.1	27.6	29.4	
South Africa	41.0	44.1	47.0	49.3	51.6	52.7	54.9	55.7	56.4	57.0	57.6	58.1	
Low-Income Developing Countries	30.8	31.2	31.7	38.0	40.7	44.2	45.3	44.6	43.6	42.9	42.1	41.1	
Nigeria	12.7	12.9	13.1	16.0	19.6	23.4	26.8	27.4	27.3	27.8	28.1	28.3	
Oil Producers	32.2	32.9	33.9	39.9	43.6	43.5	45.4	45.4	45.0	44.4	43.8	43.2	
Net Debt													
World	65.7	64.9	65.1	66.6	69.3	68.8	68.2	68.0	67.6	67.3	67.1	66.6	
Advanced Economies	76.6	75.8	75.6	75.6	77.3	76.6	75.2	74.8	74.2	73.9	73.6	73.0	
United States ¹	80.4	81.2	80.7	80.4	81.4	82.9	81.9	83.0	84.5	86.2	88.1	89.6	
Euro Area	72.2	74.5	74.9	73.7	73.2	71.1	69.2	67.5	65.6	63.5	61.4	59.2	
France	80.6	83.5	86.1	86.9	87.7	87.8	87.5	87.5	86.4	84.8	82.8	80.2	
Germany	58.4	57.4	54.0	51.0	48.3	45.0	41.5	38.2	35.4	32.7	30.2	27.9	
Italy	111.6	116.7	118.8	119.5	120.2	119.9	118.5	116.5	114.1	111.6	109.0	106.5	
Spain	71.8	81.1	85.5	85.7	86.5	86.2	85.4	84.5	83.6	82.9	82.3	81.7	
Japan	146.7	146.4	148.5	147.6	152.8	153.0	152.6	150.8	148.9	148.1	147.4	146.3	
United Kingdom	76.0	77.2	79.1	79.6	79.1	78.1	77.5	77.3	76.6	76.0	75.2	74.1	
Canada ¹	28.3	29.3	28.0	27.7	28.5	28.8	27.8	27.0	26.1	25.3	24.6	23.9	
Emerging Market and Middle-Income Economies	22.5	22.6	23.9	28.4	34.5	35.9	38.2	39.7	40.9	41.9	42.6	43.2	
Asia	...	...	...	...	...	...	...	...	...	...	...	...
Europe	32.0	31.6	29.6	28.7	31.8	30.8	31.3	31.4	31.3	31.1	31.0	31.3	
Latin America	29.4	29.4	31.9	35.2	40.9	43.4	45.2	47.3	49.3	50.9	52.2	53.0	
MENAP	-3.2	-4.0	-0.7	15.2	28.6	29.0	34.7	37.0	38.2	39.6	40.3	41.3	
Low-Income Developing Countries	...	...	...	...	...	...	...	...	...	...	...	...

Source: IMF staff estimates and projections.

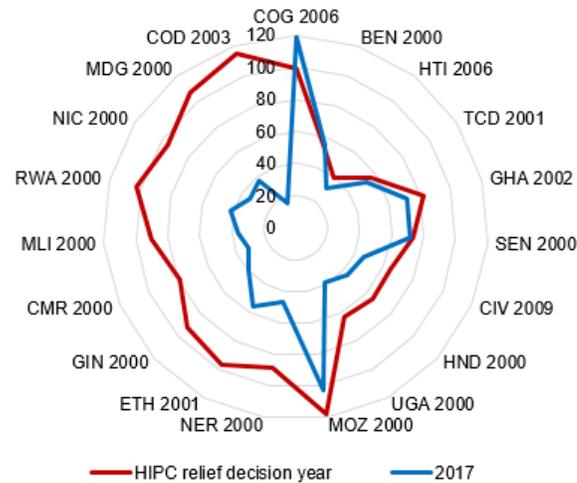
Note: All fiscal data country averages are weighted by nominal GDP converted to US dollars at average market exchange rates in the years indicated and based on data availability. In many countries, 2017 data are still preliminary. Projections are based on IMF staff assessments of current policies. For country-specific details, see Data and Conventions and Tables A, B, C, and D in the Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan.

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

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

Figure 1.7. General Government Debt in Countries that Received Debt Relief Under the Highly Indebted Poor Countries Initiative (Percent of GDP)

In a number of countries, debt-to-GDP is close to the level when debt relief was previously determined.



Sources: IMF (2017a) and IMF staff estimates.

Note: Decision year refers to the date when the executive boards of the IMF and the World Bank formally determined the country's eligibility for debt relief, and the international community committed to reducing debt to a level considered sustainable. Data labels in the figure use International Organization for Standardization (ISO) country codes.

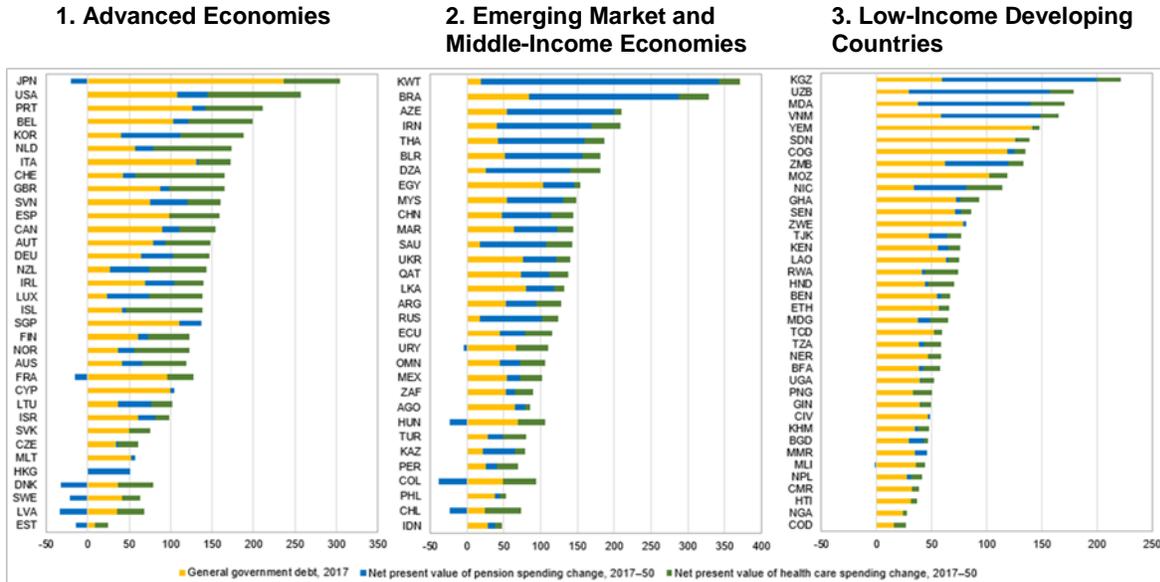
9. Debt ratios are considerably higher when including implicit liabilities linked to pension and health care spending. In this case, the average debt-to-GDP ratio doubles to 204 percent among advanced economies, 112 percent among emerging market and middle-income economies, and 80 percent among low-income developing countries (Figure 1.8).

10. Even with favorable global financing conditions, higher debt ratios are pushing up the interest burden, especially among low-income developing countries. Figure 1.9 shows that interest payments in 2017 among this group of countries reached about 18 percent of tax revenue and 10 percent of total expenditure, double the burden 10 years earlier. This is approaching the historic peaks reached in the early 2000s, when debt-to-GDP ratios were at all-time highs before HIPC debt relief. Some countries (Ghana, Nigeria) have seen the interest to tax revenue ratio climb to more than 30 percent in 2017.¹⁷

¹⁷ For Nigeria, only the federal government is responsible for the repayment of interests on debt. Interest payments to federal government revenue is above 60 percent.

Figure 1.8. General Government Debt Including Implicit Liabilities from Pension and Health Care Spending, 2017
(Percent of GDP)

Debt-to-GDP ratios more than double when implicit liabilities linked to aging are included.

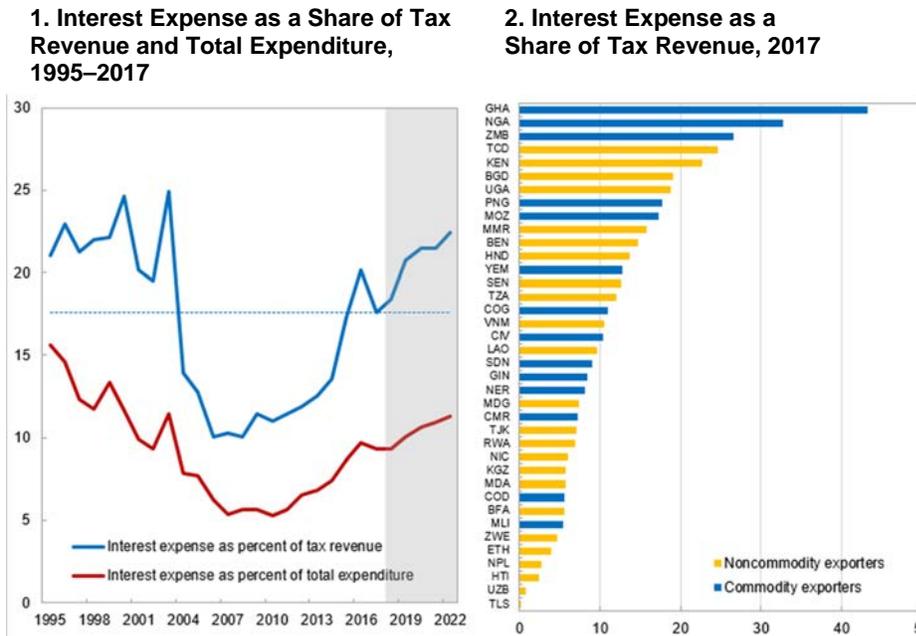


Source: IMF staff calculations.

Note: Data labels in the figure use International Organization for Standardization (ISO) country codes.

Figure 1.9. Low-Income Developing Countries: Interest Expense as a Share of Tax Revenue and Total Expenditure
(Percent)

Interest payments as a share of tax revenues have doubled in the past 10 years and are close to historic highs.



Source: IMF staff estimates.

Note: Dashed line refers to interest expense as percent of tax revenue in 2017. Data labels in the figure use International Organization for Standardization (ISO) country codes.

11. In addition to high debt ratios, the composition of debt makes many countries vulnerable to changes in financing conditions. As low-income developing countries have gained international market access and expanded domestic debt issuance to nonresidents, there has been a gradual shift to nonconcessional financing that reached 46 percent of total debt in 2016 (Figure 1.10). In addition, external borrowing from commercial creditors (including commodity traders) has grown quickly from a low base, taking various forms, including Eurobonds and syndicated loans. As discussed in IMF (2018d), recent changes in the composition of creditors and debt instruments amplify both refinancing risk—as nonconcessional debt instruments typically have shorter maturity and grace periods—and the risk of capital flow reversal—as nonresident participation in domestic debt markets could reverse suddenly. First-time and lower-rated issuers in international capital markets may be particularly vulnerable to loss of market access if financial conditions tighten suddenly. Furthermore, the share of foreign currency debt remains high at one-third of general government debt in emerging market and middle-income economies and two-thirds in low-income developing countries, which increases their exposure to exchange rate risk (Figure 1.11). In some low-income developing countries, loans to state-owned enterprises backed by future commodity exports have increased exposure to commodity price shocks.

12. With debt at historic highs, debt management becomes an important tool. Indeed, as global interest rates declined, many countries have taken the opportunity to lengthen their debt maturity structure and lock-in lower rates, which helps to mitigate somewhat rollover risk. Since 2009, average maturities have risen by 1.4 years in the case of high income countries, and close to 1 year for emerging market and developing economies (Table 1.2). This includes the growing issuance of ultra-long government bonds (more than 30 years): among OECD countries, the annual volume of ultra-long bond sales tripled (from a low base) and the number of issues doubled between 2006-2016 (OECD 2017).¹⁸ In some countries, policymakers have chosen not to aggressively raise the average maturity to avoid putting too much upward pressure on long-term rates for the private sector and also to take advantage of negative bond yields at the shorter-end of the yield curve. Furthermore, some emerging market economies have significantly deepened local bond markets, reducing the potential risk of capital-flow reversals (IMF and World Bank 2017). Nonetheless, gross financing needs remain elevated, especially in several emerging market economies (Table 1.3 and Table 1.4).¹⁹

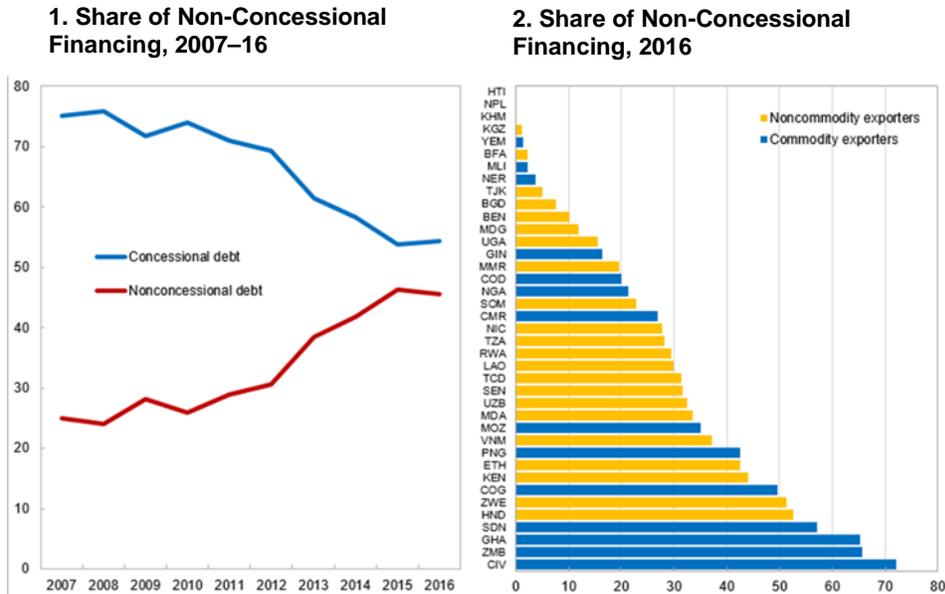
¹⁸ For example, Mexico, Belgium, and Ireland have sold 100-year “century” bonds. As of December 2016, the outstanding stock of ultra-long bonds comprised 9 percent of central government marketable debt in OECD countries. See OECD (2017).

¹⁹ The IMF's Debt Sustainability Analysis for Market Access Countries raises flags when gross financing needs exceed 20 percent of GDP for advanced economies and 15 percent of emerging market economies.

Figure 1.10. Low-Income Developing Countries: Share of Nonconcessional Financing

(Percent of total public and publicly guaranteed debt)

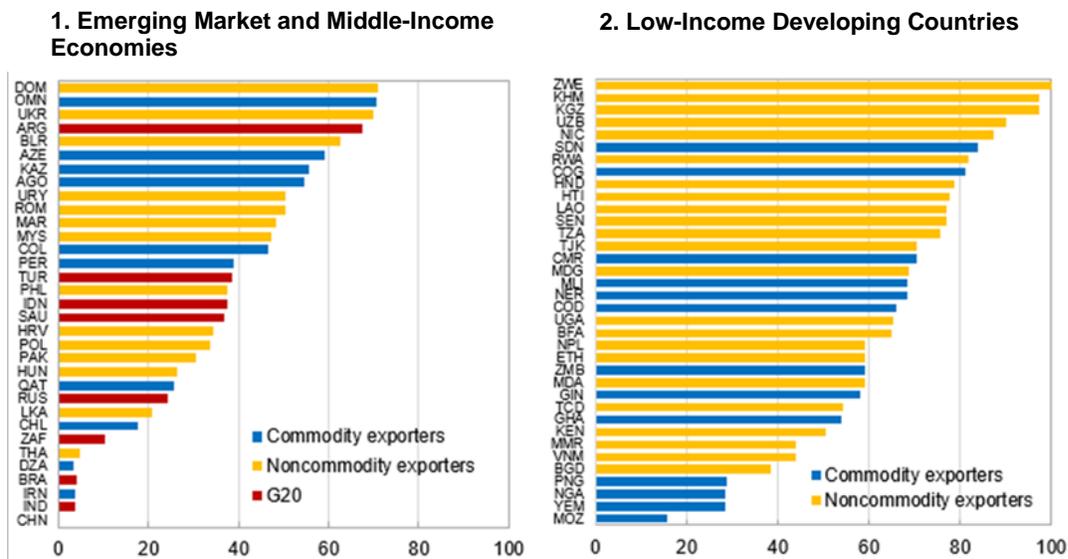
Low-income developing countries are increasingly relying on nonconcessional debt.



Sources: World Bank; International Debt Statistics; and IMF staff calculations.
 Note: Data labels in the figure use International Organization for Standardization (ISO) country codes.

Figure 1.11. Foreign-Currency-Denominated General Government Debt, 2017
 (Percent of total debt)

Exposure to foreign-currency-denominated debt remains elevated.



Sources: IMF, Government Finance Statistics; and IMF staff calculations.
 Note: Data labels in the figure use International Organization for Standardization (ISO) country codes.

Table 1.2. Average Term to Maturity of Outstanding Debt
(Number of Years)

	2009		2017	
	Weighted ATM	Median	Weighted ATM	Median
High Income	5.8	5.6	7.2	7.3
Upper Middle Income	5.7	5.8	6.6	6.9
Lower Middle Income	7.3	5.5	8.3	7.3
Market Access	5.8	5.6	7.1	7.1

Sources: Bloomberg Finance L.P.; IMF, *World Economic Outlook*; and IMF staff estimate.

Note: Weighted ATM is calculated using total debt from the World Economic Outlook database. Table includes only countries with market access. ATM = average term to maturity.

Table 1.3. Selected Advanced Economies: Gross Financing Need, 2018–20
(Percent of GDP)

	2018			2019			2020		
	Maturing Debt	Budget Deficit	Total Financing Need	Maturing Debt ¹	Budget Deficit	Total Financing Need	Maturing Debt ¹	Budget Deficit	Total Financing Need
Australia	1.6	1.7	3.3	2.3	1.1	3.3	3.1	0.1	3.2
Austria	5.9	0.3	6.2	7.2	0.2	7.4	5.4	0.2	5.6
Belgium	17.0	1.3	18.3	16.7	1.3	18.0	16.4	1.3	17.6
Canada	8.5	0.8	9.4	10.2	0.8	11.0	8.4	0.7	9.1
Czech Republic	5.3	-1.1	4.2	5.2	-1.0	4.2	3.8	-0.5	3.3
Denmark	4.0	0.8	4.8	5.0	0.5	5.5	2.7	0.3	3.1
Finland	6.3	1.4	7.7	6.6	0.9	7.4	8.6	0.2	8.8
France	10.4	2.7	13.1	11.5	3.2	14.6	11.8	2.0	13.8
Germany	5.0	-1.4	3.6	4.3	-1.5	2.8	3.4	-1.5	1.9
Iceland	3.2	-1.2	1.9	2.9	-1.1	1.8	3.9	-1.2	2.7
Ireland	6.6	0.2	6.8	7.3	0.2	7.5	8.5	-0.1	8.4
Italy	20.6	1.6	22.2	21.2	0.9	22.1	20.8	0.3	21.1
Japan	37.2	3.4	40.7	36.8	2.8	39.6	32.4	2.2	34.6
Korea	2.6	-2.0	0.6	2.6	-1.9	0.6	2.9	-1.8	1.1
Lithuania	6.9	-0.7	6.2	3.4	-0.8	2.6	3.5	-0.9	2.6
Malta	4.7	-1.6	3.2	4.8	-1.1	3.7	4.7	-0.7	4.0
Netherlands	7.4	-0.6	6.8	6.0	-0.7	5.3	5.8	-0.8	5.0
New Zealand	1.4	-1.1	0.3	5.1	-1.1	4.0	3.5	-2.0	1.5
Portugal	12.7	1.0	13.7	13.7	0.9	14.6	12.8	0.8	13.7
Slovak Republic	7.5	0.9	8.4	4.1	0.4	4.5	2.3	0.2	2.5
Slovenia	5.2	0.0	5.2	6.1	0.3	6.4	4.2	0.4	4.6
Spain ²	15.9	2.5	18.4	14.5	2.1	16.6	14.4	2.1	16.5
Sweden	4.1	-1.1	3.0	5.4	-0.7	4.7	4.8	-0.6	4.2
Switzerland	2.1	-0.4	1.6	1.9	-0.4	1.5	1.6	-0.3	1.3
United Kingdom	6.7	1.9	8.5	8.3	1.6	9.9	7.5	1.4	8.8
United States ³	18.7	5.0	23.7	18.1	5.6	23.7	15.3	5.2	20.6
Average	15.5	2.7	18.3	15.4	2.8	18.2	13.5	2.5	16.0

Sources: Bloomberg Finance L.P.; and IMF staff estimates and projections.

Note: For most countries, data on maturing debt refer to central government securities. For some countries, general government deficits are reported on an accrual basis. For country-specific details, see "Data and Conventions", and Table B.

¹ Assumes that short-term debt outstanding in 2018 and 2019 will be refinanced with new short-term debt that will mature in 2019 and 2020, respectively.

Countries projected to have budget deficits in 2018 or 2019 are assumed to issue new debt based on the maturity structure of debt outstanding at the end of 2017.

² Data refer to the general government on a consolidated basis.

³ For cross-country comparability, expenditure and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditures under the 2008 System of National Accounts (2008 SNA) adopted by the United States, but not in countries that have not yet adopted the 2008 SNA. Data for the United States in this table may thus differ from data published by the U.S. Bureau of Economic Analysis.

Table 1.4. Selected Emerging Market and Middle-Income Economies: Gross Financing Need, 2018–19
(Percent of GDP)

	2018			2019		
	Maturing Debt	Budget Deficit	Total Financing Need	Maturing Debt	Budget Deficit	Total Financing Need
Argentina	8.9	5.6	14.5	6.3	4.9	11.2
Brazil	5.7	9.4	15.1	8.6	9.0	17.5
Chile	0.9	1.0	1.9	0.7	0.6	1.3
Colombia	2.1	2.7	4.8	2.0	2.1	4.1
Croatia	11.0	0.5	11.6	...	0.3	...
Dominican Republic	6.8	3.0	9.8	7.3	3.2	10.5
Ecuador	11.3	5.0	16.3	10.2	3.7	13.9
Egypt	24.9	10.0	34.9	20.7	6.6	27.4
Hungary	16.3	2.1	18.4	16.0	1.9	17.9
India	3.9	6.7	10.6	...	6.5	...
Indonesia	2.0	2.5	4.5	1.8	2.5	4.3
Malaysia	7.7	2.7	10.4	6.8	2.5	9.3
Mexico	4.6	2.5	7.1	7.2	2.5	9.7
Morocco	7.5	3.0	10.4	6.1	2.8	9.0
Pakistan	28.8	5.3	34.1	30.5	5.7	36.1
Peru	1.9	3.4	5.3	1.9	2.8	4.7
Philippines	4.2	0.5	4.6	4.5	0.6	5.2
Poland	5.6	1.9	7.5	6.0	1.8	7.8
Romania	5.0	3.5	8.5	4.4	3.4	7.8
Russia	1.3	0.0	1.3	1.4	-0.1	1.3
South Africa	8.5	4.2	12.7	9.0	4.1	13.1
Sri Lanka	14.0	4.5	18.5	13.1	3.6	16.8
Thailand	5.0	1.0	6.5	5.3	1.1	6.6
Turkey	3.5	2.9	6.5	3.9	3.2	7.1
Ukraine	5.4	2.5	7.9	6.2	2.7	8.9
Uruguay ¹	9.7	2.9	12.6	12.1	2.5	14.6
Average	5.4	4.3	9.7	5.1	4.1	8.0

Source: IMF staff estimates and projections.

Note: Data in the table refer to general government data. For some countries, general government deficits are reported on an accrual basis. For country-specific details, see "Data and Conventions", and Table C.

¹ Data are for the consolidated public sector, which includes the nonfinancial public sector (as presented in the authorities' budget documentation), local governments, Banco Central del Uruguay, and Banco de Seguros del Estado.

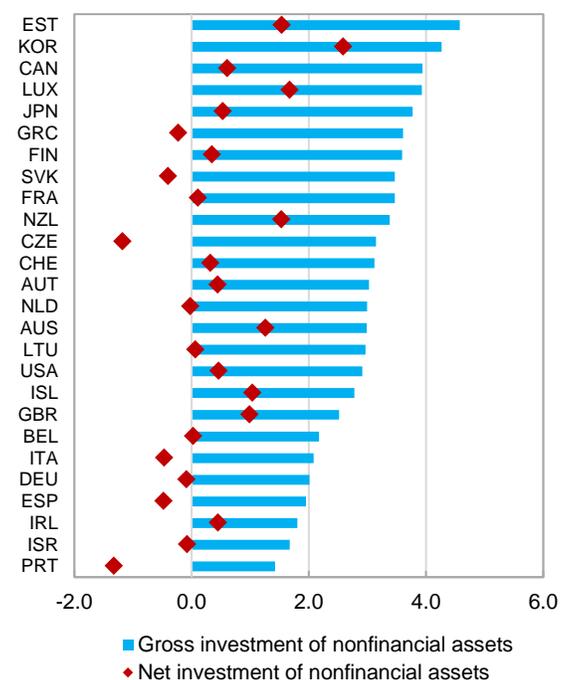
Advanced economies: Resting on laurels

13. The fiscal stance among advanced economies was mildly expansionary in 2017, but overall fiscal balances remained nearly unchanged because of cyclical improvements linked to higher growth and lower unemployment. Structural primary deficits expanded by 0.2 percent of potential GDP on average in 2017, mainly reflecting higher current spending in the United States and higher capital spending in Canada and Japan. Of note, however, capital spending has been insufficient to offset depreciation in several cases (Figure 1.12). Meanwhile, overall deficits remained broadly unchanged at 2.6 percent of GDP on average (Table 1.5). Cyclical factors helped contain overall deficits by reducing spending and increasing revenues through automatic stabilizers (Figure 1.13). In many countries, social benefit outlays declined as unemployment rates receded (Denmark, Finland, the Netherlands, Norway, Slovenia). On the revenue side, improvements in some countries largely reflected cyclical gains in tax collection. In the case of Germany and the Netherlands, revenues from income taxes increased by 0.3 percentage points of GDP in 2017, reaching levels not seen in the past 20 years. In Australia, France, and Korea, income tax revenues reached the highest levels since 2007.

14. Taking a longer view, overall deficits have been falling since 2012 through a combination of policy action, cyclical gains, and lower interest payments, although less so since 2014. Spending has declined by 1.6 percent of GDP on average since 2012, mainly because of reductions in interest payments (France, Germany, Italy), compensation of employees as a share of GDP (Cyprus, Finland, Spain), and other current spending items (Figure 1.14). Investment spending has also continued to fall on average since 2012, particularly in the United Kingdom and the United States. However, the magnitude of the decline was smaller than during 2010–12, and some countries have made efforts to expand investment to support growth (Greece, Norway). Social benefits have remained roughly stable. Nonetheless, in some cases lower unemployment benefits have been more than offset by discretionary increases in health care spending (Germany, United States), and increases in pension outlays (France, Italy). Revenues as a share of GDP have improved by 0.7 percentage points on average, largely reflecting cyclical gains in taxes and social security contributions, especially in 2017.

Figure 1.12. Advanced Economies: General Government Net and Gross Investment in Nonfinancial Assets, 2016 or Latest (Percent of GDP)

In several countries, investment spending has been insufficient to offset depreciation.



Sources: IMF, *Government Finance Statistics*; and IMF staff estimates. Note: Data labels in the figure use International Organization for Standardization (ISO) country codes. Net investment in nonfinancial assets = gross investment in nonfinancial assets minus depreciation.

Table 1.5. General Government Fiscal Balance, 2012–23: Overall Balance
(Percent of GDP)

	2012	2013	2014	2015	2016	2017	Projections					
							2018	2019	2020	2021	2022	2023
World	-3.7	-2.9	-2.9	-3.3	-3.5	-3.3	-3.2	-3.2	-3.0	-2.9	-2.9	-2.7
Advanced Economies	-5.5	-3.7	-3.1	-2.6	-2.7	-2.6	-2.6	-2.7	-2.3	-2.2	-2.2	-1.9
United States ¹	-7.9	-4.4	-4.0	-3.5	-4.4	-4.6	-5.0	-5.6	-5.2	-5.2	-5.1	-4.6
Euro Area	-3.6	-3.0	-2.6	-2.1	-1.5	-1.0	-0.8	-0.7	-0.3	-0.1	0.0	0.2
France	-4.8	-4.0	-3.9	-3.6	-3.4	-2.9	-2.7	-3.2	-2.0	-1.4	-1.0	-0.3
Germany	0.0	-0.1	0.3	0.6	0.8	1.1	1.4	1.5	1.5	1.4	1.3	1.2
Italy	-2.9	-2.9	-3.0	-2.6	-2.5	-1.9	-1.6	-0.9	-0.3	0.0	0.0	0.0
Spain ²	-10.5	-7.0	-6.0	-5.3	-4.5	-3.1	-2.5	-2.1	-2.1	-2.1	-2.2	-2.2
Japan	-8.6	-7.9	-5.6	-3.8	-3.7	-4.2	-3.4	-2.8	-2.2	-2.1	-2.0	-2.0
United Kingdom	-7.6	-5.4	-5.4	-4.3	-3.0	-2.3	-1.9	-1.6	-1.4	-1.2	-0.8	-0.7
Canada	-2.5	-1.5	0.2	-0.1	-1.1	-1.0	-0.8	-0.8	-0.7	-0.7	-0.7	-0.7
Others	0.5	0.2	0.2	0.1	0.6	1.0	0.6	0.6	0.8	0.9	0.9	0.9
Emerging Market and Middle-Income Economies	-1.0	-1.5	-2.4	-4.4	-4.8	-4.5	-4.2	-4.1	-4.0	-3.9	-3.9	-3.8
Excluding MENAP Oil Producers	-2.0	-2.3	-2.7	-4.1	-4.4	-4.4	-4.3	-4.2	-4.1	-4.0	-4.0	-3.9
Asia	-1.6	-1.8	-1.9	-3.2	-3.9	-4.2	-4.3	-4.3	-4.3	-4.3	-4.4	-4.3
China	-0.3	-0.8	-0.9	-2.8	-3.7	-4.0	-4.1	-4.3	-4.3	-4.3	-4.4	-4.3
India	-7.5	-7.0	-7.2	-7.0	-6.7	-7.2	-6.7	-6.5	-6.4	-6.2	-6.1	-5.9
Europe	-0.7	-1.5	-1.4	-2.7	-3.0	-2.0	-1.4	-1.4	-1.2	-1.0	-1.0	-1.0
Russia	0.4	-1.2	-1.1	-3.4	-3.7	-1.5	0.0	0.1	0.3	0.5	0.5	0.5
Latin America	-3.1	-3.3	-4.8	-7.2	-6.6	-6.4	-6.3	-5.8	-5.3	-4.9	-4.7	-4.5
Brazil	-2.5	-3.0	-5.4	-10.3	-9.0	-7.8	-9.4	-9.0	-8.3	-7.7	-7.2	-6.7
Mexico	-3.7	-3.7	-4.5	-4.0	-2.8	-1.1	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
MENAP	5.7	4.0	-1.4	-8.4	-9.3	-5.8	-4.6	-3.4	-3.3	-3.2	-2.9	-2.9
Saudi Arabia	11.9	5.6	-3.5	-15.8	-17.2	-9.0	-7.3	-5.6	-5.3	-5.0	-4.4	-4.0
South Africa	-4.4	-4.3	-4.3	-4.8	-4.1	-4.5	-4.2	-4.1	-4.1	-4.0	-4.1	-4.1
Low-Income Developing Countries	-1.7	-3.3	-3.2	-4.0	-4.2	-4.2	-4.2	-4.0	-3.7	-3.6	-3.4	-3.3
Nigeria	0.2	-2.3	-2.1	-3.5	-3.9	-5.8	-4.8	-4.6	-4.2	-4.3	-4.2	-4.2
Oil Producers	1.5	0.4	-1.2	-4.5	-4.9	-3.3	-2.2	-1.8	-1.7	-1.7	-1.6	-1.6
Memorandum												
World Output (percent)	3.5	3.5	3.6	3.5	3.2	3.7	3.9	3.9	3.8	3.7	3.7	3.7

Source: IMF staff estimates and projections.

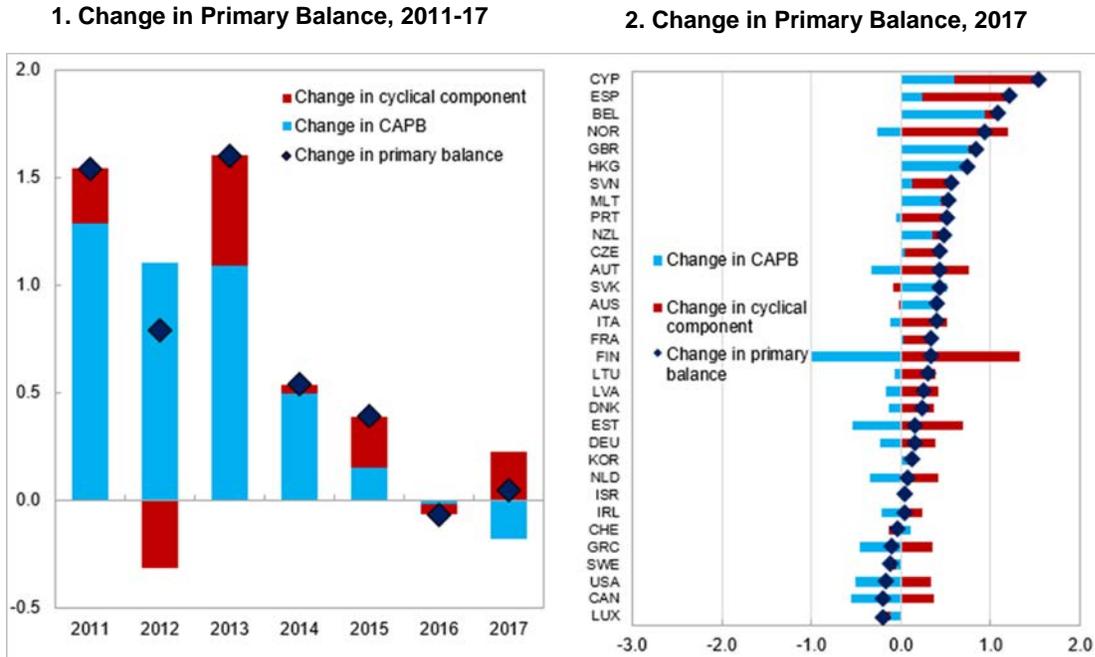
Note: All fiscal data country averages are weighted by nominal GDP converted to US dollars at average market exchange rates in the years indicated and based on data availability. Projections are based on IMF staff assessments of current policies. In many countries, 2017 data are still preliminary. For country-specific details, see Data and Conventions and Tables A, B, C, and D in the Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan.

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

² Including financial sector support.

Figure 1.13. Advanced Economies: Change in Primary Balance (Percent of GDP)

Cyclical momentum helped countries stabilize their primary balances despite a slight fiscal expansion in 2017.

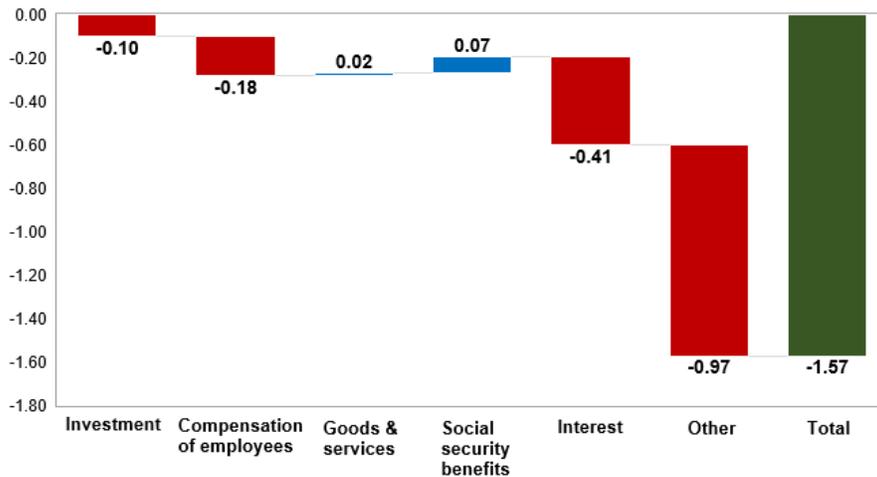


Source: IMF staff estimates.

Note: Cyclical component refers to improvements in the primary balance driven by automatic stabilizers that react to changes in output growth and employment (for example tax payments that move in sync with income, and social transfers, such as unemployment benefits). Negative change in CAPB denotes fiscal expansion. Data labels in the figure use International Organization for Standardization (ISO) country codes. CAPB = cyclically adjusted primary balance as percent of GDP.

Figure 1.14. Advanced Economies: Change in Total Expenditure, 2012–17 (Percent of GDP)

Investment spending has not been spared from cuts.



Sources: IMF, *World Economic Outlook*; and IMF staff estimates. Other spending includes subsidies and grants. Note: 2012 weights were used to calculate averages for 2012–17.

15. The fiscal stance is expected to remain broadly neutral in 2018 and mildly expansionary in 2019, followed by a gradual adjustment in outer years. Debt is set to decline only marginally, to around 100 percent of GDP by 2023. The small reduction in debt is achieved mainly thanks to higher projected inflation (from low levels), in the context of continued low nominal interest rates (particularly in the euro area and Japan) and despite an expected tapering of real GDP growth. Several countries intend to remain expansionary in the near-term (United States, Germany), some plan to implement a gradual consolidation (France, Japan, United Kingdom, Spain), while a few countries expect to follow a neutral stance in 2018, resuming consolidation in later years (Canada, Italy) (see Table 1.6).

Table 1.6. Selected Advanced Economies: Fiscal Stance for 2018 and the Medium-Term

Canada	After expanding significantly over the past two years, Canada is expected to take a broadly neutral stance in 2018, while the authorities are committed to implementing the long-term infrastructure investment plan, complemented with an “Innovation and Skills” plan.
France	The draft multi-year budget aims to reduce the annual real spending growth gradually to close to zero by 2022, so as to bring the overall deficit to 1.5 percent of GDP by 2020. Specific spending reforms to achieve this objective are yet to be defined. At the same time, the authorities are reducing the corporate tax rate and implementing structural and tax reforms that support employment, including conversion of an existing tax credit into a permanent tax cut in 2019. They also plan to replace the wealth tax with a less distortionary tax on real estate.
Germany	The draft budget for 2018 envisages a mild expansion through a revision of tax brackets and more generous child-related tax credits, together with higher social benefits. Following the expansion, structural primary balances would remain unchanged over the medium-term.
Italy	Plans for an increase in VAT rates in 2018 have been cancelled and fiscal policy is expected to remain broadly neutral.
Japan	A supplementary budget amounting to 0.5 percent of GDP was adopted, which would partly offset a fiscal contraction resulting from the expiration of a previous fiscal stimulus package in 2018. Plans for a consumption tax hike in 2019—delayed from 2017—remain unchanged. Part of the revenue increase would be used for childcare support and education.
Spain	The authorities envisage a gradual consolidation through expenditure restraint, to bring the overall deficit to 0.5 by 2020, although a medium-term fiscal plan with concrete measures has yet to emerge.
United Kingdom	Fiscal consolidation is projected to proceed at a gradual pace that accommodates a more subdued growth outlook, with the objective of bringing the cyclically-adjusted public sector net borrowing below 2 percent of GDP and putting debt to GDP on a declining path in 2020/21. The consolidation plans include cuts to welfare and current spending, with the exception of defense, education, and health.
United States	The increase in spending authority by US\$150 billion (0.7 percent of GDP) per year for the next two years, and lower corporate and personal income tax rates will give rise to overall deficits in excess of US\$1 trillion over the next 3 years (5 percent of GDP), and debt is projected to increase to 115 percent of GDP by 2023. Part of the expansion would be unwound in 2023 when the provisions on the personal income tax (PIT) are set to expire.

Source: IMF staff's estimate.

16. The fiscal outlook for the United States is driving the average for advanced economies. Following two years of fiscal expansion in the United States in 2016–17, the revised tax code and the two-year budget agreement provide an additional expansionary fiscal impulse until 2019. The increase in spending authority by US\$150 billion (0.7 percent of GDP) per year for the next two years, and lower corporate and personal income tax rates will give rise to overall deficits in excess of US\$1 trillion over the next 3 years (5 percent of GDP), and debt is projected to increase to 115 percent of GDP by 2023. Part of the expansion would be unwound in 2023 when the provisions on the personal income tax (PIT) are set to expire. The stimulus will strengthen near-term growth in the United States with some short-term positive spillovers on trading partners' growth (see Chapter 1 of the April 2018 WEO). Box 1.2 provides a stylized illustration of the distributional effects of certain aspects of the reform using a dynamic general equilibrium model. The estimates show that all income groups would benefit from the reform as tax cuts raise the profitability of businesses, which increases demand for labor and hence wages. Those in the top quintile of the income distribution would gain the most, followed by those in the lower quintile. However, because the increase in consumption for the middle is substantially outpaced by increases at the top and bottom of the distribution, the reform may contribute further to the hollowing out of the middle of the income distribution. These results contrast with static analyses, which show lower-income households gaining the least from the reform. Furthermore, the US tax reform includes several innovative international provisions that will likely deepen the debate on the future of the international tax system (Box 1.3).

Emerging market and middle-income economies: Progress, but not enough

17. Overall fiscal deficits in emerging markets and middle-income economies fell marginally in 2017 for the first time after four years of steady increase, explained mainly by fiscal adjustment among commodity exporters. On average, the overall deficit declined from 4.8 percent of GDP in 2016 to 4.5 percent of GDP in 2017, with diverging fiscal developments across countries. Commodity exporters have continued to push through reform to adjust to “lower for longer” oil prices. The headline fiscal balances improved in most commodity exporters, supported by a pick-up in commodity prices and by expenditure cuts (Russia, Mexico, Gulf Cooperation Council members). In contrast, the fiscal position was relaxed in major noncommodity exporters, including to provide stimulus to the economy (China, India, Thailand, Turkey). The average trend among emerging market and middle-income economies is largely driven by rising fiscal deficits in China, which are higher when off-budget spending is also taken into account (Box 1.4). In contrast, fiscal consolidation in Brazil continued in 2017 (see Table 1.7).

Table 1.7. Selected Emerging Market and Middle-Income Economies: Fiscal Developments in 2017

Brazil	Fiscal consolidation continued in 2017—supported by a recovery of revenues, containment in discretionary expenditure, and lower interest on debt—with the overall deficit declining from 9.0 to 7.8 percent of GDP.
China	The on-budget deficit continued to rise to 4 percent of GDP in 2017. Stimulus measures included reforms to reduce multiple VAT rates and tax cuts for some small enterprises that more than offset on-budget investment spending cuts.
India	Fiscal consolidation was interrupted in fiscal year 2017/18 at the federal level. Relatively buoyant revenues supported by base-broadening efforts and lower capital expenditures were offset by higher spending (including higher compensation to states for the roll-out of the new goods and service tax) and lower profit transfers from the Reserve Bank of India due to costs incurred during the demonetization.
Indonesia	While the overall deficit remained at 2.5 percent of GDP in 2017, spending was rebalanced towards education, health, and social protection, and efficiency improved, particularly the targeting of energy subsidies.
Mexico	The overall deficit was cut to 1.1 percent of GDP in 2017, helped by a contraction in capital spending, a continued reduction in the wage bill, and a one-off transfer from the central bank.
Russia	The overall deficit is projected to have fallen by over 2 percentage points to 1.5 percent of GDP in 2017, mainly through a nominal spending freeze and temporary revenue measures, supported by higher oil prices.
Saudi Arabia	The overall deficit was reduced from over 17 percent of GDP in 2016 to 9 percent in 2017. This was driven by a combination of key non-oil revenue measures—such as the introduction of excises on tobacco and beverages, increased fees on expatriate labor, and savings from energy price reforms—and spending cuts of close to 2.5 percent of GDP largely in capital expenditures.
Thailand	The overall balance of the public sector weakened by slightly over 1 percent of GDP as sales of licenses and income tax revenues declined.

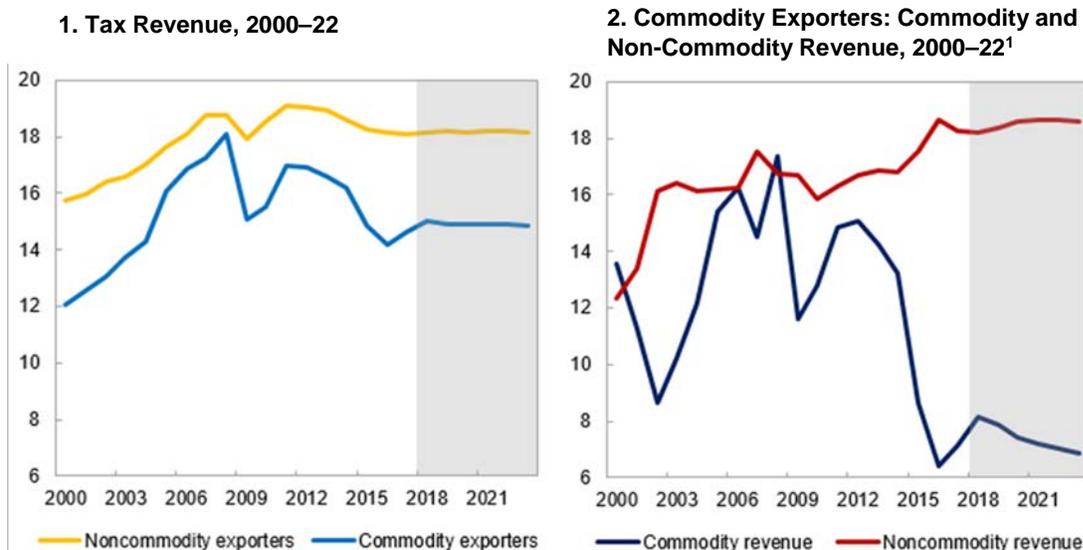
Source: IMF staff's estimate.

18. Developments in 2017 did little to reverse the revenue and spending trends over the past five years. Tax to GDP ratios have been declining, whereas spending rigidities have crowded out investment. Tax revenues have fallen by 1.1 percentage points of GDP among noncommodity exporters, in some cases linked to stimulus measures (China, Turkey) and in others due to cyclical considerations. For commodity exporters, tax revenues have also been declining, in some cases because of lower corporate income tax (CIT) collection from oil companies (Figure 1.15). Although noncommodity revenues have held their ground supported by recent reforms (Mexico, Saudi Arabia), in many cases the improvement has not been enough to offset the earlier decline in commodity revenues. Of note, 40 percent of emerging market and middle-

income economies continue to have tax to GDP ratios below 15 percent.²⁰ Meanwhile, all expenditure categories have been rising as a share of GDP on average across all countries, with the exception of investment spending that remained flat (Figure 1.16).

Figure 1.15. Emerging Market and Middle-Income Economies: General Government Revenue
(Percent of GDP)

Tax revenue to GDP has been falling since 2012, although recent reforms by commodity exporters have lifted noncommodity revenues.



Sources: IMF staff estimates.

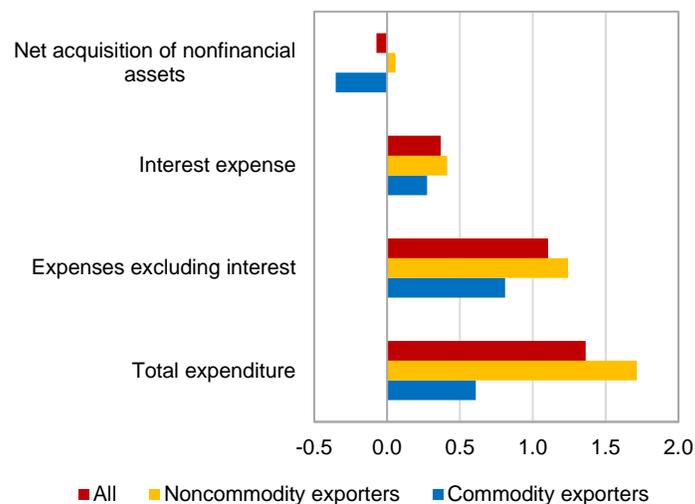
Note:

¹ Algeria, Angola, Argentina, Chile, Colombia, Ecuador, Indonesia, Iran, Kuwait, Malaysia, Mexico, Oman, Peru, Qatar, Russia, Saudi Arabia, United Arab Emirates, Venezuela.

²⁰ Gaspar, Jaramillo Mayor, and Wingender (2016) provide empirical evidence that once the tax-to-GDP level exceeds 12¾ percent, real GDP per capita increases sharply and in a sustained manner over several years.

Figure 1.16. Emerging Market and Middle-Income Economies: Change in Expenditure Categories, 2012–17
(Percent of GDP)

The composition of spending has shifted away from investment to wages, transfers, and social assistance.



Sources: IMF staff estimates.

Note: 2012 weights were used to calculate averages for 2012–17.

19. For 2018 and over the medium term, spending restraint is expected to keep deficits in check. Countries aim to contain current expenditure growth below nominal GDP growth, including the wage bill. Investment spending is expected to increase slightly for noncommodity exporters, but to continue contracting for commodity exporters. Meanwhile, total revenues are expected to decline slightly in the forecast period, as the small improvement in tax revenue (less than ½ percent of GDP) is not enough to offset the continued deterioration in nontax revenue driven by the expected moderation in oil prices. It is important to note that the expected improvement in overall balances will be insufficient to stabilize debt. Commodity exporters are expected to continue reducing their overall deficits (Gulf Cooperation Council members, Mexico, Russia). Several noncommodity exporters are also expected to adjust over the medium term (Brazil, India), while some countries do not envisage adjustment (China, Thailand) (see Table 1.8).

Table 1.8. Selected Emerging Market and Middle-Income Economies: Fiscal Stance in 2018 and the Medium-Term

Brazil	The fiscal rule introduced at the end of 2016—which establishes a limit on the real growth of primary spending at the federal level—will imply a primary spending reduction of about 0.5 percent of GDP per year starting in 2019. However, approval of a pension reform, which could generate savings of about 9.5 percent of GDP over the next decade, has been delayed. Debt is expected to stabilize just under 100 percent of GDP in the mid-2020s.
China	A tightening of local government spending on infrastructure investment has been announced. However, a recalibration of the economy towards consumption and reform of state-owned enterprises will leave the on-budget deficit stable at around 4 percent of GDP over the medium-term, with a moderate decline in off-budget spending.
India	Consolidation is expected to resume in FY2018/19 and after, but further measures—including to ensure smooth implementation of the new GST, reductions in fuel and food subsidies, and tax reforms—are needed to support it over the medium term.
Kuwait	Three-year rolling indicative expenditure ceilings have been set, which combined with recent revenue measures would keep the overall balance in surplus.
Mexico	A constant fiscal deficit target of 2.5 percent of GDP has been set, starting in 2018.
Russia	The 2018-20 budget targets an annual reduction of 1 percent of GDP in the overall deficit, to be achieved mostly through a continued nominal spending freeze. This adjustment aims to bring the overall deficit to balance by 2019, as mandated by the new budget rule passed in 2017 that requires a zero-primary balance at the benchmark oil price of US\$40 per barrel (in 2017 U.S. dollars).
Saudi Arabia	Fiscal consolidation will continue to be pursued to balance the budget by 2023. To support growth and redistribution, the authorities plan to raise capital spending, provide a direct targeted cash transfer to low and middle-income households, and offer support to the private sector through specialized funds in the real estate and industrial sectors.
Thailand	The fiscal balance is expected to weaken owing to a moderate boost to infrastructure expected over the coming years, and a gradual rise in public spending on health and pensions, in line with demographics.
Turkey	Fiscal expansion is expected in 2018-19. The revenue gains from the expiration of temporary tax breaks and earlier reforms to the CIT rate would be offset by recently announced VAT exemptions, continuation of minimum wage subsidies, and several new employment incentives, all of which will be effective until end-2019.

Source: IMF staff's estimate.

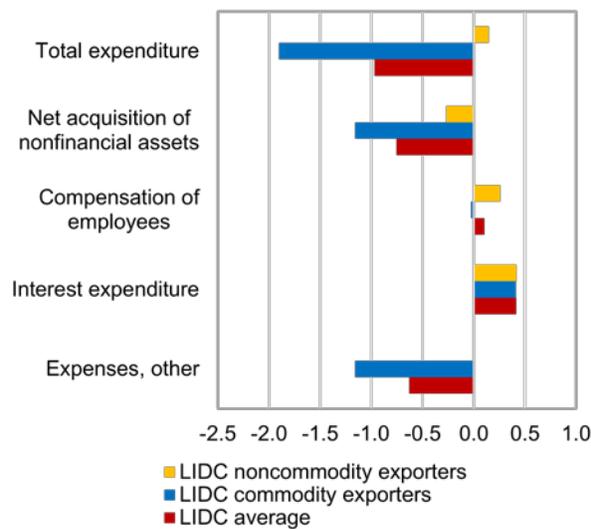
Low-Income Developing Countries: Vulnerabilities Drifting Upward

20. Overall fiscal deficits in low-income developing countries were broadly unchanged at 4.2 percent of GDP on average. Deficits continued to deteriorate among commodity exporters, notwithstanding the improvement in commodity prices during the second half of the year that raised revenue slightly. The overall deficit for noncommodity exporters remained flat, with a slight improvement in tax revenue.

21. The deterioration in fiscal balances over the past five years do not reflect a scaling up of investment. Commodity exporters have not been able to fully compensate for the fall in commodity revenues. They implemented cuts to both current and capital expenditure, whereas the public wage bill remained flat as a percent of GDP (Figure 1.17). Meanwhile, noncommodity exporters let spending drift upwards across most items, except for investment spending which remained unchanged. In some cases, higher current spending reflected increases in education spending, albeit this corresponds to a relatively small share of the spending increase (Figure 1.18). Furthermore, there has been limited progress among both commodity and noncommodity exporters in mobilizing revenues, with tax revenue to GDP ratios in half of low-income developing countries still below 15 percent (Figure 1.19).

Figure 1.17. Low-Income Developing Countries: Change in Expenditure Categories, 2012–17 (Percent of GDP)

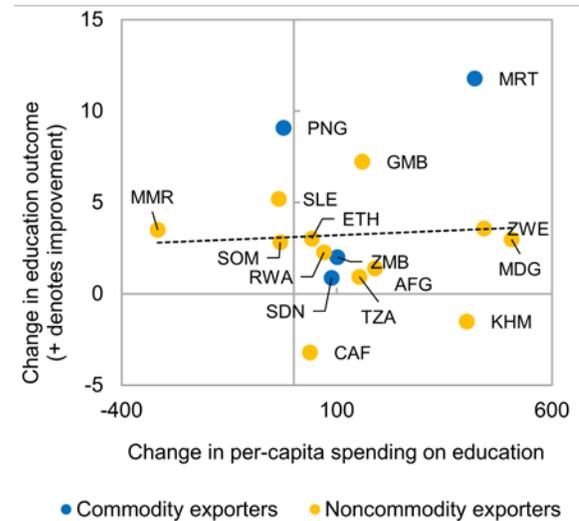
Investment has taken a hit as commodity exporters adjust to lower prices.



Sources: IMF staff estimates.
Note: 2012 weights were used to calculate averages for 2012–17.

Figure 1.18. Low-Income Developing Countries: Change in Government Secondary Education Spending and Outcome, 2012–15

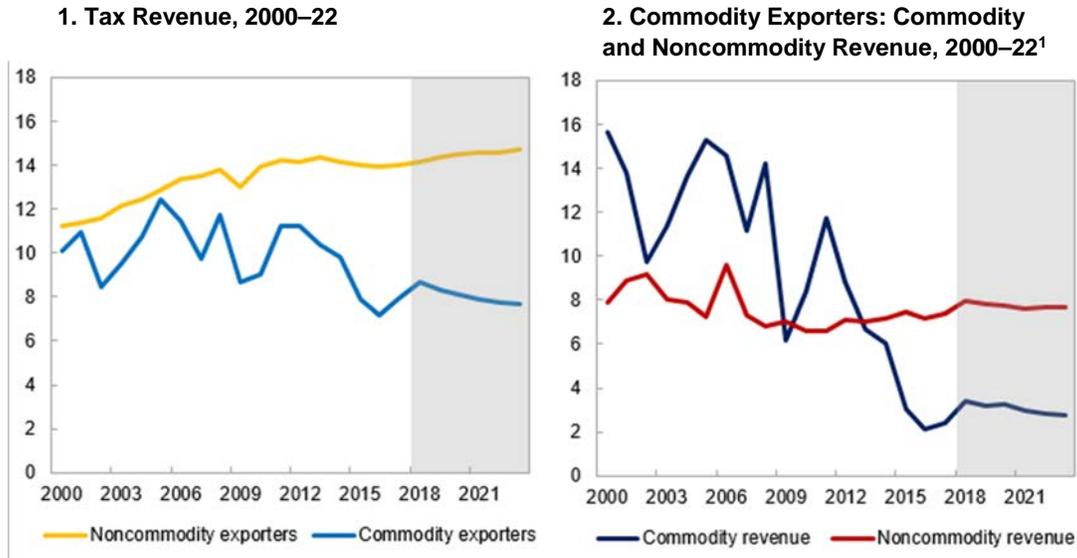
Some countries have increased spending on education.



Sources: Garcia-Escribano and Liu (2017) and IMF, Fiscal Affairs Department Expenditure Assessment Tool.
Note: Change in education outcome refers to change in net secondary school enrollment.

Figure 1.19. Low-Income Developing Countries: General Government Revenue (Percent of GDP)

Since 2012, both commodity and noncommodity exporters have made limited progress in mobilizing revenue.



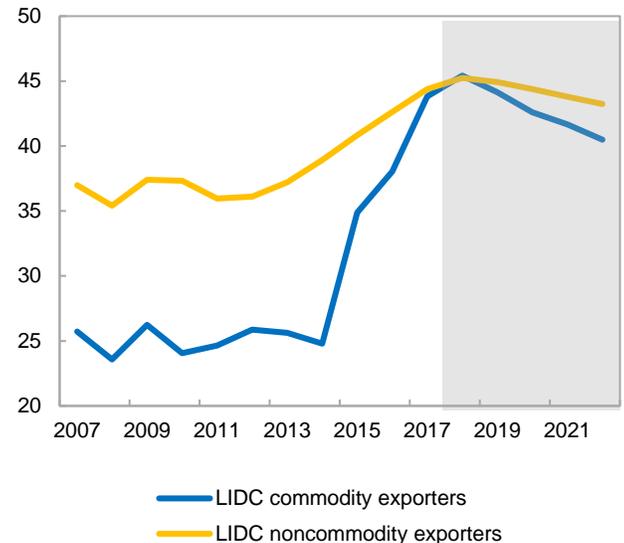
Sources: IMF staff estimates.

¹ Includes Cameroon, Republic of Congo, Côte d'Ivoire, Ghana, Guinea, Madagascar, Mali, Niger, Nigeria, Senegal, Sudan, Vietnam, Yemen, and Zambia.

22. Protracted fiscal deficits have contributed to rapidly rising debt-to-GDP ratios in recent years. Debt increased by 13 percentage points on average since 2012, to 44 percent of GDP in 2017. Debt was rising in more than two-thirds of low-income developing countries in 2017. Debt increases were highest among commodity exporters, many of which continued to rely on debt financing to cushion the effects of falling revenues (Figure 1.20). The rise in debt since 2012 was mainly driven by deteriorating primary deficits and a rising interest burdens. Other factors have also contributed in some cases, including exchange rate depreciations (Cote d'Ivoire, Senegal, Zambia), bailing out of the financial system (Moldova), and reporting of previously undisclosed debt (Mozambique, Republic of Congo). Furthermore, in 2017, eight countries were classified as in debt distress under the IMF-World Bank debt sustainability framework, almost double the number from one year

Figure 1.20. Low-Income Developing Countries: General Government Debt, 2007–23 (Percent of GDP)

Government debt-to-GDP has risen among LIDCs to unprecedented levels since the global financial crisis.



Source: IMF staff calculations.

Note: LIDC = low-income developing countries.

ago.²¹ For these countries in debt distress, the average effective interest rate has risen by around 100 basis points since 2014—considerably higher than the increment faced by other low-income developing countries—and interest payments to tax revenue ratios have risen by over 12 percentage points since 2014.

23. Spending control is expected to help bring fiscal deficits down in 2018 and over the medium term. Overall deficits would decline by close to 1 percent of GDP between 2018 and 2023, though the adjustment is expected to be significantly more ambitious in some cases (Niger, Yemen). Much of the improvements in fiscal balances reflect governments' intention to unwind previous stimulus (Kenya) and cut current administrative expenditures (Vietnam), while maintaining public investment (Ethiopia). However, several countries are forecast to have cuts in public investment over the medium term, after having expanded investment spending over the past few years. Meanwhile, medium-term revenue forecasts for commodity exporters are disappointing. While there is an expected pick up in commodity revenues in 2018, these are expected to moderate over the medium term, and little improvement is envisaged in terms of tax mobilization. In contrast, some noncommodity exporters are expected to expand their tax collection by about 1 percent of GDP or more over the next five years (Ethiopia, Uganda).

24. Debt buildup is expected to slow moderately over the medium term. The average debt ratio is projected to stabilize in 2018 at about 45 percent of GDP and then to start declining slightly. The expected stabilization of debt is driven by more favorable interest rate-growth differentials. Narrowing deficits contribute to declining debt in about one third of the countries (Cameroon, Ghana, Kenya).

Risks to the fiscal outlook

25. Risks appear broadly balanced in the near-term owing to the economic upswing. On the upside, the cyclical recovery could prove stronger and support both public and private deleveraging. Stronger demand could also result in higher than expected commodity prices, a boon for commodity exporters.

26. Nonetheless, there are a number of downside risks, particularly for the medium- and longer term. Though each is discussed separately below, it is important to keep in mind that these different shocks can be correlated and would reinforce one another, which would magnify the adverse effect on public finances and exacerbate the drag on growth.

- A sudden tightening in global financial conditions would worsen debt dynamics in several advanced, emerging and low-income developing countries (see the April 2018 GFSR and the 2015 *Spillover Report*). A faster than expected increase in global interest

²¹ The IMF-World Bank Debt Sustainability Framework for Low-Income Countries uses a statistical model based on debt stock and debt service indicators, relevant debt distress thresholds as determined by historical episodes, and tailored stress tests results to assign risk ratings (low, moderate, or high risk of debt distress, or in debt distress) for individual low-income developing countries (IMF 2017b).

rates—in response to a faster pickup in inflation in the United States for example—would add to the public debt burden, especially among countries with large gross financing needs and still low growth, and could disrupt market access. A divergence in monetary policy rates across major economies or a shift in investors’ risk appetite could lead to an appreciation of the US dollar, affecting countries with foreign currency debt. Similarly, a large depreciation or correction in asset prices could give rise to potential strains on private sector balance sheets wherever currency mismatches are prevalent, so contingent liabilities could materialize.

- Global policy uncertainty remains a key concern, and difficulties in implementing announced consolidation policies could eventually undermine market confidence in some countries, as projected economic growth alone would be insufficient to significantly bring debt ratios down. Brexit negotiations remain a key source of risk. In several advanced economies, the implementation of necessary fiscal adjustment could be delayed because of reduced political cohesion (Italy, Spain) or because of complacency given the favorable economic environment. Geopolitical risks—such as intensifying conflicts in parts of the Middle East and Africa—and a potential retreat from globalization also increases policy uncertainty.
- A slowdown in potential growth would undermine the projected reduction in debt-to-GDP ratios. It would directly raise the debt-to-GDP ratio because of a lower denominator, unless fully offset with lower effective interest rates. It would further add to debt because of weaker primary balances unless expenditure growth is also curtailed.
- There is also uncertainty with respect to movements in oil prices. While oil prices are projected to rise modestly, they could fall if, for example, cohesion of the cartel among oil producers weakened or oil production in Africa were to recover. Oil exporters would see a significant drop in revenues, putting pressure on fiscal balances. In countries where fuel prices are administered by the government, a decrease in oil prices would lead to lower subsidies and thus support the fiscal position.
- For the long term, demographic changes and ageing populations pose a challenge. A shrinking labor force in some advanced economies will create headwinds to potential growth (Germany, Korea, Japan), and the fiscal cost of retirement benefits and age-related health expenditures could put the sustainability of current policies at risk (Korea, United States).²²

²² See Clements and others (2015), Amaglobeli, Chai, and others (2018), and CBO (2017).

III. CAPITALIZING ON GOOD TIMES

Enhancing Resilience

27. The ongoing recovery presents a golden opportunity to focus fiscal policy on rebuilding buffers and raising potential growth. Forecasts indicate that economic activity will continue to accelerate, which implies that fiscal stimulus to support demand is no longer a priority in most countries. Governments should avoid the temptation of spending the revenue windfalls during good times. Starting to rebuild buffers now will ensure that policymakers have sufficient fiscal ammunition to respond in case of a downturn and prevent fiscal vulnerabilities themselves from hurting the economy. There is some uncertainty as to the amount of slack that countries have in their economy. Nonetheless, economic costs should be moderate if adjustment is based on policies that support medium-term growth. In general, countries should allow automatic stabilizers to operate fully, and make concerted efforts to bring deficits and debt toward their medium-term targets.²³ The size and pace of adjustment needs to be tailored to country-specific circumstances, taking into account cyclical conditions and available fiscal space

28. Fiscal policy in advanced economies should turn to consolidation over the medium term, but additional support in the near term would be helpful in some countries.

- In economies with smaller or already closed output gaps and where debt has reached high levels, fiscal policy support should be withdrawn sooner. In the United States, where tax reform and the two-year budget agreement provide a procyclical stimulus and a less favorable debt outlook, fiscal policy should be recalibrated to ensure that the government debt-to-GDP ratio declines over the medium term. This should be achieved by mobilizing higher revenues and gradually curbing public spending dynamics, while shifting its composition toward much-needed infrastructure investment. In the United Kingdom, a steady but gradual fiscal consolidation to rebuild buffers against future shocks could have greater reliance on revenue measures, as earlier adjustment fell heavily on expenditure. In Belgium, where the recovery is strengthening, continuing fiscal consolidation will require efficiency-oriented spending reforms, as recent reforms to reduce the tax wedge will result in lower revenues in coming years. In Ireland, where the economy may be approaching full capacity, consolidation may need to accelerate to take advantage of the favorable cyclical condition to continue rebuilding buffers. In Spain, where the economic momentum remains strong, a consolidation of the structural primary balance of about 0.5 percent of GDP is advisable for 2018, with room for measures lying mostly on the revenue side.
- Where output gaps remain and fiscal space is constrained, consolidation efforts should continue, based on policies that will support medium-term growth. In France, public spending as a share of GDP needs to be reduced (wage bill and local government

²³ Debt management strategies, such as extending debt maturity profiles or prefinancing, can help mitigate somewhat rollover risk.

spending) and its efficiency improved (the targeting of social benefits and health spending) with a view to gradually reduce the fiscal deficit while creating room to reduce taxes. In Italy, the priority should be to start a credible and ambitious fiscal consolidation to put debt on a robust downward path, based on cutting current primary spending while supporting the vulnerable, raising capital spending, lowering tax rates on productive factors, shifting taxation toward wealth and property and consumption, and broadening the tax base.

- A few advanced economies that have ample fiscal space and are operating at or close to capacity should focus on structural reforms to boost potential growth. This would also support external rebalancing by helping to narrow unduly large current account surpluses. Germany has the fiscal space to support medium-term growth through higher spending on public investment in physical and digital infrastructure, childcare, refugee integration, and relief of the tax burden on labor. In the Netherlands, the loosening of the fiscal stance through increased spending on education and research and development and a reduction of the tax burden will help unlock potential growth. In Korea, where cyclical shortfalls remain, reducing the structural balance toward zero by at least 0.5 percentage point a year during the coming years through higher expenditures on social policies and structural reforms (including targeted transfers to the most vulnerable, and increased spending on childcare and active labor market policies) could increase growth by an estimated 0.2 percentage points each year (IMF 2017c).
- In Japan, a premature drop in the level of fiscal support should be avoided to sustain the growth momentum and promote structural reforms, while the debt trajectory needs to be anchored by a credible medium-term fiscal consolidation plan.

29. In emerging market and developing economies, fiscal policy is appropriately focused on consolidation, especially in those countries that are still adjusting to lower commodity prices. However, the speed of adjustment could be fine-tuned and, in some cases, it can be more ambitious.

- Several countries could step up the speed of their fiscal adjustment. Given the strength of the recovery, Brazil should quicken the pace of consolidation and frontload the fiscal effort. In Argentina, the primary deficit targets set forth by the authorities for 2018–20 put fiscal policy on the right track, but a faster pace of deficit reduction would decrease financing needs and support the disinflation effort. In Turkey, a stronger, front-loaded fiscal consolidation—achieved by rationalizing untargeted transfers, containing wage bill increases and subsidies, and cutting discretionary investment incentives—would support internal and external rebalancing, help avoid overburdening monetary policy, and buoy investor sentiment. In India, a return to a gradual path of growth-friendly fiscal consolidation is desirable to create fiscal space, but full and smooth implementation of the new goods and service tax is necessary to avoid that tax revenue underperformance results in cuts to capital expenditures. In China, a consolidation of 0.5 percent of GDP a

year of the “augmented” deficit (a broader concept that also includes local government financing vehicles and other off-budget activities that should continue to be monitored closely) and recomposition of spending away from infrastructure investment and toward health, education, and social security is necessary over the medium term to curb the rapid build-up of debt and support the rebalancing of the economy. Consolidation should only be interrupted if growth were to fall significantly.

- The recent pick-up in commodity prices should not sidetrack commodity exporters from rebuilding fiscal buffers. In Angola, the medium-term non-oil primary balance needs to improve by at least 4.5 percent of GDP over the medium term to put public debt firmly on a downward path. In Mongolia, the 2018 budget commitment to save any revenue overperformance will help avoid the overborrowing that initially triggered financial distress in 2016. In Nigeria, a growth friendly fiscal adjustment—driven by the frontloading of non-oil revenue mobilization while increasing public investment—would raise growth and reduce the ratio of interest payments to Federal Government revenue toward more sustainable levels. Members of the Central African Economic and Monetary Community (CEMAC) need to advance with a steadfast fiscal adjustment—supported by measures to increase non-oil revenues—combined with sufficient financing to smooth the adjustment path.
- Many noncommodity exporting low-income developing countries should retain their focus on addressing fiscal vulnerabilities. Several countries will need to keep debt under control (Ethiopia, Ghana, Tajikistan). In Sudan, deficit reduction could also support the disinflation effort, as it would reduce central bank direct budget financing. In some countries that have planned a consolidation path, concrete measures should be better identified (Vietnam). Other countries will have to mobilize revenues, rationalize spending, and improve investment spending efficiency to create the fiscal space needed to accommodate the implementation of infrastructure plans (Guinea, Tanzania).
- In a few countries, there is room to scale back the pace of adjustment. In Saudi Arabia, availability of fiscal space has enabled the authorities to appropriately slow the pace of the projected budgetary retrenchment starting in 2018 to smooth economic activity. In Malaysia, fiscal consolidation could proceed gradually over the medium term, however priority should be given to revenue measures, including broadening the tax base and raising the tax rate on goods and services.

Structural fiscal policies to buttress growth

30. Adjustment strategies should center on structural fiscal policies that strengthen medium-term growth prospects. In turn, stronger medium-term growth helps reduce fiscal vulnerabilities, including through stronger balances and lower risk premiums. In the case of advanced economies, real GDP per capita growth is expected to remain subdued after declining for several decades. Among emerging market and developing economies, little improvement is forecast for

real GDP per capita growth rates, while stronger growth is needed to facilitate convergence to higher incomes (Figure 1.21).

Figure 1.21. Real GDP per Capita Growth
(Percent)

Real per capita growth has not returned to earlier levels.



Source: IMF staff estimates.

Note: The dotted lines represent trends based on a Hodrick-Prescott filter.

31. Growth-friendly fiscal policies can act through both direct and indirect channels, as discussed in the April 2017 *Fiscal Monitor*. They can impact growth directly through structural tax and expenditure measures that boost employment, the accumulation of physical and human capital, and productivity. They can work indirectly by reducing macroeconomic volatility and by facilitating the implementation of productivity-enhancing structural reforms in labor and product markets. Also, as discussed in the October 2017 *Fiscal Monitor*, fiscal policies can be used to avoid excessive inequality.

32. Countries can directly raise growth by upgrading their tax systems to ensure that firms' decisions are made for business reasons and not for tax reasons. Tax reform measures should focus on reducing distortionary taxes, cutting inefficient tax expenditures, better targeting tax incentives, and lowering burdensome tax administration practices. Several studies have shown that budget-neutral changes in the tax structure can support stronger growth (De Mooij and Keen 2013; European Commission 2013; Bussi ere and others 2017; IMF 2015b). Using the newly created database on tax reform measures by Amaglobeli, Crispolti, and others (2018),²⁴ a recent analysis by Dabla-Norris and others (2018) finds that, in contrast with tax rate hikes, measures

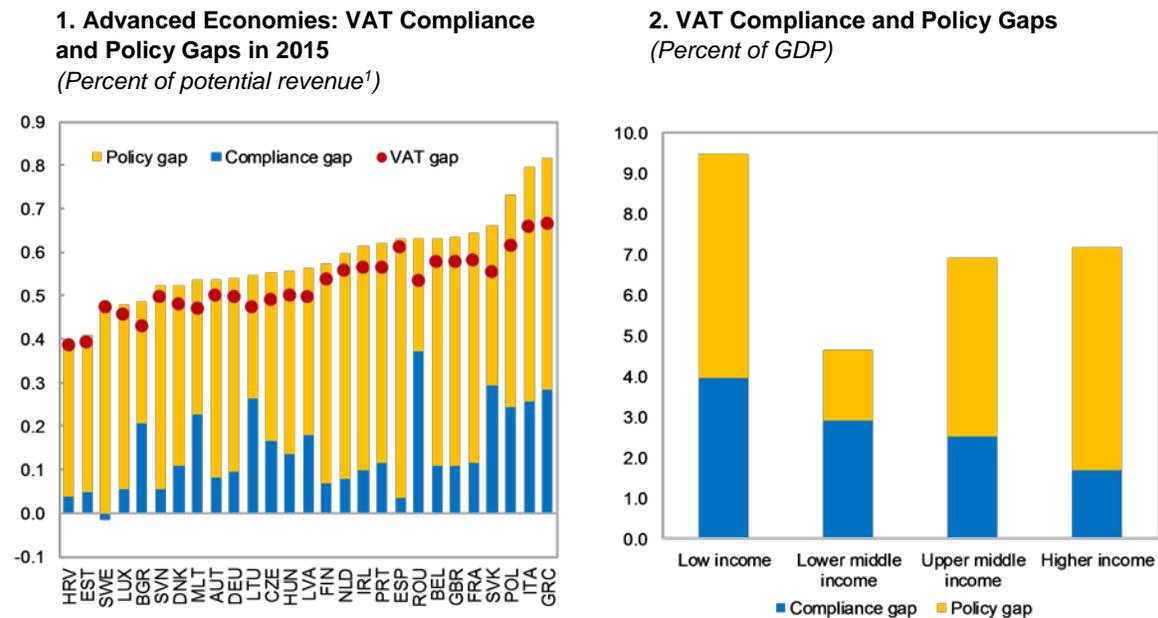
²⁴ This novel, cross-country database contains major tax policy reforms in 23 advanced and emerging market economies from 1970 to 2014, using narrative information from OECD country reports and the International Bureau of Fiscal Documentation. The database contains granular information on rate and base changes for PIT, CIT, and VAT. It also provides specific information on the announcement and implementation dates of each reform episode. See Amaglobeli, Crispolti, and others (2018).

that broaden tax bases (such as limiting interest deduction or preferential tax rates and reliefs) can raise significant tax revenues without a negative impact on growth over the medium term.

- Advanced economies have room to make their tax systems more growth-friendly. The United States has several areas for reform not addressed with the recent tax legislation. For example, the eligibility and generosity of the earned income tax credit should be expanded to boost labor supply and sustain wages for the working poor. There is also scope to rely more on other revenue sources, including a federal level consumption tax, a broad-based carbon tax, and a higher federal gas tax.²⁵ In France, government’s envisaged cuts in labor, corporate income, and capital tax rates, and narrowing of the wealth tax base should be complemented by reforms that remove special regimes for small businesses that create disincentives for company growth. In Italy, the United Kingdom, and Spain, reducing VAT gaps would remove economic distortions and create room for growth-friendly spending (Figure 1.22.1). In Japan, eliminating the spousal tax deduction should boost female labor force participation.

Figure 1.22. Value Added Tax, Compliance, and Policy Gaps

Even among advanced economies, there is room to improve VAT compliance.



Sources: Center for Social and Economic Research (2017); Hutton (2017); and IMF, Revenue Administration—Gap Analysis Program.

Note: The policy gap is the difference between the potential VAT revenue if all final consumption were taxed at the current standard rate and the potential VAT given the current policy framework. The compliance gap is the difference between the potential VAT revenue that could have been collected given the current policy framework and actual accrued VAT revenue. The VAT gap is the difference between the potential VAT revenue if all final consumption were taxed at the current standard rate and the actual accrued VAT revenue. Data labels in the figure use International Organization for Standardization (ISO) country codes. VAT = value-added tax.

¹ For the VAT and policy gap, potential revenue refers to the VAT revenue if all final consumption were taxed at the current standard rate. For the compliance gap, potential revenue refers to the VAT revenue that could have been collected given the current policy framework.

²⁵ See Parry (2015) for considerations on implementing a carbon tax in the United States.

- For most emerging market and developing economies, the focus should be on improving tax administration, broadening the tax base, and improving collection from noncommodity taxes. A well-designed Medium-Term Revenue Strategy (MTRS) can provide a useful roadmap.²⁶ Indonesia is working toward putting in place an MTRS aimed at raising revenue by at least 3 percentage points over the medium term by streamlining tax administration, removing exemptions to VAT and income taxes, and introducing excise taxes on vehicles and fuel. In Papua New Guinea, a MTRS will aim at rebalancing the tax mix, broadening the tax base, and, in the short-term introducing new excise rates and undertaking administrative initiatives to strengthen revenue institutions. Many countries have room to raise revenues by narrowing VAT compliance and policy gaps (Figure 1.22.2). Revenue mobilization is also crucial for continued progress by low-income developing countries toward their 2030 Sustainable Development Goals.²⁷ In the case of commodity exporters, greater tax capacity can make room for spending on human capital and infrastructure, as well as other structural reforms to facilitate diversification.²⁸
- Digital technologies can enhance the efficiency of overall government operations. In particular, they can improve tax compliance and enforcement (see Chapter 2). By improving access to taxpayer data, these technologies can help countries reconcile payment differences, monitor revenue collection in real-time, perform audits, and identify anomalous behavior of taxpayers. This in turn has helped improve domestic revenue mobilization, tackle tax evasion from cross-border fraud, and lower revenue losses from personal income and wealth sheltered in tax havens. However, cautious implementation is needed because digitalization may also create new fraud opportunities, for example the use of cryptocurrencies to accumulate wealth outside of the reach of tax authorities or digital identity theft to illegally claim benefits.

33. Expenditure measures that raise public investment and enhance human capital can also support growth directly.²⁹

- Public investment can spur economic growth, but its efficiency hinges on the institutional setting and how it is managed. After three decades of decline, public investment remains

²⁶ An MTRS is a high-level road map of the tax system reform over 4–6 years, covering policy, administration, and legal components. It is a government-led initiative supported by development partners and private stakeholders aimed at mobilizing tax resources to finance a country's spending needs for economic development and macroeconomic stability. See <https://www.imf.org/external/np/pp/eng/2016/072016.pdf>

²⁷ See Gaspar and Selassie (2017).

²⁸ For recent IMF analytical work in this area, see the October 2017 *Sub-Saharan Africa Regional Economic Outlook*; Callen and other (2014); and, in the context of low-income developing countries, <https://www.imf.org/external/np/res/dfidimf/topic6.htm>.

²⁹ For a discussion on policies to increase productivity by fostering innovation and the efficient allocation of resources see the April 2016 and April 2017 editions of the *Fiscal Monitor*.

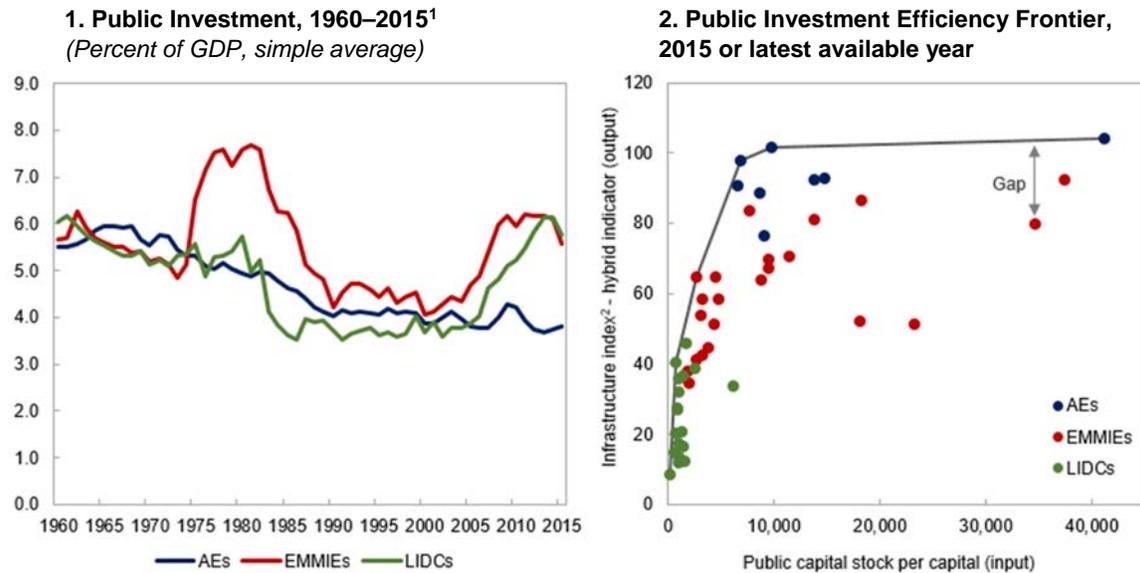
at historical lows in advanced economies. It has begun to recover in emerging market and developing economies but efficiency of investment spending is low in many cases (Figure 1.23). IMF (2015c) finds that countries that significantly improve public investment efficiency could potentially double the impact of investment on output. Experience with the IMF's Public Investment Management Assessment (PIMA)³⁰ across 29 countries so far shows that there is room to improve public investment management across multiple fronts (IMF 2018e). PIMAs also reveal that countries need not only to improve their institutional framework (existence of formal rules and procedures), but also need to make sure the framework is implemented effectively (Figure 1.24). Advanced economies should ensure that their fiscal and budgetary frameworks provide stable and sustainable bases for investment planning across levels of government. The United States should increase public investment in infrastructure, currently at historically low levels, while ensuring the right balance is achieved between maintenance and new projects. Germany should improve public investment management at the local level, including by rebuilding staffing capacity. Canada should enhance efforts to consolidate existing information on project plans from all levels of government and expand the use of common standards of project evaluation. Ireland should improve the integration between strategic planning and capital budgeting, oversight of public private partnerships, and management and maintenance of infrastructure assets.³¹ Given development needs and infrastructure bottlenecks, emerging market and developing economies should protect capital expenditure and increase its efficiency through more rigorous and transparent arrangements to select, fund, and monitor investment projects (Bangladesh, Nigeria). Countries with limited fiscal space, such as South Africa, should continue to attract private sector participation and strengthen the evaluation and management of investment projects.

³⁰ The IMF's PIMA is a diagnostic tool that helps countries evaluate the strength of their public investment management practices. The PIMA evaluates 15 institutions that shape decision-making at the planning, allocation, and implementation stages of the public investment cycle. See <http://www.imf.org/external/np/fad/publicinvestment/index.htm>.

³¹ The recently published National Development Plan highlights several measures taken by the government, drawing on PIMA recommendations.

Figure 1.23. Public Investment Trends and Efficiency

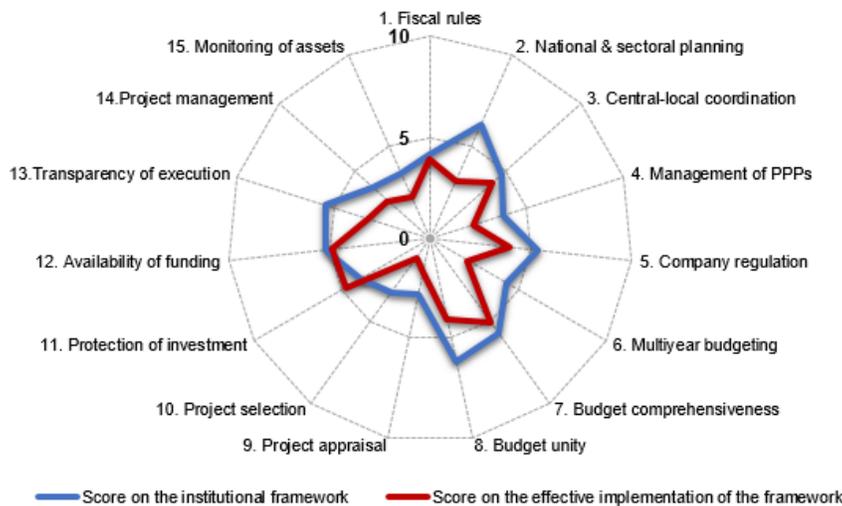
The scope for increasing public investment and efficiency is substantial in many countries.



Sources: IMF, Investment and Capital Stock Dataset, 2017; IMF (2015c); and IMF staff estimates.
 Note: AEs = advanced economies; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries.
 ¹ Public investment refers to general government investment (gross fixed capital formation), in billions of constant 2011 international dollars.
 ² The infrastructure index (PIE-X) is a hybrid indicator, which combines the physical and survey-based indicators into a synthetic index of the coverage and quality of infrastructure networks. For more details, see IMF (2015c).

Figure 1.24. Public Investment Management Assessment (PIMA) Scores: Institutional Framework and Effectiveness

There are many weaknesses to be addressed both in the institutional framework and in the effectiveness of public investment management.

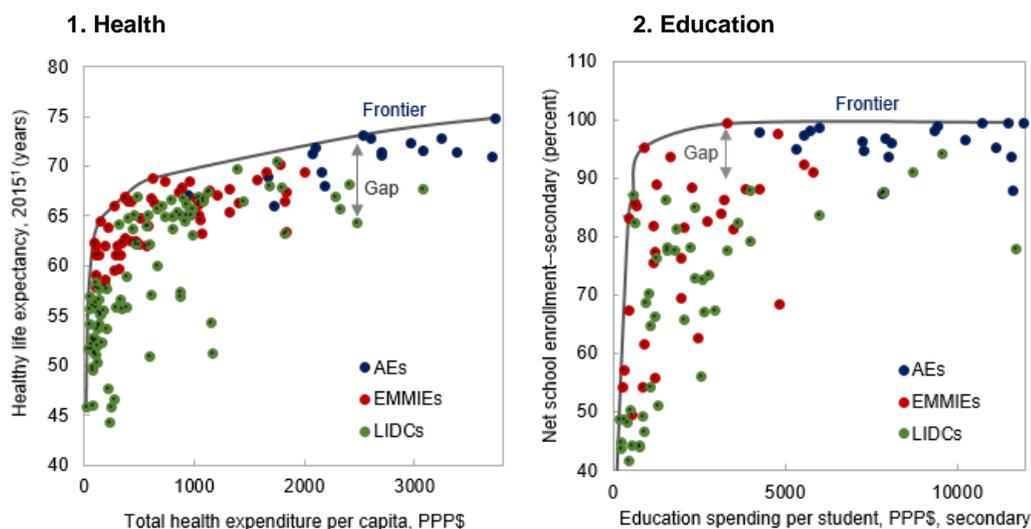


Sources: IMF, Public Investment Management Assessment (PIMA); IMF (2018e); and IMF staff estimates.
 Note: The PIMA evaluates 15 key institutions for planning, allocation, and implementation of public investment. For each of the 15 key institutions, three key design features are identified, each of which can be fully met, partly met or not met. Based on how many of these key features are in place, countries are given a PIMA score between 0 (no key features in place) and 10 (all key features fully in place). See IMF (2015) for details. The figure shows average scores across 26 countries: Albania, Botswana, Brazil, Burkina Faso, Cameroon, Côte d'Ivoire, Ghana, Guyana, Honduras, Ireland, Jordan, Kosovo, Kyrgyz Republic, Liberia, Malaysia, Maldives, Mali, Mauritius, Mongolia, Morocco, Peru, Serbia, Timor-Leste, Togo, Ukraine, and Zambia. PPP = public-private partnerships.

- Spending policies can also help raise the supply and quality of the labor force (see Chapter 2 of the April 2018 WEO). Among advanced economies where population is aging (Germany, Italy, and Japan), public spending should aim to expand the labor force by raising access to vocational training and increasing female labor participation (for example, through greater provision of child- and senior care). Emerging market and developing economies need to focus on raising the quality of the labor force, by improving access to health, education, and social protection among vulnerable groups. Figures 1.25 illustrates that improvements in education and health outcomes could be achieved within the existing budget envelope. In China, continued increases in public spending in these sectors would boost medium-term growth, while reducing income inequality and facilitating economic rebalancing. Encouraging female labor force participation in India and Saudi Arabia will go a long way in improving the quality of the labor force. In low-income developing countries, such as Mozambique and Tanzania, spending should be mainly targeted to improve access to primary and secondary education.

Figure 1.25. Government Social Spending and Outcome, Latest Year Available

All countries can enhance the efficiency of their health care and education spending.



Sources: Garcia-Escribano and Liu (2017) and IMF, Fiscal Affairs Department Expenditure Assessment Tool.

Note: AEs = advanced Economies; EMMIEs = emerging market and middle-income economies; and LIDCs = low-income developing countries; PPP = purchasing-power parity-adjusted.

¹ Healthy life expectancy is a measure that applies disability weights to health states to compute the equivalent number of years of life expected to be lived in full health.

34. There is scope for the implementation of the policies outlined above to be budget neutral. For example, France can obtain important fiscal savings by gradually reducing the wage bill, consolidating subnational governments, better targeting social benefits, improving the efficiency of health spending, and implementing measures to further raise the effective retirement age. In Italy, efforts to cut current spending (including high pension spending) and improve the targeting of the social safety should also create room for pro-growth and inclusive measures. In Mexico,

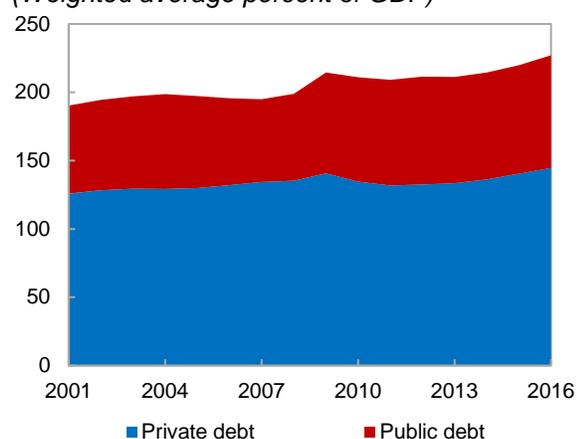
consolidating and better targeting existing social assistance programs should continue in order to create space for much needed infrastructure spending. In China, lower infrastructure investment could make room for a greater spending on education, health, and social security. With oil prices rising, Nigeria and several other developing economies would benefit from implementing a fuel price adjustment mechanism to prevent petroleum subsidies from reemerging. Digital tools can also enhance financial management, service delivery and spending efficiency. They can be used to disseminate important information and monitor public servants. Better identification and authentication systems, such as biometric technology, and electronic payment systems can facilitate the delivery of social benefits, reduce leakages and the cost of reaching targeted populations (see Chapter 2).

35. Fiscal policy can also support long-term growth indirectly by reducing macroeconomic volatility and facilitating the implementation of productivity-enhancing structural reforms. Volatility hampers long-term growth by increasing uncertainty about investment returns and spurring a misallocation of resources as price signals become distorted (Ramey and Ramey 1995; Fatás and Mihov 2013). Fiscal stabilization policies have been shown to reduce output volatility and support growth (see the April 2015 *Fiscal Monitor*). Amaglobeli, Jaramillo, and others (2018) find that implementing tax reforms that broaden the tax base can increase the magnitude of automatic stabilizers. They estimate that tax base reforms lift tax revenue elasticity with respect to output by about 15 percent and significantly increase consumption smoothing. In the euro area, a central fiscal capacity for macroeconomic stabilization would enhance the currency union's ability to respond to both area-wide and country-specific shocks, especially when monetary policy is constrained and fiscal space is limited in some countries (Arnold and others 2018). In some cases, temporary loosening of the fiscal stance could be used to increase the likelihood of structural reforms being implemented, by spreading the gains more widely across the population (see Chapter 3 of the April 2016 WEO; Banerji and others 2017). For fiscal support to be successful, it should be temporary, targeted to those adversely affected by the reform, and restricted to politically feasible reforms.

Box 1.1. Private Debt and Its Discontents

At \$164 trillion—equivalent to 225 percent of global GDP—, global debt continues to hit new record highs almost a decade after the collapse of Lehman Brothers.¹ Compared to the previous peak in 2009, the world is now 12 percent of GDP deeper in debt, reflecting a pickup in both public and nonfinancial private sector debt after a short hiatus (Figure 1.1.1). All income groups have experienced increases in total debt but, by far, emerging market economies are in the lead (Mbaye, Moreno Badia, and Chae 2018b). Only three countries (China, Japan, and the United States) account for more than half of global debt (Table 1.1.1)—significantly greater than their share of global output.

Figure 1.1.1. Global Private and Public Debt
(Weighted average percent of GDP)



Sources: Mbaye, Moreno Badia, and Chae (2018a); Global Debt Database; and IMF staff's calculations.

Note: Data refers to the gross debt of the nonfinancial sector—comprising the government, households, and nonfinancial firms. The weighted average is calculated using an unbalanced sample comprising 190 countries. To ensure comparability, public debt for each country refers to the debt of either the central or the general government throughout the sample period.

Table 1.1.1. Global Debt
(Trillions of US dollars)

	2001	2007	2015	2016
Total	61.5	115.8	158.2	163.9
Advanced Economies	55.0	99.7	116.5	119.0
United States	20.3	33.6	46.2	48.2
Japan	13.1	15.6	16.9	17.9
France	2.7	6.2	6.7	6.7
Emerging Market Economies	6.3	15.6	40.5	43.7
China	1.7	4.9	23.6	25.5
Low-Income Developing Countries	0.3	0.5	1.2	1.3

Sources: Mbaye, Moreno Badia, and Chae (2018b); Global Debt Database; and IMF staff's calculations.

Note: Data refer to the global gross debt (both public and private) for an unbalanced sample comprising 190 countries. For each country and year, public debt corresponds to the largest institutional unit for which data are available.

Greater insights into the drivers of global debt trends are possible thanks to an update of the October 2016 *Fiscal Monitor* dataset—which will be available as the Global Debt Database. The Global Debt Database offers an unparalleled coverage of public and non-financial private sector debt for 190 countries—accounting for 99 percent of global output—and going as far back as 1950 (Mbaye, Moreno Badia, and Chae 2018a).

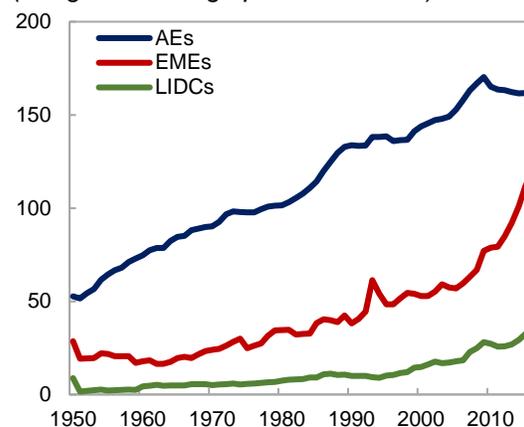
¹ This figure comprises the debt of the government, household and nonfinancial firms. Compared with the \$152 trillion figure published in the October 2016 *Fiscal Monitor*, this updated estimate expands the coverage by 77 countries to a total of 190 countries and introduces significant methodological changes.

Box 1.1. Private Debt and Its Discontents (concluded)

From a longer term perspective, global indebtedness has been driven by private sector debt—which has almost tripled since 1950. For almost six decades, advanced economies spearheaded the global leverage cycle, with the debt of the nonfinancial private sector reaching a peak of 170 percent of GDP in 2009 (Figure 1.1.2), with little deleveraging since. Emerging market economies, in contrast, are relative newcomers. Their nonfinancial private debt started to accelerate in 2005, overtaking advanced economies as the main force behind global trends by 2009. Private debt ratios doubled in a decade, reaching 120 percent of GDP by 2016. Developments since the onset of the Global Financial Crisis are, however, almost a mirror-image of just one country: China alone explains almost three quarters of the increase in global private debt. By contrast, financial deepening in low-income developing countries has been limited.

As discussed in the October 2016 *Fiscal Monitor*, excessive private debt carries great risks for growth and financial stability. If left unchecked, the private sector is vulnerable to an abrupt deleveraging process and ultimately a financial crisis. In the event of a financial crisis, a weak fiscal position increases the depth and duration of the ensuing recession, as the ability to conduct countercyclical fiscal policy is significantly curtailed. This underscores the need to build fiscal buffers during upturns, to create space that can later be deployed if needed in times of crisis.

Figure 1.1.2 Private Debt by Income Group
(Weighted average percent of GDP)



Sources: Mbaye, Moreno Badia, and Chae (2018b); Global Debt Database; and IMF staff's calculations.

Note: The weighted average is calculated using an unbalanced sample comprising 158 countries. AEs=advanced economies; EMEs=emerging market economies; LIDCs=low-income developing countries.

Box 1.2. The Distributional Effects of Income Tax Cuts

The Tax Cuts and Jobs Act (TCJA), signed into law in December 2017, makes substantial changes to corporate and personal income taxes in the United States. This box provides a stylized illustration of the long-run distributional effects of certain aspects of the TCJA, taking into account that the effects will depend on workers' skill level and focusing on possible general equilibrium effects not considered by static incidence analyses. The discussion below draws on a dynamic, multisector, heterogeneous agent, general equilibrium model calibrated to the United States, as developed by Lizarazo, Peralta-Alva, and Puy (2017).¹ The model incorporates the following assumptions²:

- *Personal income tax (PIT)*. The TCJA reduced average and marginal effective rates across the various tax brackets. The Tax Policy Center estimates that the reform will: (i) lower the average effective PIT rate by about 0.5 percent for households with incomes less than \$50,000; (ii) reduce the average effective PIT rate by about 1.2 percent for households with incomes less than \$200,000; (iii) and reduce the average effective PIT rate by about 2 percent for those with incomes greater than \$200,000.³ Although these provisions are to expire under the current legislation, the model is based on expectations that they are permanent.⁴
- *Corporate income tax (CIT)*. The reform cut the statutory federal rate from 35 percent to 21 percent. This reduction is comparable to that of the 1986 tax reform, which reduced statutory rates from 48 to 35 percent, corresponding to a decline of about 4 percentage points in the effective CIT rate. Given the lack of readily available estimates of the change in effective tax rates resulting from the TCJA, the model uses the reduction in effective tax rates from the 1986 reform as a rough and imperfect approximation.
- *Financing of the permanent revenue loss*. The model makes the optimistic assumption that revenue losses from the reform can be offset by cuts to unproductive government spending to keep the government deficit unchanged. The implications of other assumptions are also discussed below.

Based on these assumptions, Figure 1.2.1 illustrates the simulated *general equilibrium* long-term effects of the reform on consumption across the income distribution. For comparison, Figure 1.2.2 provides the *static* estimates provided by Tax Policy Center (2018).

- The analysis finds that the increase in consumption of households in the top quintile of the distribution is higher than the rest, making the reform, in that sense, regressive. In a similar vein, the Joint Committee on Taxation (2017), the Tax Policy Center (2018), and Tax Foundation (2017) find that the increase in after-tax income is highest for those at the top. The upper income quintiles of the population gain the most because they receive higher cuts in PIT. The CIT reform (which directly benefits the return on capital) further strengthens the gains for higher income households because they hold most of the wealth.
- Strikingly, the model suggests that the lower quintiles of the income distribution also benefit from this reform. CIT cuts raise the profitability of businesses, which increases demand for labor and hence wages. PIT cuts push up the prices of non-tradables, particularly services, leading to higher demand for labor and wages in that sector, which benefits lower income individuals who tend to work in the services sector. This result contrasts with the static

Box 1.2. The Distributional Effects of Income Tax Cuts (continued)

estimates of the Joint Committee on Taxation, the Tax Policy Center, and Tax Foundation, which show lower-income households gaining the least from the reform. It is important to note, however, that if the PIT provisions expire in 2025 as foreseen in the TCJA, it would dampen the demand for services, shrinking the benefits of the reform for the working poor. In addition, if consumption of services were weaker than estimated by the model, the benefits of the reform would tilt further in favor of higher-income households.

- The middle quintile is the one that benefits the least from the reform. The reason is that tax cuts (in particular CIT cuts) stimulate capital investment, and capital tends to be a substitute particularly for middle-skill individuals.

Although inequality does not increase, polarization deepens. Inequality, as measured by the Gini coefficient, is estimated to remain constant because of two opposing effects: higher gains of the upper quintiles of the income distribution compared with the middle increases the Gini coefficient while higher gains of the bottom quintiles compared with the middle reduces it. However, because the increase in consumption for the middle is substantially outpaced by increases at the top and bottom of the distribution, the reform may contribute further to the hollowing out of the middle of the income distribution, a characteristic of the United States in recent decades.⁵

Alternative ways of bringing public finances into balance significantly affect the distributional effects of the reform. The simulation shows a permanent revenue loss of 1 percent of GDP, offset by cuts to unproductive spending that may be difficult to achieve in practice.⁶ If, instead, regressive expenditure cuts were implemented, the estimated gains for the three bottom quintiles of the distribution would be wiped out. If revenue losses were offset with the introduction of a value added tax, the estimated gains would be lower for all, in particular those in the middle and bottom of the distribution. If no action were taken to offset revenue losses, higher deficits would need to be market financed, which could push interest rates higher, taking a toll on growth that affects all income groups. This analysis suggests that the United States would need to address the revenue losses from the reform with a careful mix of spending and tax measures.

¹ The model is dynamic and populated by households differentiated by skills and productivity shocks. It has three sectors (manufacturing, low-skill services, and high-skill services) with different capital and labor (by skill) intensities, and an input-output structure intended to match U.S. data at the macro level. The implications of the transmission mechanism of the model are consistent with empirical work by Mertens and Montiel-Olea (2018).

² This box does not provide a detailed distributional costing of the various provisions of the legislation, including the numerous features on the CIT side of the reform (see Box 1.3 for a more details on CIT reform). Other institutions have published their own assessments of the reform based on static incidence analyses, for example the Joint Committee on Taxation (2017), Tax Policy Center (2018), and the Tax Foundation (2017).

³ For details, see <https://www.taxpolicycenter.org/simulations/individual-income-tax-provisions-tax-cuts-and-jobs-act-tcja-february-2018>.

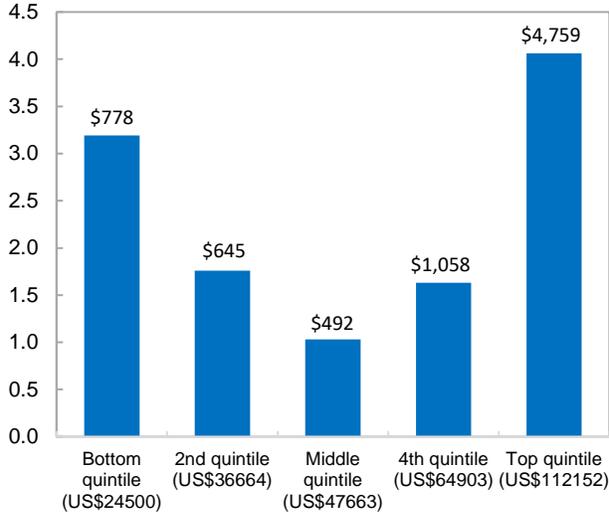
⁴ Staff estimates of the growth outlook for the United States in the WEO are based on existing legislation.

⁵ See Autor and Dorn (2013) and Alich, Kantenga, and Solé (2016).

⁶ Static costing by the Joint Committee on Taxation point to revenue losses from the TCJA of about US\$1.5 trillion over 10 years. These values were used as inputs for the WEO forecasts.

Box 1.2. The Distributional Effects of Income Tax Cuts (concluded)

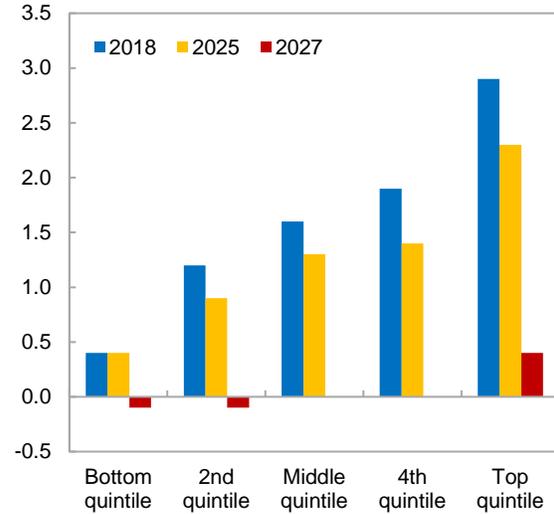
Figure 1.2.1 Long-run General Equilibrium Estimates of the Change in US Consumption by Quintile (Percent)



Source: IMF staff estimates.

Note: Numbers on top of each bar correspond to the US\$ equivalent of the percentage change in consumption. Numbers in parenthesis on the X-axis correspond to the mean household income in each quintile, as estimated in the model.

Figure 1.2.2 Static Estimates by the Tax Policy Center of the Change in After-Tax Income by Quintile (Percent)



Source: Tax Policy Center (2018).

Note: The change in income drops markedly in 2027 because almost all individual income tax provisions would sunset after 2025.

Box 1.3. International Tax Policy Implications from U.S. Corporate Tax Reform

The US tax reform will affect not only the United States but also the rest of the world. Macroeconomic spillovers resulting from the fiscal stimulus will affect global demand (see the April 2018 WEO). Other spillovers will arise because the reform will affect the decisions of multinational companies and that, in turn, will prompt other countries to look closely again at their own tax systems. This box provides a preliminary assessment of these latter tax spillovers—some of which, reflecting innovative features of the reform, are quite complex.

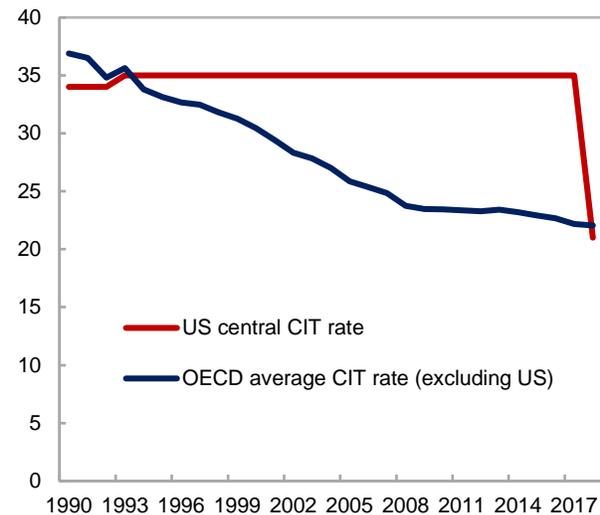
While the reform introduces numerous new features, two central elements bring the US tax system closer to those of other advanced economies. One is the reduction in the headline federal corporate tax rate from 35 to 21 percent¹; the mean central government corporate income tax rate in other Organization for Economic Co-operation and Development (OECD) countries is currently 22 percent (Figure 1.3.1). The second is the exemption from US taxation of repatriated active business income by US subsidiaries abroad. This ‘territoriality’ is a feature that is common among most advanced economies, although in the United States it is restricted by some other features of the new tax law, described below. There are further major aspects of the corporate tax reform, such as expensing of investment for the next five years and the one-off US taxation of accumulated earnings of US subsidiaries abroad.

The reduced tax rate (and more generous tax allowances for investment) will make it more attractive for multinationals to invest and produce in the United States. Moreover, the lower corporate tax rate makes it less attractive for multinationals to shift profits out of the United States through tax planning techniques—an effect that some studies have put in the range of one quarter of the US tax base under the pre-2018 system (Clausing 2016). These two consequences negatively affect the tax bases of other countries into which profits were previously shifted or where investment would otherwise be located. The territorial system, in contrast, makes it more attractive to invest outside the United States in countries offering lower tax rates. Moreover, it implies that US investment abroad will become more responsive to local tax rates because these now become the only applicable tax.²

¹ Most US states levy additional corporate income taxes, raising the overall rate in the United States by about 5 percentage points, on average.

² There is evidence that this happened, for example, when Japan and the United Kingdom moved from worldwide to territorial systems in 2009 (Liu 2017).

Figure 1.3.1. United States Central Government Corporate Tax Rate, 1990–2018
(Percent)



Source: Organisation for Economic Co-operation and Development (OECD).

Note: CIT = corporate income tax.

Box 1.3. International Tax Policy Implications from U.S. Corporate Tax Reform (continued)

As a result of these changed incentives for multinationals, other countries may respond to the US reforms. For example, they may well be tempted to lower their own tax rates and/or offer more generous treatment of investment so as to lure US businesses and prevent erosion of their own tax bases. Empirical studies on this issue have estimated tax reaction functions, by which each country's tax rate is explained by (among other factors) the weighted average of the rates prevailing in other countries. With GDP-weights, studies find that a reduction of 1 percentage-point in the mean statutory rate in all other countries will induce a country to reduce its own rate by between 0.35 and 0.75 percentage points (Devereux and others 2008; Crivelli and others 2016). As the global share of US GDP is approximately one quarter and the rate cut in the United States is 14 percentage points, this implies a direct average response in the rate of other countries by between 1 and 3 percentage points. The equilibrium effect will be larger because each country will also respond to rate cuts of all other countries. Caution is needed in applying these generic results to the specifics of the US reform, however: because the US rate has not changed since 1993, the aforementioned estimates are driven more by reforms elsewhere; and the recent reform is much more than simply a cut to the rate.

The other features of the reform, which are highly innovative and complex, can either offset or magnify the spillover effects. Their effect is likely to be highly country- and company-specific, which makes it hard to assess their overall effect. Three are especially important:

- **Global Intangible Low-Taxed Income (GILTI).** US multinationals with subsidiaries abroad that earn foreign income exceeding 10 percent of tangible assets will be liable to a minimum US tax rate of 10.5 percent on that income—with an 80 percent tax credit for foreign tax paid.³ The intent (if not the actual substance) of this provision is to ensure that US-based multinationals with substantial income from intangible assets pay tax on that income in the United States. It means that the new system is **not** purely territorial, but includes an element of worldwide taxation for 'excess' returns—indeed more strongly so than under the prereform system, given that this minimum tax is due immediately, instead of being deferred until repatriation. GILTI may in some respects mitigate the increased pressure for tax competition, making it harder to attract the intangible assets of US multinationals by offering low tax rates.
- **Foreign-Derived Intangible Income (FDII).** Multinationals producing in the United States that earn a large portion of their income from export sales and that obtain a return exceeding 10 percent of tangible assets, will be taxed at a reduced rate on that income of 13.125 percent. FDII is intended to encourage multinationals to produce for foreign markets in the United States instead of in other countries with tax rates above 13.125 percent. This provision is likely to further intensify tax competition.

³ This implies that, if the foreign tax rate is 13.125 percent or more, the total (US plus foreign) tax payable on this income under this provision would be higher than that under the FDII provision (applicable if the firm instead exported from the United States). If the foreign tax rate was reduced to less than 13.125 percent, it would not have much impact, as 80 percent of that tax is in any event credited against GILTI liability in the United States, and the total tax rate cannot fall below 10.5 percent.

Box 1.3. International Tax Policy Implications from U.S. Corporate Tax Reform (concluded)

- **Base Erosion Anti-Avoidance Tax (BEAT).** Large multinationals that operate in the United States (including US subsidiaries of foreign parents) with large payments to their foreign affiliates other than the cost of goods sold (such as interest⁴ or service fees) will face a new minimum tax. The tax is based on the profit calculated without otherwise applicable deductions for those payments, at a rate that increases sharply over time.⁵ This BEAT intends to discourage profit shifting out of the United States through excessive intracompany payments. To the extent that it reduces such actual offshore payments, it would result in a smaller tax base in other countries.

These new and innovative international tax measures in the United States are now shaping the global tax debate. Some have noted that the FDII provisions and some aspects of the BEAT may risk noncompliance with rules of the World Trade Organization (Avi-Yonah and Allespinos 2018); they may also override obligations in existing bilateral tax treaties. Moreover, the BEAT implies more aggressive action against tax avoidance through excessive foreign payments than envisaged in the G20/OECD Base Erosion and Profit Shifting project. How other countries will respond remains unclear.

The reform brings the United States closer to international norms. This puts pressure on other countries to protect their tax bases and offer incentives to become or remain hosts for US investment. Whereas reductions in statutory tax rates are the most obvious response, investment incentives (either across the board or targeted to specific investments) could become more prevalent. Countries might also tighten antiavoidance provisions. The reform also introduces wholly new tax concepts for others to consider, including the conditioning of tax liability on the return on tangible assets. Through the differential treatment of export sales under the controversial FDII provisions, it also implicitly introduces an element of destination taxation—a much-discussed and contentious idea in the international tax context.⁶ Not least because of these structural novelties, the US tax reform is likely to intensify and strongly affect the continuing debate on the future of the international tax system.

⁴ Interest deductions will in general be limited to 30 percent of earnings before interest, taxes, depreciation and amortization; after 2021, this will be further tightened to 30 percent of earnings before interest and tax.

⁵ From 5 percent in 2018 to 10 percent from 2019 and 12.5 percent from 2026.

⁶ See Chapter 2 on digitalization and international taxation, and Box 1.1 in the April 2017 *Fiscal Monitor*.

Box 1.4. General Government Debt and Fiscal Risks in China

General government debt in China is projected to rise over the medium-term, driven largely by sizeable off-budget borrowings from local governments. The official debt concept points to a stable debt profile over the medium term at about 40 percent of GDP. However, a broader concept that includes borrowings by local governments and their financing vehicles (LGFVs) shows debt rising to more than 90 percent of GDP by 2023 primarily driven by rising off-budget borrowing (Figure 1.4.1).¹ Rating agencies have lowered China's sovereign credit ratings in 2017, citing concerns with a prolonged period of rapid credit growth and large off-budget spending by LGFVs.

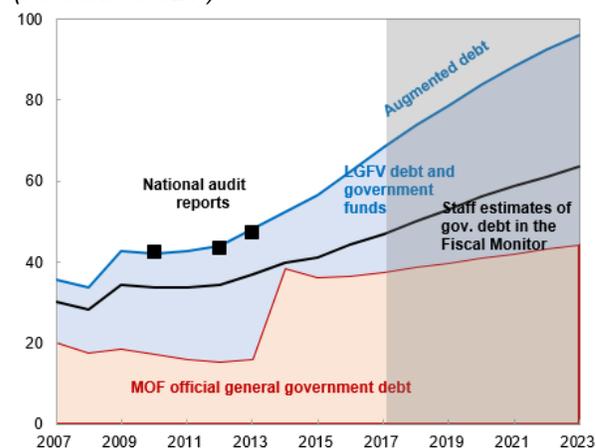
The Chinese authorities are aware of the fiscal risks implied by rapidly-rising off-budget borrowing and undertook reforms to constrain these risks. In 2014, the government recognized as government obligations two-thirds of legacy debt incurred by LGFVs (22 percent of GDP). In 2015, the budget law was revised to officially allow provincial governments to borrow only in the bond market, subject to an annual threshold. Since then, the government has reiterated the ban on off-budget borrowings by local governments, while more strictly regulating the role of the government in public-private partnerships (PPPs) and holding local officials accountable for improper borrowings. Given these measures, the authorities do not consider the LGFV off-budget borrowing as a government obligation under applicable laws.

There is some uncertainty regarding the degree to which these measures will effectively curb off-budget borrowings. Since the implementation of government reforms, the net issuance of LGFV bonds declined and their spreads rose slightly to reflect greater credit risk (Figure 1.4.2). However, there have been no LGFV defaults so far, despite weak and deteriorating interest rate coverage ratios and return on equity for LGFVs (see Figure 1.4.3), which suggests that there continues to be implicit local government support. Moreover, fiscal risks are arising from new borrowing avenues that have

¹ The baseline debt measure in the IMF WEO corresponds to the authorities' official definition of general government debt and two-thirds of additional contingent debt, such as guarantees, incurred by local governments since 2015. The "augmented" debt measure estimated by IMF staff expands the perimeter further by including (1) spending by LGFV entities that is mostly under noncommercial terms; and (2) the LGFV entities that are largely government-controlled. Most of the activity of LGFVs—based on their economic behavior—is treated as part of the general government in accordance to the Government Finance Statistics Manual (IMF 2017d). See Mano and Stokoe (2017) for a more detailed discussion. Similar criteria have been used in other countries (Belgium, Brazil, Russia, United Kingdom) to include corporate entities—mainly those undertaking public infrastructure—in the general government perimeter.

Figure 1.4.1. Broader Perimeters of General Government Could Help Understand Better China's Fiscal Risks

(Percent of GDP)



Sources: Chinese Ministry of Finance and IMF staff estimates.

Note: gov. = government; LGFV = local government financing vehicles; MOF = Ministry of Finance.

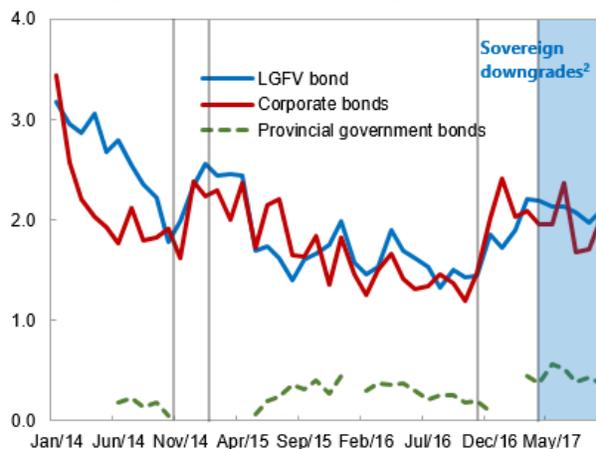
The IMF staff estimates of general government debt comprises of the numbers reported by MOF, and two-thirds of new contingent debt contracted by local governments since 2015 (IMF 2017a).

Box 1.4. General Government Debt and Fiscal Risks in China (concluded)

emerged, such as less supervised public–private partnerships and government-guided funds (Mano and Stokoe 2017).²

Close monitoring of off-budget activities is needed to maintain a comprehensive view of fiscal risks in China. Effective surveillance of fiscal risks requires a clear definition of the perimeter of the government and the wider public sector, as well as enhancement of data collection and disclosures. Further analysis of individual LGFVs is needed to assess the extent to which they operate on a fully commercial basis, with sound earnings and debt outlook. Recent efforts to control borrowings are commendable and greater priority can now be placed on containing new financing channels—such as public–private partnerships and policy bank quasi-fiscal lending—and improving fiscal statistics in line with the GFSM. Over the medium term, fiscal policy should support rebalancing toward consumption and gradually reduce off budget investment. In addition, developing a sound local government bond market (Lam, Wei, and van Eden 2017) and resolving intergovernmental relations will reduce the need for off-budget financing.

Figure 1.4.2. Local Government Financing Vehicle Spreads Rose Slightly in 2017 After a Series of Government Measures¹
(Percentage points above sovereign bond yields)



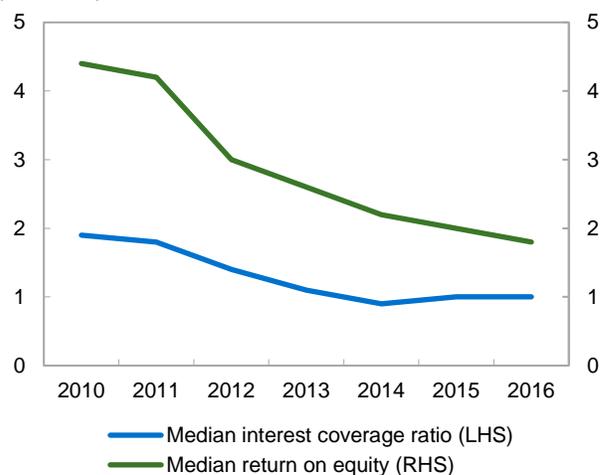
Source: WIND database.

Note: LGFV = local government financing vehicles.

¹ Bond spreads over sovereign yields in the secondary market. Gray vertical solid lines refer to the announcement of key government measures to tighten imprudent local government borrowing (IMF 2017).

² Sovereign downgrades by separate rating agencies in May and September 2017.

Figure 1.4.3. Deteriorating Performance Among Local Government Financing Vehicles
(Percent)



Sources: WIND database and IMF staff estimates.

Note: Median ratios are estimated based on individual local government financing vehicle financial data.

² Other contingent liabilities to consider include the potential bank recapitalization costs to restore financial stability under a severe stress scenario (IMF 2017e) and the cost of reforming state-owned enterprises.

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METHODOLOGICAL AND STATISTICAL APPENDIX

This appendix comprises four sections. “Data and Conventions” provides a general description of the data and conventions used to calculate economy group composites. “Fiscal Policy Assumptions” summarizes the country-specific assumptions underlying the estimates and projections for 2018–19 and the medium-term scenario for 2020–23. “Definition and Coverage of Fiscal Data” summarizes the classification of countries in the various groups presented in the *Fiscal Monitor* and provides details on 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 March 16, 2018.

Data and Conventions

Country-specific data and projections for key fiscal variables are based on the April 2018 World Economic Outlook (WEO) database, unless indicated otherwise, and compiled by the IMF staff. Historical data and projections are based on information gathered by IMF country desk officers in the context of their missions and through their ongoing analysis of the evolving situation in each country; they are updated on a continual basis 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 can differ from official data in other sources, including the IMF’s *International Financial Statistics*.

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

The country classification in the *Fiscal Monitor* divides the world into three major groups: 35 advanced economies, 40 emerging market and middle-income economies, and 40 low-income developing countries. The seven largest advanced economies as measured by GDP (Canada, France, Germany, Italy, Japan, United Kingdom, 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 EU member countries have been revised after the new European System of National and Regional Accounts (ESA 2010) was adopted. Low-income developing countries are those that have per capita income levels below a certain threshold (currently set at \$2,700 in 2016 as measured by the World Bank’s Atlas method), structural features consistent with limited development and structural transformation, and external financial linkages insufficiently close to be widely seen as emerging market economies. Zimbabwe is included in the group. Emerging market and middle-income economies include those that are not classified as advanced economies or low-income developing countries. See Table A, “Economy Groupings,” for more details.

Most fiscal data refer to the general government for advanced economies; for emerging markets and developing economies, data often refer only to the central government or budgetary central government (for specific details, see Tables B–D). All fiscal data refer to calendar years, except in the cases of Bangladesh, Egypt, Ethiopia, Haiti, Hong Kong Special Administrative Region, India, the Islamic Republic of Iran, Myanmar, Nepal, Pakistan, Singapore, and Thailand, for which they refer to the fiscal 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 20 (G20) member aggregate refers to the 19 country members and does not include the European Union.

In many countries, fiscal data follow the IMF’s 2001 *Government Finance Statistics Manual* (GFSM 2001). The 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.

The fiscal gross and net debt data reported in the *Fiscal Monitor* are drawn from official data sources and IMF staff estimates. While attempts are made to align gross and net debt data with the definitions in the IMF’s *Government Finance Statistics Manual*, as a result of data limitations or specific country circumstances, these data can sometimes 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 can sometimes be substantial.

The term “country” as used in the *Fiscal Monitor* 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 whose statistical data are maintained separately and independently.

Argentina: Total expenditure and the overall balance account for cash interest only. The primary balance excludes profit transfers from the central bank of Argentina. Interest expenditure is net of interest income from the social security administration. For GDP and consumer price index (CPI) data, see the “Country Notes” section in the Statistical Appendix of the April 2018 WEO.

Australia: For cross-country comparability, gross and net debt levels reported by national statistical agencies for countries that have adopted the 2008 System of National Accounts (2008 SNA) (Canada, Hong Kong Special Administrative Region, United States) are adjusted to exclude 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 those 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 from 2003 only. 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 general government and central bank debt. The national definition of nonfinancial public sector gross debt excludes government securities held by the central bank, except the stock of Treasury securities used for monetary policy purposes by the central bank (those pledged as security reverse repurchase agreement operations). According to this national definition, gross debt amounted to 74.0 percent of GDP at the end of 2017.

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

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

China: Public debt data include central government debt as reported by the Ministry of Finance, explicit local government debt, and shares—less than 19 percent, according to the National Audit Office estimate—of contingent liabilities the government may incur. IMF staff estimates exclude central government debt issued for the China Railway Corporation. Relative to the authorities' definition, consolidated general government net borrowing includes (1) transfers to and from stabilization funds, (2) state-administered state-owned enterprise funds and social security contributions and expenses, and (3) 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.

Egypt: Data are on a fiscal year basis.

Greece: General government gross debt includes short-term debt and loans of state-owned enterprises.

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-country comparability, gross and net debt levels reported by national statistical agencies for countries that have adopted the 2008 SNA (Australia, Canada, United States) are adjusted to exclude unfunded pension liabilities of government employees' defined-benefit pension plans.

India: Data are on a fiscal year basis.

Ireland: General government balances between 2009 and 2012 reflect the impact of banking sector support. Fiscal balance estimates excluding these measures are -11.4 percent of GDP for 2009, -10.9 percent of GDP for 2010, -8.6 percent of GDP for 2011, and -7.9 percent of GDP for 2012. For 2015, if the conversion of government's remaining preference shares to ordinary shares in one bank were excluded, the fiscal balance would be -1.1 percent of GDP. Cyclically adjusted balances reported in 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," at <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, public enterprises, development banks, the national insurance corporation, and the National Infrastructure Fund, but excludes subnational governments.

Norway: Cyclically adjusted balances correspond to the cyclically adjusted non-oil overall or primary balance. These variables are in percent 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. Historical fiscal data have been revised to reflect the migration to GFSM 2001, which entailed some classification changes.

Spain: Overall and primary balances include financial sector support measures estimated to be -0.1 percent of GDP for 2010, 0.3 percent of GDP for 2011, 3.7 percent of GDP for 2012, 0.3 percent of GDP for 2013, 0.1 percent of GDP for 2014, 0.1 percent of GDP for 2015, 0.2 percent of GDP for 2016, 0.1 percent of GDP for 2017, and 0.0 percent of GDP for 2018.

Sweden: Cyclically adjusted balances take into account output and employment gaps.

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

Thailand: Data are on a fiscal year basis.

Turkey: Information on the general government balance, primary balance, and cyclically adjusted primary balance differs from that in the authorities' official statistics or country reports, which include net lending and privatization receipts.

United States: Cyclically adjusted balances exclude financial sector support estimated at 2.4 percent of potential GDP for 2009, 0.3 percent of potential GDP for 2010, 0.2 percent of potential GDP for 2011, 0.1 percent of potential GDP for 2012, and 0.0 percent of potential GDP for 2013. For cross-country comparability, expenditure and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditure under the 2008 SNA adopted by the United States, but this is not true for countries that have not yet adopted the 2008 SNA. Data for the United States may thus differ from data published by the U.S. Bureau of Economic Analysis (BEA). In addition, gross and net debt levels reported by the BEA and national statistical agencies for other countries that have adopted the 2008 SNA (Australia, Canada, Hong Kong Special Administrative Region) are adjusted to exclude unfunded pension liabilities of government employees' defined-benefit pension plans.

Uruguay: Data are for the consolidated public sector, which includes the nonfinancial public sector (as presented in the authorities' budget documentation), local governments, Banco Central del Uruguay, and Banco de Seguros del Estado. In particular, Uruguay is one of the few countries in the sample for which public debt includes the debt of the central bank, which increases recorded public sector gross debt.

Venezuela: Fiscal accounts for 2010–23 correspond to the budgetary central government and Petróleos de Venezuela S.A. (PDVSA). Fiscal accounts before 2010 correspond to the budgetary central government, public enterprises (including PDVSA), Instituto Venezolano de los Seguros Sociales (IVSS—social security), and Fondo de Garantía de Depósitos y Protección Bancaria (FOGADE—deposit insurance).

Fiscal Policy Assumptions

Historical data and projections of key fiscal aggregates are in line with those of the April 2018 WEO, unless noted otherwise. For underlying assumptions other than on fiscal policy, see the April 2018 WEO.

Short-term fiscal policy assumptions are based on officially announced budgets, adjusted for differences between the national authorities and the IMF staff regarding macroeconomic

assumptions and projected fiscal outturns. Medium-term fiscal projections incorporate policy measures that are 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.

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

Australia: Fiscal projections are based on Australian Bureau of Statistics data, fiscal year 2017/18 Commonwealth, State and Territorial budgets and mid-year economic fiscal updates, and IMF staff estimates.

Austria: Fiscal projections are based on data from Statistics Austria, the authorities' projections, and IMF staff estimates and projections.

Belgium: Projections reflect the IMF staff's assessment of policies and measures outlined in the 2017 budget and 2016–19 Stability Programme, incorporated into the IMF staff's macroeconomic framework.

Brazil: Fiscal projections for 2018 take into account budget performance through December 31, 2017, and the deficit target approved in the budget law.

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 the baseline forecasts in the Fall 2017 Economic Statement federal budget, and 2017 latest available provincial budgets as available. The IMF staff makes some adjustments to these forecasts, including for differences in macroeconomic projections. The IMF staff forecast also incorporates the most recent data releases from Statistics Canada's Canadian System of National Economic Accounts, including federal, provincial, and territorial budgetary outturns through the third quarter of 2017.

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

China: Projections assume that the pace of fiscal consolidation is likely to be gradual, reflecting reforms to strengthen social safety nets and the social security system announced as part of the Third Plenum reform agenda.

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

Cyprus: Projections are on accrual basis based on the IMF staff's assessment of budget and fiscal measures and on the IMF staff's macroeconomic assumptions.

Czech Republic: Projections are based on the authorities' budget forecast for 2017 with adjustments for the IMF staff's macroeconomic projections. Projections for 2018 onward are based on the country's Convergence Programme.

Denmark: Estimates for 2016 are aligned with the latest official budget estimates and the underlying economic projections, adjusted where appropriate for the IMF staff's macroeconomic assumptions. For 2017–18, the projections incorporate key features of the medium-term fiscal plan as embodied in the authorities' 2017 Convergence Programme submitted to the European Union and 2018 budget.

Estonia: Fiscal projections are on an accrual basis and are based on the authorities' 2017 budget.

Finland: Projections are based on the authorities' announced policies, adjusted for the IMF staff's macroeconomic scenario.

France: Projections for 2017 reflect the budget law and cancelation of spending taken in July 2017. For 2018–22, they are based on the multiyear budget and the 2018 budget adjusted for differences in assumptions on macro and financial variables, and revenue projections. Historical fiscal data reflect the May and September 2017 revisions and update of the fiscal accounts, debt data, and national accounts for 2014 and 2015.

Germany: The IMF staff's projections for 2017 and beyond are based on the 2018 Draft Budgetary Plan, adjusted for the differences in the IMF staff's macroeconomic framework and assumptions concerning revenue elasticities. The estimate of gross debt includes portfolios of impaired assets and noncore business transferred to institutions that are winding up, as well as other financial sector and EU support operations.

Greece: Fiscal projections reflect staff's assessment of implementation of legislated fiscal measures under the IMF and ESM programs. Fiscal data since 2010 are adjusted in line with program definitions.

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

Hungary: Fiscal projections include IMF staff projections of the macroeconomic framework and of the impact of recent legislative measures, as well as fiscal policy plans announced in the 2017 budget.

India: Historical data are based on budgetary execution data. Projections are based on available information on the authorities' fiscal plans, with adjustments for IMF staff assumptions. Subnational data are incorporated with a lag of up to two years; general government data are thus

finalized well after central government data. IMF and Indian presentations differ, particularly regarding divestment and license auction proceeds, net versus gross recording of revenues in certain minor categories, and some public sector lending.

Indonesia: IMF projections are based on moderate tax policy and administration reforms, fuel subsidy pricing reforms introduced in January 2015, and a gradual increase in social and capital spending over the medium term in line with fiscal space.

Ireland: Fiscal projections are based on the country's Budget 2018.

Israel: Historical data are based on Government Finance Statistics data prepared by the Central Bureau of Statistics. Projections for 2017 and 2018 are based on the 2017-18 budget, adjusted for the fiscal impact of new measures announced in April 2017 (the "Net Family Plan"). The central government deficit is assumed to remain at the current ceiling level of 2.9 percent of GDP in subsequent years, rather than declining in line with medium-term fiscal targets, consistent with long experience of revisions to those targets.

Italy: IMF staff estimates and projections are based on the fiscal plans included in the government's 2018 draft budget plan and September 2017 Update to the Economic and Financial Document.

Japan: The projections include fiscal measures already announced by the government, including the consumption tax hike in October 2019.

Kazakhstan: Fiscal projections are based on the Budget Code and IMF staff projections.

Korea: The medium-term forecast incorporates the government's announced medium-term consolidation path. The series on general government debt does not include non-market non-profit institutions.

Libya: Against the background of a civil war and weak capacities, the reliability of Libya's data, especially medium-term projections, is low.

Malaysia: Projections are based on data provided by the Ministry of Finance for the 2018 Article IV Consultation.

Malta: Projections are based on the authorities' latest Stability Programme Update and budget documents, adjusted for the IMF staff's macroeconomic and other assumptions.

Mexico: Fiscal projections for 2018 are broadly in line with the approved budget; projections for 2019 onward assume compliance with rules established in the Fiscal Responsibility Law.

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

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

Netherlands: Fiscal projections for the period 2017–23 are based on the authorities' Bureau for Economic Policy Analysis budget projections, after differences in macroeconomic assumptions are adjusted for. Historical data were revised after the Central Bureau of Statistics released revised macro data in June 2014 after adopting the European System of National and Regional Accounts (ESA 2010) and revising data sources.

New Zealand: Fiscal projections are based on the authorities' fiscal year 2017/18 budget and half-year economic and fiscal update, and on IMF staff estimates.

Norway: Fiscal projections are based on the latest 2018 revised budget.

Philippines: Fiscal projections assume that the authorities' fiscal deficit target for the national government will be achieved in 2018 and beyond. Revenue projections reflect the IMF staff's macroeconomic assumptions and incorporate anticipated revenue-enhancing tax reforms. Expenditure projections are based on budgeted figures, institutional arrangements, current data, and fiscal space in each year.

Poland: Data are based on ESA 2010 beginning in 2010. Data before 2010 are based on ESA 95. Projections are based on the 2016 budget and take into account the effects of the 2014 pension changes.

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 for 2018 reflect the adopted budget measures as of February 2018 (including the increases in wages and pensions, and changes to labor taxation). Projections for 2019 reflect the full effect of the 2018 budget measures and the impact of the unified wage law. Apart from the impact of the unified wage law which will be gradually implemented until 2022, no additional policy changes are assumed beyond 2019.

Russia: Projections for 2018-2020 are IMF staff estimates based on the authorities' budget. Projections for 2021-2023 are based on the new oil-price rule, with adjustments by IMF staff.

Saudi Arabia: Staff baseline projections of total government revenues reflect the impact of announced policies in the 2018 Budget. Oil revenues are based on WEO baseline oil prices and the assumption that Saudi Arabia continues to meet its commitments under the OPEC+ agreement. Expenditure projections take the 2018 budget as a starting point and reflect IMF staff estimates of the effects of the latest changes in policies and economic developments. Expenditures in 2018 include the allowances and other measures announced in the Royal Decree for one year in January 2018.

Singapore: For fiscal years 2017/18, projections are based on budget numbers. For the remaining projection period, the IMF staff assumes unchanged policies.

Slovak Republic: Projections for 2015 take into account developments in the first three quarters of the year and the authorities' new projections presented in the budget for 2016. Projections for 2016 consider the authorities' 2016 budget. Projections for 2017 and beyond reflect a no-policy-change scenario.

Spain: For 2017, fiscal data are IMF staff projections, reflecting the cash outturn through November. For 2018 and beyond, fiscal projections are based on the information specified in the government's 2018 Budgetary Plan, and on the IMF staff's macroeconomic projections.

Sri Lanka: Projections are based on the authorities' medium-term fiscal framework and the revenue measures proposed.

Sweden: Fiscal projections take into account the authorities' projections based on the 2018 Budget. The effect of cyclical developments on the fiscal accounts is calculated using the Organisation for Economic Co-operation and Development's 2005 elasticity to take into account output and employment gaps.

Switzerland: The projections assume that fiscal policy is adjusted as necessary to keep fiscal balances in line with the requirements of the country's fiscal rules.

Thailand: For the projection period, the IMF staff assumes a relatively modest and temporary increase in public infrastructure investment, partly reflecting 50 percent implementation of planned infrastructure by SOEs and low implementation rates by the general government.

Turkey: The fiscal projections for 2018 are based on the authorities' Medium-Term Plan (MTP) 2017-19, with adjustments for additionally announced fiscal measures and staff's higher inflation forecast. For the medium term, the fiscal projections assume a more gradual fiscal consolidation than envisaged in the MTP.

United Kingdom: Fiscal projections are based on the U.K.'s 2017 Budget, published in November 2017, with expenditure projections based on the budgeted nominal values and with revenue projections adjusted for differences between IMF staff forecasts of macroeconomic variables (such as GDP growth and inflation) and the forecasts of these variables assumed in the authorities' fiscal projections. IMF staff 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 U.K. Office for Budget Responsibility.

United States: Fiscal projections are based on the June 2017 Congressional Budget Office baseline adjusted for the IMF staff's policy and macroeconomic assumptions. Projections incorporate the effects of tax reform (Tax Cuts and Jobs Act, signed into law end-2017) as well

as the Bipartisan Budget Act of 2018 passed in February 2018 . 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. Data is compiled using SNA 2008, and when translated into GFS this is in accordance with GFSM 2014. Due to data limitations, most series begin 2001.

Venezuela: Projecting the economic outlook in Venezuela, including assessing past and current economic developments as the basis for projections, is complicated by the lack of discussions with the authorities (the last Article IV consultation took place in 2004), long intervals in receiving data with information gaps, incomplete provision of information, and difficulties in interpreting certain reported economic indicators given economic developments. The fiscal accounts include the budgetary central government and *Petróleos de Venezuela, S.A. (PDVSA)*, and data for 2016–23 are IMF staff estimates. Revenue includes the IMF staff's estimated foreign exchange profits transferred from the central bank to the government (buying U.S. dollars at the most appreciated rate and selling at more depreciated rates in a multitier exchange rate system) and excludes the IMF staff's estimated revenue from PDVSA's sale of Petrocaribe assets to the central bank. The effects of hyperinflation and the noted data gaps mean that staff's projected macroeconomic indicators need to be interpreted with caution. For example, nominal GDP is estimated assuming the GDP deflator rising in line with the staff's projection of average inflation. Public external debt in relation to GDP is projected using the staff's estimate of the average exchange rate for the year.

Vietnam: Fiscal data for 2015-17 are the authorities' estimate. From 2018 onward, fiscal data are based on IMF staff projections.

Yemen: Hydrocarbon revenue projections are based on *World Economic Outlook* assumptions for oil and gas prices (the authorities use \$55 a barrel) and authorities' projections of production of oil and gas. Nonhydrocarbon revenues largely reflect authorities' projections, as do most of the expenditure categories, with the exception of fuel subsidies, which are projected based on the *World Economic Outlook* price consistent with revenues. Monetary projections are based on key macroeconomic assumptions about the growth rate of broad money, credit to the private sector, and deposit growth.

DEFINITION AND COVERAGE OF FISCAL DATA

Table A. Economy Groupings

The following groupings of countries are used in the *Fiscal Monitor*.

Advanced Economies	Emerging Market and Middle-Income Economies	Low-Income Developing Countries	G7	G20 ¹	Advanced G20 ¹	Emerging G20
Australia	Algeria	Bangladesh	Canada	Argentina	Australia	Argentina
Austria	Angola	Benin	France	Australia	Canada	Brazil
Belgium	Argentina	Burkina Faso	Germany	Brazil	France	China
Canada	Azerbaijan	Cambodia	Italy	Canada	Germany	India
Cyprus	Belarus	Cameroon	Japan	China	Italy	Indonesia
Czech Republic	Brazil	Chad	United Kingdom	France	Japan	Mexico
Denmark	Chile	Democratic Republic of the Congo	United States	Germany	Korea	Russia
Estonia	China	Republic of Congo		India	United Kingdom	Saudi Arabia
Finland	Colombia	Côte d'Ivoire		Indonesia	United States	South Africa
France	Croatia	Ethiopia		Italy		Turkey
Germany	Dominican Republic	Ghana		Japan		
Greece	Ecuador	Guinea		Korea		
Hong Kong SAR	Egypt	Haiti		Mexico		
Iceland	Hungary	Honduras		Russia		
Ireland	India			Saudi Arabia		
Israel	Indonesia	Kyrgyz Republic		South Africa		
Italy	Iran	Lao P.D.R.		Turkey		
Japan	Kazakhstan	Madagascar		United Kingdom		
Korea	Kuwait	Mali		United States		
Latvia	Libya	Moldova				
Lithuania	Malaysia	Mozambique				
Luxembourg	Mexico	Myanmar				
Malta	Morocco	Nepal				
Netherlands	Oman	Nicaragua				
New Zealand	Pakistan	Niger				
Norway	Peru	Nigeria				
Portugal	Philippines	Papua New Guinea				
Singapore	Poland	Rwanda				
Slovak Republic	Qatar	Senegal				
Slovenia	Romania	Somalia				
Spain	Russia	Sudan				
Sweden	Saudi Arabia	Tajikistan				
Switzerland	South Africa	Tanzania				
United Kingdom	Sri Lanka	Timor-Leste				
United States	Thailand	Uganda				
	Turkey	Uzbekistan				
	Ukraine	Vietnam				
	United Arab Emirates	Yemen				
	Uruguay	Zambia				
	Venezuela	Zimbabwe				

Note: Emerging market and developing economies include emerging market and middle-income economies as well as low-income developing countries.

¹ Does not include EU aggregate.

Table A. Economy Groupings *(continued)*

Euro Area	Emerging Market and Middle-Income Asia	Emerging Market and Middle-Income Europe	Emerging Market and Middle-Income Latin America	Emerging Market and Middle-Income Middle East and North Africa and Pakistan	Emerging Market and Middle-Income Africa
Austria	China	Azerbaijan	Argentina	Algeria	Angola
Belgium	India	Belarus	Brazil	Egypt	South Africa
Cyprus	Indonesia	Croatia	Chile	Iran	
Estonia	Malaysia	Hungary	Colombia	Kuwait	
Finland	Philippines	Kazakhstan	Dominican Republic	Libya	
France	Sri Lanka	Poland	Ecuador	Morocco	
Germany	Thailand	Romania	Mexico	Oman	
Greece		Russia	Peru	Pakistan	
Ireland		Turkey	Uruguay	Qatar	
Italy		Ukraine	Venezuela	Saudi Arabia	
Latvia				United Arab Emirates	
Lithuania					
Luxembourg					
Malta					
Netherlands					
Portugal					
Slovak Republic					
Slovenia					
Spain					

Table A. Economy Groupings (*concluded*)

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	Kyrgyz Republic	Cameroon	Algeria
Cambodia	Honduras	Burkina Faso	Moldova	Republic of Congo	Angola
Lao P.D.R.	Nicaragua	Cameroon	Somalia	Côte d'Ivoire	Azerbaijan
Myanmar		Chad	Sudan	Nigeria	Bahrain
Nepal		Democratic Republic of the Congo	Tajikistan	Papua New Guinea	Brunei Darussalam
Papua New Guinea		Republic of Congo	Uzbekistan	Timor-Leste	Cameroon
Timor-Leste		Côte d'Ivoire	Yemen	Yemen	Canada
Vietnam		Ethiopia			Colombia
		Ghana			Republic of Guinea
		Guinea			Côte d'Ivoire
		Kenya			Ecuador
		Madagascar			Equatorial Guinea
		Mali			Gabon
		Mozambique			Indonesia
		Niger			Iran
		Nigeria			Iraq
		Rwanda			Kazakhstan
		Senegal			Kuwait
		Tanzania			Libya
		Uganda			Mexico
		Zambia			Nigeria
		Zimbabwe			Norway
					Oman
					Papua New Guinea
					Qatar
					Russia
					Saudi Arabia
					Syria
					Timor-Leste
					Trinidad and Tobago
					United Arab Emirates
					Venezuela
					Yemen

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

	Overall Fiscal Balance ¹			Cyclically Adjusted Balance			Gross Debt		
	Coverage		Accounting Practice	Coverage		Accounting Practice	Coverage		Valuation of Debt ²
	Aggregate	Subsectors		Aggregate	Subsectors		Aggregate	Subsectors	
Australia	GG	CG,SG,LG,TG	A	GG	CG,SG,LG,TG	A	GG	CG,SG,LG,TG	Nominal
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 ³	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	Nominal
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	Nominal
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,SG,SS	A	GG	CG,SG,SS	A	GG	CG,SG,SS	Face
Ireland	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Israel	GG	CG,LG,SS	Other	GG	CG,LG,SS	Other	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	C	CG	CG	C	CG	CG	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	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
New Zealand	CG	CG	A	CG	CG	A	CG	CG	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,SG,LG,SS	C	GG	CG,SG,LG,SS	C	GG	CG,SG,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; NFPC = nonfinancial public corporations; PS = public sector; SG = state governments; SS = social security funds; TG = territorial governments. Accounting standard: C = cash; A = accrual.

¹ In many countries, fiscal data follow the IMF's *Government Finance Statistics Manual 2001*. 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 = debt securities 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 = 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 = debt securities 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

³ Historical data until 2012 are reported on an accrual basis, as general government cash data are not available for years that preceded the IMF program.

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	Nominal
Angola	GG	CG,LG	Other	...	...	...	GG	CG,LG,NFPC	Nominal
Argentina	GG	CG,SG,LG,SS	C	CG	CG	C	CG	CG	Nominal
Azerbaijan	CG	CG	C	...	...	...	CG	CG	Face
Belarus ³	GG	CG,LG,SS	C	...	...	...	GG	CG,LG,SS	Nominal
Brazil ⁴	NFPS	CG,SG,LG,SS, MPC,NFPC	C	NFPS	CG,SG,LG,SS, MPC,NFPC	C	NFPS	CG,SG,LG,SS, MPC,NFPC	Nominal
Chile	GG	CG,LG	A	GG	CG,LG	A	GG	CG,LG	Face
China	GG	CG,LG	C	GG	CG,LG	C	GG	CG,LG	Face
Colombia ⁵	GG	CG,SG,LG,SS	Other	GG	CG,SG,LG,SS	Other	GG	CG,SG,LG,SS	Face
Croatia	GG	CG,LG	A	GG	CG,LG	A	GG	CG,LG	Nominal
Dominican Republic	GG	CG,SG,LG,SS, NMPC	Mixed	GG	CG,SG,LG,SS, NMPC	Mixed	GG	CG,SG,LG,SS, NMPC	Face
Ecuador	NFPS	CG,SG,LG,SS, NFPC	C	NFPS	CG,SG,LG,SS, NFPC	C	NFPS	CG,SG,LG,SS, NFPC	Face
Egypt	GG	CG,LG,SS,MPC	C	GG	CG,LG,SS,MPC	C	GG	CG,LG,SS,MPC	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	A	...	...	...	GG	CG,LG	Nominal
Kuwait	CG	CG	Mixed	...	...	...	CG	CG	Nominal
Libya	GG	CG,SG,LG	C	...	...	...	GG	CG,SG,LG	Face
Malaysia	GG	CG,SG,LG	C	GG	CG,SG,LG	C	GG	CG,SG,LG	Nominal
Mexico	PS	CG,SS,NMPC,NFPC	C	PS	CG,SS,NMPC,NFPC	C	PS	CG,SS,NMPC,NFPC	Face
Morocco	CG	CG	A	...	...	...	CG	CG	Face
Oman	CG	CG	C	...	...	...	CG	CG	Nominal
Pakistan	GG	CG,SG,LG	C	...	...	...	GG	CG,SG,LG	Nominal
Peru	GG	CG,SG,LG,SS	C	GG	CG,SG,LG,SS	C	GG	CG,SG,LG,SS	Face
Philippines	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Nominal
Poland	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Face
Qatar	CG	CG	C	...	...	...	CG	CG	Nominal
Romania	GG	CG,LG,SS	C	GG	CG,LG,SS	C	GG	CG,LG,SS	Face
Russia	GG	CG,SG,SS	Mixed	GG	CG,SG,SS	Mixed	GG	CG,SG,SS	Current market
Saudi Arabia	CG	CG	C	...	...	...	CG	CG	Nominal
South Africa ⁶	GG	CG,SG,SS	C	GG	CG,SG,SS	C	GG	CG,SG,SS	Nominal
Sri Lanka	CG	CG	C	...	...	...	CG	CG	Nominal
Thailand ⁷	PS	CG,BCG,LG,SS	A	PS	CG,BCG,LG,SS	A	PS	CG,BCG,LG,SS	Nominal
Turkey	GG	CG,LG,SS	A	GG	CG,LG,SS	A	GG	CG,LG,SS	Nominal
Ukraine	GG	CG,SG,LG,SS	C	GG	CG,SG,LG,SS	C	GG	CG,SG,LG,SS	Nominal
United Arab Emirates ⁸	GG	CG,BCG,SG,SS	C	...	...	...	GG	CG,BCG,SG,SS	Nominal
Uruguay	PS	CG,LG,SS,MPC, NFPC	A	...	...	...	PS	CG,LG,SS,MPC, NFPC	Face
Venezuela ⁹	GG	BCG,NFPC	C	GG	BCG,NFPC	C	GG	BCG,NFPC	Nominal

Note: Coverage: BCG = budgetary central government; CG = central government; GG = general government; LG = local governments; MPC = monetary public corporations, including central bank; NFPC = nonfinancial public corporations; NFPS = nonfinancial public sector; NMPC = nonmonetary financial public corporations; PS = public sector; SG = state governments; SS = social security funds. Accounting standard: C = cash; NC = noncash; Mixed = mixed.

¹ In many countries, fiscal data follow the IMF's *Government Finance Statistics Manual 2001*. 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 = debt securities 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 = 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 = debt securities are valued at market prices; insurance, pension, and standardized guarantee schemes are valued according to principles that are equivalent to market valuation; and all other debt instruments are valued at nominal prices, which are considered to be the best generally available proxies of their market prices.

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

⁴ Gross debt refers to the nonfinancial public sector, excluding Eletrobras and Petrobras, and includes sovereign debt held on the balance sheet of the central bank.

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

⁶ Coverage for South Africa is a proxy for general government. It includes the national and provincial governments and certain public entities, while local governments are only partly covered, through the transfers to them.

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

⁸ Gross debt covers banking system claims only.

⁹ The fiscal accounts for 2010–22 correspond to the budgetary central government and Petróleos de Venezuela S.A. (PDVSA), whereas the fiscal accounts for years before 2010 correspond to the budgetary central government, public enterprises (including PDVSA), Instituto Venezolano de los Seguros Sociales (IVSS—social security), and Fondo de Garantía de Depósitos y Protección Bancaria (FOGADE—deposit insurance).

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	
Bangladesh	CG	CG	C	CG	CG	C	CG	CG	Nominal
Benin	CG	CG	C	...	...	...	CG	CG	Nominal
Burkina Faso	GG	CG,LG,SS,NMPC, NFPC	C	...	...	...	GG	CG,LG,SS,NMPC, NFPC	Face
Cambodia	CG	CG	CB	CG	CG	CB	CG	CG	Face
Cameroon	NFPS	CG,LG	A	...	...	...	NFPS	CG,LG	Current market
Chad	NFPS	CG,NFPC	C	...	...	...	NFPS	CG,NFPC	Face
Democratic Republic of the Congo	GG	CG,NFPC	C	...	...	...	GG	CG,NFPC	Nominal
Republic of Congo	CG	CG,LG	A	...	...	...	CG	CG,LG	Nominal
Côte d'Ivoire	CG	CG	A	...	...	...	CG	CG	Nominal
Ethiopia	CG	CG	A	...	...	...	CG	CG	Nominal
Ghana	CG	CG,SG,LG,NFPC	C	...	...	...	CG	CG,SG,LG,NFPC	Face
Guinea	CG	CG	C	...	...	...	CG	CG	Nominal
Haiti	CG	CG	Other	CG	CG	Other	CG	CG	Nominal
Honduras	CPS	CG	C	CPS	CG	C	CPS	CG	Nominal
Kenya	CG	CG,LG,SS,NFPC	A	...	...	...	CG	CG,LG,SS,NFPC	Current market
Kyrgyz Republic	GG	CG	A	...	...	...	GG	CG	Face
Lao P.D.R. ³	CG	CG,LG,SS	C	CG	CG,LG,SS	C	CG	CG,LG,SS	...
Madagascar	CG	CG	C	...	...	...	CG	CG	Nominal
Mali	CG	CG,LG	C	...	...	...	CG	CG,LG	Nominal
Moldova	GG	CG	Mixed	GG	CG	Mixed	GG	CG	Nominal
Mozambique	CG	CG,LG,SS	C	CG	CG,LG,SS	C	CG	CG,LG,SS	Nominal
Myanmar ⁴	NFPS	CG,SG,LG,SS	C	...	...	...	NFPS	CG,SG,LG,SS	Face
Nepal	CG	CG,SG	Mixed	CG	CG,SG	Mixed	CG	CG,SG	Face
Nicaragua	GG	CG,NFPC	C	GG	CG,NFPC	C	GG	CG,NFPC	Nominal
Niger	CG	CG	C	...	...	...	CG	CG	Nominal
Nigeria	GG	CG,LG,SS	C	...	...	...	GG	CG,LG,SS	Current market
Papua New Guinea	CG	CG	A	...	...	...	CG	CG	Face
Rwanda	GG	CG,SG,LG	C	...	...	...	GG	CG,SG,LG	Nominal
Senegal	CG	CG	Mixed	CG	CG	Mixed	CG	CG	Nominal
Somalia	CG	CG,LG	Mixed	CG	CG,LG	Mixed	CG	CG,LG	...
Sudan	CG	CG	C	...	...	...	CG	CG	Nominal
Tajikistan	GG	CG	Mixed	...	...	...	GG	CG	Nominal
Tanzania	CG	CG,LG,SS	C	...	...	...	CG	CG,LG,SS	Nominal
Timor-Leste	CG	CG,LG	C	CG	CG,LG	C	CG	CG,LG	...
Uganda	CG	CG	C	...	...	...	CG	CG	Nominal
Uzbekistan ⁵	GG	CG,SG,LG,SS	C	...	...	...	GG	CG,SG,LG,SS	Nominal
Vietnam	GG	CG,SG,LG	C	GG	CG,SG,LG	C	GG	CG,SG,LG	Nominal
Yemen	GG	CG,LG	C	...	...	...	GG	CG,LG	Nominal
Zambia	CG	CG	C	...	...	...	CG	CG,NFPC	Current market
Zimbabwe	CG	CG	C	...	...	...	CG	CG	Current market

Note: Coverage: BCG = budgetary central government; CG = central government; CPS = combined public sector; EA = extrabudgetary units; FC = financial public corporations; GG = general government; LG = local governments; MPC = monetary public corporations, including central bank; NC = non-cash; NFPC = nonfinancial public corporations; NFPS = nonfinancial public sector; NMPC = nonmonetary financial public corporations; PS = public sector; SG = state governments; SS = social security funds. Accounting standard: C = cash; NC = non-cash; CB = commitments basis accounting; Mixed = combination of accrual and cash accounting.

¹In many countries, fiscal data follow the IMF's *Government Finance Statistics Manual 2001*. 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.

²Nominal = debt securities 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 = 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 = debt securities 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.

³Lao P.D.R.'s fiscal spending includes capital spending by local governments financed by loans provided by the central bank.

⁴Overall and primary balances in 2012 are based on the monetary statistics and are different from the balances calculated from expenditure and revenue data.

⁵Uzbekistan's listing includes the Fund for Reconstruction and Development.

Table A1. Advanced Economies: General Government Overall Balance, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia	-4.6	-5.1	-4.4	-3.4	-2.8	-2.9	-2.8	-2.6	-2.2	-1.7	-1.1	-0.1	0.2	0.2	0.2
Austria	-5.4	-4.5	-2.6	-2.2	-1.4	-2.7	-1.1	-1.5	-0.8	-0.3	-0.2	-0.2	-0.2	-0.4	-0.5
Belgium	-5.4	-4.0	-4.1	-4.2	-3.1	-3.1	-2.5	-2.5	-1.1	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Canada	-3.9	-4.7	-3.3	-2.5	-1.5	0.2	-0.1	-1.1	-1.0	-0.8	-0.8	-0.7	-0.7	-0.7	-0.7
Cyprus ¹	-5.4	-4.7	-5.7	-5.6	-3.3	-0.2	-0.2	0.5	1.9	2.0	1.7	1.6	1.5	1.3	1.4
Czech Republic	-5.5	-4.2	-2.7	-3.9	-1.2	-1.9	-0.6	0.7	1.3	1.1	1.0	0.5	0.5	0.5	0.5
Denmark	-2.8	-2.7	-2.1	-3.5	-1.2	1.1	-1.5	-0.4	-0.1	-0.8	-0.5	-0.3	0.0	0.2	0.4
Estonia	-2.2	0.2	1.2	-0.3	-0.2	0.7	0.1	-0.3	-0.1	-0.4	-0.2	0.0	0.0	0.0	0.0
Finland	-2.5	-2.6	-1.0	-2.2	-2.6	-3.2	-2.7	-1.8	-1.4	-1.4	-0.9	-0.2	-0.1	-0.1	-0.1
France	-7.2	-6.8	-5.1	-4.8	-4.0	-3.9	-3.6	-3.4	-2.9	-2.7	-3.2	-2.0	-1.4	-1.0	-0.3
Germany	-3.2	-4.2	-1.0	0.0	-0.1	0.3	0.6	0.8	1.1	1.4	1.5	1.5	1.4	1.3	1.2
Greece	-15.1	-11.2	-10.3	-6.6	-3.6	-4.0	-2.9	0.5	0.0	0.0	0.0	0.1	0.2	-0.1	-2.5
Hong Kong SAR	1.5	4.1	3.8	3.1	1.0	3.6	0.6	4.4	5.1	2.7	1.7	1.7	1.3	1.3	1.2
Iceland	-9.6	-9.7	-5.6	-3.7	-1.8	-0.1	-0.8	12.6	1.6	1.2	1.1	1.2	1.3	1.2	1.1
Ireland ¹	-13.8	-32.1	-12.7	-8.0	-6.1	-3.7	-1.9	-0.7	-0.4	-0.2	-0.2	0.1	0.5	0.8	1.0
Israel	-5.7	-3.7	-2.9	-4.8	-4.1	-3.3	-2.1	-2.1	-2.2	-3.2	-3.3	-3.4	-3.4	-3.4	-3.4
Italy	-5.3	-4.2	-3.7	-2.9	-2.9	-3.0	-2.6	-2.5	-1.9	-1.6	-0.9	-0.3	0.0	0.0	0.0
Japan	-10.2	-9.5	-9.4	-8.6	-7.9	-5.6	-3.8	-3.7	-4.2	-3.4	-2.8	-2.2	-2.1	-2.0	-2.0
Korea	0.0	1.5	1.7	1.6	0.6	0.4	0.6	1.7	1.9	2.0	1.9	1.8	1.8	1.8	1.9
Latvia	-7.0	-6.5	-3.2	0.2	-0.6	-1.7	-1.5	-0.4	0.0	-0.5	-0.9	-0.4	-0.2	-0.2	-0.2
Lithuania	-9.3	-6.9	-8.9	-3.1	-2.6	-0.7	-0.2	0.3	0.6	0.7	0.8	0.9	0.7	0.7	0.6
Luxembourg	-0.7	-0.7	0.5	0.3	1.0	1.3	1.4	1.6	1.4	0.8	0.2	0.5	0.4	0.3	0.2
Malta	-3.2	-2.4	-2.4	-3.5	-2.4	-1.8	-1.1	1.1	1.9	1.6	1.1	0.7	0.6	0.5	0.5
Netherlands	-5.4	-5.0	-4.3	-3.9	-2.4	-2.3	-2.0	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0
New Zealand	-1.2	-4.8	-4.5	-1.7	-0.8	-0.1	0.6	1.3	1.6	1.1	1.1	2.0	2.5	2.6	2.6
Norway	10.3	10.9	13.2	13.5	10.5	8.5	5.9	3.9	4.9	3.7	3.8	4.0	4.0	4.0	4.1
Portugal	-9.8	-11.2	-7.4	-5.7	-4.8	-7.2	-4.4	-2.0	-1.2	-1.0	-0.9	-0.8	-0.7	-0.6	-0.6
Singapore	0.0	6.0	8.6	7.8	6.6	5.4	3.6	3.3	6.0	2.3	1.9	1.7	2.0	2.0	1.9
Slovak Republic	-7.8	-7.5	-4.3	-4.3	-2.7	-2.7	-2.7	-2.2	-1.6	-0.9	-0.4	-0.2	-0.2	-0.1	-0.1
Slovenia	-5.4	-5.2	-5.5	-3.1	-13.8	-5.8	-3.3	-1.7	-0.8	0.0	-0.3	-0.4	-0.6	-0.7	-0.8
Spain ¹	-11.0	-9.4	-9.6	-10.5	-7.0	-6.0	-5.3	-4.5	-3.1	-2.5	-2.1	-2.1	-2.1	-2.2	-2.2
Sweden	-0.7	0.0	-0.2	-1.0	-1.4	-1.6	0.2	1.2	1.2	1.1	0.7	0.6	0.5	0.4	0.3
Switzerland	0.5	0.4	0.7	0.4	-0.4	-0.2	0.6	0.1	0.0	0.4	0.4	0.3	0.3	0.3	0.3
United Kingdom	-10.1	-9.4	-7.5	-7.6	-5.4	-5.4	-4.3	-3.0	-2.3	-1.9	-1.6	-1.4	-1.2	-0.8	-0.7
United States ²	-13.1	-10.9	-9.6	-7.9	-4.4	-4.0	-3.5	-4.4	-4.6	-5.0	-5.6	-5.2	-5.2	-5.1	-4.6
Average	-8.7	-7.7	-6.3	-5.5	-3.7	-3.1	-2.6	-2.7	-2.6	-2.6	-2.7	-2.3	-2.2	-2.2	-1.9
Euro Area	-6.3	-6.2	-4.2	-3.6	-3.0	-2.6	-2.1	-1.5	-1.0	-0.8	-0.7	-0.3	-0.1	0.0	0.2
G7	-9.9	-8.8	-7.4	-6.4	-4.3	-3.6	-3.0	-3.4	-3.4	-3.3	-3.5	-3.1	-3.0	-2.9	-2.6
G20 Advanced	-9.5	-8.4	-7.0	-6.0	-4.1	-3.4	-2.9	-3.2	-3.2	-3.1	-3.2	-2.8	-2.7	-2.6	-2.3

Source: IMF staff estimates and projections. Projections are based on staff assessment 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-country comparability, expenditure and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditures under the 2008 System of National Accounts (2008 SNA) adopted by the United States, but not in countries that have not yet adopted the 2008 SNA. Data for the United States in this table may thus differ from data published by the U.S. Bureau of Economic Analysis.

Table A2. Advanced Economies: General Government Primary Balance, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia	-4.5	-4.8	-3.9	-2.7	-2.0	-2.0	-1.8	-1.7	-1.3	-0.9	-0.2	0.7	1.0	1.0	1.0
Austria	-3.2	-2.3	-0.4	0.0	0.8	-0.7	0.8	0.1	0.6	0.9	1.1	1.0	0.9	0.8	0.6
Belgium	-2.0	-0.7	-0.9	-1.0	-0.2	-0.2	0.2	0.1	1.1	0.7	0.5	0.5	0.4	0.3	0.2
Canada	-2.8	-3.9	-2.7	-1.8	-1.0	0.5	0.5	-0.4	-0.6	-0.5	-0.4	-0.3	-0.2	-0.2	-0.1
Cyprus ¹	-3.4	-3.2	-4.1	-2.9	0.4	2.8	2.5	2.9	4.4	4.2	4.2	4.0	3.9	3.7	3.7
Czech Republic	-4.5	-3.2	-1.7	-2.8	-0.2	-0.8	0.3	1.5	2.0	1.8	1.6	1.1	1.0	1.0	1.0
Denmark	-2.4	-2.1	-1.4	-3.0	-0.8	1.6	-0.7	0.1	0.3	-0.6	-0.6	-0.2	0.2	0.5	0.8
Estonia	-2.5	0.0	1.0	-0.4	-0.3	0.6	0.0	-0.4	-0.2	-0.4	-0.3	-0.1	0.0	-0.1	-0.1
Finland	-2.9	-2.5	-1.0	-2.0	-2.5	-3.0	-2.5	-1.5	-1.2	-1.3	-0.9	-0.3	-0.2	-0.1	-0.1
France	-4.9	-4.5	-2.6	-2.4	-1.9	-1.9	-1.7	-1.7	-1.3	-1.1	-1.5	-0.2	0.5	1.0	1.8
Germany	-0.8	-2.1	1.1	1.8	1.4	1.7	1.8	1.9	2.0	2.1	2.1	2.0	1.9	1.8	1.7
Greece	-10.1	-5.3	-3.0	-1.5	0.4	0.0	0.7	3.8	3.7	2.9	3.5	3.5	3.5	3.5	1.5
Hong Kong SAR	-0.4	2.3	1.9	1.3	-0.7	3.6	0.6	3.6	4.3	1.3	0.6	0.6	0.2	0.2	0.2
Iceland	-6.6	-6.9	-2.9	-0.4	1.6	3.5	2.9	15.6	4.5	3.5	3.0	2.9	2.7	2.5	2.4
Ireland ¹	-12.4	-29.7	-10.2	-4.8	-2.6	-0.3	0.5	1.5	1.5	1.5	1.5	1.7	2.0	2.2	2.4
Israel	-1.9	0.0	0.6	-1.3	-0.9	-0.2	0.8	0.5	0.6	-0.4	-0.5	-0.6	-0.6	-0.5	-0.5
Italy	-1.0	-0.1	0.8	2.1	1.7	1.4	1.4	1.3	1.7	1.9	2.5	3.2	3.5	3.6	3.6
Japan	-9.3	-8.6	-8.3	-7.5	-7.0	-4.9	-3.2	-2.9	-3.7	-3.2	-2.7	-2.1	-2.0	-1.9	-1.9
Korea	-0.7	0.8	0.9	0.8	-0.2	-0.3	-0.3	0.8	0.9	1.1	0.8	0.9	1.0	1.2	1.2
Latvia	-5.9	-5.1	-1.8	1.7	0.9	-0.2	0.3	0.8	1.1	0.4	0.0	0.6	0.6	0.6	0.6
Lithuania	-8.2	-5.2	-7.2	-1.2	-0.9	1.0	1.3	1.6	1.9	2.2	2.3	2.4	2.1	1.8	1.6
Luxembourg	-1.2	-0.9	0.3	0.1	0.8	1.1	1.2	1.4	1.2	0.6	-0.2	-0.2	-0.5	-0.8	-1.1
Malta	0.0	0.7	0.8	-0.5	0.4	1.0	1.3	3.2	3.8	3.4	2.7	2.3	2.1	2.1	2.1
Netherlands	-4.2	-3.8	-3.0	-2.8	-1.3	-1.2	-1.1	1.2	1.3	1.1	1.2	1.3	1.4	1.5	1.6
New Zealand	-1.0	-4.3	-3.9	-1.0	-0.2	0.4	1.0	1.6	2.1	1.8	1.8	2.6	3.1	3.2	3.2
Norway	8.0	8.8	11.1	11.7	8.7	6.4	3.4	1.6	2.6	1.3	1.5	1.7	1.7	1.7	1.8
Portugal	-7.1	-8.5	-3.6	-1.4	-0.6	-2.8	-0.1	1.9	2.5	2.3	2.3	2.2	2.2	2.1	2.1
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovak Republic	-6.7	-6.4	-2.9	-2.8	-1.1	-1.1	-1.3	-0.8	-0.4	0.3	0.8	0.9	0.9	0.8	0.8
Slovenia	-4.6	-4.0	-4.2	-1.4	-11.5	-2.8	-0.6	1.0	1.5	1.9	1.5	1.4	1.3	1.2	1.1
Spain ¹	-9.6	-7.8	-7.7	-8.0	-4.0	-3.0	-2.6	-2.0	-0.8	-0.3	0.2	0.3	0.3	0.2	0.2
Sweden	-0.4	0.3	0.1	-0.8	-1.2	-1.5	0.1	1.1	1.0	0.9	0.5	0.4	0.3	0.2	0.2
Switzerland	1.0	0.8	1.1	0.8	-0.2	0.0	0.9	0.3	0.2	0.6	0.6	0.5	0.4	0.4	0.4
United Kingdom	-8.7	-6.9	-4.7	-5.3	-4.1	-3.6	-2.8	-1.4	-0.6	-0.2	0.0	0.2	0.4	0.6	0.7
United States	-11.2	-8.9	-7.3	-5.7	-2.4	-2.0	-1.6	-2.3	-2.5	-2.7	-3.1	-2.5	-2.2	-1.9	-1.3
Average	-7.1	-6.0	-4.5	-3.7	-2.1	-1.5	-1.1	-1.2	-1.2	-1.1	-1.2	-0.7	-0.5	-0.3	-0.1
Euro Area	-3.8	-3.7	-1.6	-1.0	-0.6	-0.2	0.0	0.4	0.8	0.8	0.9	1.3	1.5	1.6	1.7
G7	-8.0	-6.8	-5.2	-4.3	-2.4	-1.8	-1.3	-1.6	-1.7	-1.6	-1.7	-1.2	-0.9	-0.7	-0.3
G20 Advanced	-7.7	-6.5	-5.0	-4.1	-2.3	-1.8	-1.3	-1.5	-1.6	-1.5	-1.6	-1.0	-0.8	-0.6	-0.2

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

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

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

Table A3. Advanced Economies: General Government Cyclically Adjusted Balance, 2009–23
(Percent of potential GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia	-4.5	-4.9	-4.3	-3.3	-2.5	-2.5	-2.4	-2.3	-1.8	-1.4	-0.9	-0.1	0.2	0.2	0.2
Austria	-4.6	-4.0	-3.2	-2.5	-0.9	-2.0	-0.2	-0.7	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.7
Belgium	-4.5	-3.8	-4.3	-4.0	-2.5	-2.5	-2.1	-2.2	-1.0	-1.4	-1.5	-1.4	-1.3	-1.3	-1.3
Canada	-2.6	-4.1	-3.3	-2.5	-1.6	-0.3	-0.2	-0.9	-1.1	-1.0	-1.0	-0.9	-0.9	-0.8	-0.7
Cyprus	-7.2	-6.7	-7.7	-5.9	-1.4	2.1	2.0	2.0	2.5	2.2	1.6	1.3	1.2	0.9	1.5
Czech Republic	-5.3	-4.1	-2.9	-3.2	0.1	-1.1	-0.8	0.5	0.7	0.4	0.2	0.0	0.1	0.3	0.5
Denmark	-0.6	-1.7	-1.4	-2.4	-0.1	1.8	-0.9	-0.3	-0.3	-1.3	-1.1	-0.9	-0.5	-0.2	0.0
Estonia	1.8	3.8	2.6	0.4	0.5	0.9	0.3	0.0	-0.6	-0.9	-0.6	-0.2	-0.1	0.0	-0.1
Finland	-0.3	-1.8	-1.5	-1.7	-1.2	-0.9	0.0	0.2	-0.8	-1.1	-1.0	-0.5	-0.4	-0.3	-0.3
France	-5.5	-5.7	-4.5	-3.8	-2.8	-2.6	-2.3	-2.2	-2.1	-2.2	-2.9	-1.9	-1.4	-1.0	-0.3
Germany	-1.2	-3.6	-1.5	-0.3	0.0	0.3	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.8
Greece	-8.5	-1.1	5.3	7.3	8.7	6.8	6.5	8.9	8.1	6.3	7.5	7.0	6.7	6.8	4.9
Hong Kong SAR ¹	-0.8	1.0	0.5	0.4	-1.8	2.6	-0.1	2.4	3.1	0.7	-0.1	0.0	-0.4	-0.3	-0.4
Iceland	-10.0	-7.6	-4.7	-3.1	-1.6	-0.1	-1.1	11.2	0.9	0.7	0.8	1.1	1.3	1.2	1.1
Ireland ¹	-9.9	-8.9	-7.2	-4.8	-3.2	-2.0	-0.9	-1.0	-0.9	-0.7	-0.6	-0.1	0.4	0.7	0.9
Israel	-5.0	-3.7	-3.5	-4.7	-4.3	-3.4	-1.9	-2.1	-2.2	-3.2	-3.4	-3.4	-3.4	-3.4	-3.4
Italy	-3.6	-3.6	-3.5	-1.4	-0.8	-0.8	-0.9	-1.1	-1.1	-1.2	-0.8	-0.3	-0.1	-0.1	-0.1
Japan	-6.7	-7.9	-7.8	-7.4	-7.3	-5.3	-4.2	-4.1	-4.0	-3.4	-2.8	-2.2	-2.0	-2.0	-1.9
Korea	0.5	1.5	1.6	1.7	0.9	0.6	0.8	2.0	2.1	2.2	2.0	1.9	1.8	1.8	1.9
Latvia	-3.2	-3.3	-1.4	0.9	-1.0	-1.5	-1.4	-0.1	-0.2	-0.8	-1.0	-0.5	-0.3	-0.2	-0.2
Lithuania	-6.7	-4.2	-7.4	-2.3	-2.1	-0.6	0.0	0.5	0.5	0.5	0.5	0.7	0.6	0.6	0.6
Luxembourg	0.9	-0.6	0.3	1.2	1.5	0.8	1.2	1.7	1.5	0.6	0.0	0.3	0.3	0.2	0.2
Malta	-2.6	-2.5	-1.9	-2.5	-1.3	-1.4	-2.0	0.8	1.5	1.2	0.9	0.6	0.6	0.5	0.5
Netherlands	-5.0	-4.5	-4.3	-3.1	-1.2	-1.2	-1.4	0.8	0.5	0.0	0.0	0.0	0.0	0.1	0.2
New Zealand	-1.8	-4.6	-3.8	-1.2	-0.5	0.1	0.7	1.3	1.5	0.8	0.9	1.7	2.2	2.3	2.3
Norway ¹	-4.9	-4.9	-4.1	-4.5	-4.9	-5.7	-6.6	-7.5	-7.8	-7.8	-7.9	-8.0	-8.0	-8.0	-8.0
Portugal	-8.8	-11.0	-6.4	-3.3	-2.5	-5.1	-3.0	-1.0	-0.8	-1.0	-1.1	-1.1	-0.9	-0.9	-0.9
Singapore	0.2	6.5	8.6	7.8	6.5	5.4	3.6	3.3	5.6	2.1	1.5	1.6	1.7	1.8	1.8
Slovak Republic	-5.4	-5.8	-3.0	-3.1	-1.7	-2.2	-3.1	-2.6	-2.0	-1.3	-0.7	-0.4	-0.4	-0.3	-0.2
Slovenia	-4.5	-4.8	-4.3	-2.0	-1.4	-2.3	-0.9	-0.3	0.2	-0.2	-1.0	-1.3	-1.4	-1.3	-1.1
Spain ¹	-10.6	-8.5	-7.4	-3.3	-2.3	-1.9	-2.6	-2.9	-2.6	-2.5	-2.6	-2.5	-2.5	-2.6	-2.5
Sweden ¹	1.2	0.5	-0.1	-0.5	-0.6	-0.6	-0.2	0.9	0.9	0.8	0.5	0.5	0.3	0.3	0.3
Switzerland ¹	0.8	0.4	0.7	0.6	-0.3	-0.3	0.7	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3
United Kingdom ¹	-8.7	-7.4	-5.8	-5.9	-3.8	-4.6	-3.9	-2.8	-2.2	-1.8	-1.6	-1.3	-1.2	-0.8	-0.7
United States ^{1,2}	-7.7	-9.6	-8.2	-6.4	-4.4	-3.8	-3.6	-4.1	-4.7	-5.3	-6.5	-6.0	-5.9	-5.7	-5.0
Average	-5.8	-6.6	-5.5	-4.4	-3.2	-2.7	-2.4	-2.5	-2.6	-2.8	-3.2	-2.8	-2.7	-2.6	-2.2
Euro Area	-4.6	-4.8	-3.6	-2.4	-1.2	-1.1	-0.9	-0.8	-0.7	-0.9	-0.9	-0.6	-0.4	-0.3	-0.2
G7	-6.2	-7.6	-6.4	-5.2	-3.8	-3.2	-2.9	-3.1	-3.4	-3.5	-4.1	-3.6	-3.4	-3.3	-2.8
G20 Advanced	-6.0	-7.2	-6.1	-4.9	-3.6	-3.1	-2.7	-2.9	-3.1	-3.2	-3.7	-3.3	-3.1	-2.9	-2.5

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

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

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

² For cross-country comparability, expenditure and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditures under the 2008 System of National Accounts (2008 SNA) adopted by the United States, but not in countries that have not yet adopted the 2008 SNA. Data for the United States in this table may thus differ from data published by the U.S. Bureau of Economic Analysis.

Table A4. Advanced Economies: General Government Cyclically Adjusted Primary Balance, 2009–23
(Percent of potential GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia	-4.4	-4.6	-3.7	-2.6	-1.7	-1.6	-1.4	-1.3	-0.9	-0.5	0.0	0.8	1.0	1.0	1.0
Austria	-2.4	-1.9	-1.0	-0.3	1.2	0.0	1.7	1.0	0.7	0.5	0.5	0.5	0.6	0.6	0.5
Belgium	-1.1	-0.6	-1.1	-0.8	0.4	0.3	0.6	0.3	1.2	0.6	0.4	0.4	0.3	0.3	0.2
Canada	-1.5	-3.3	-2.7	-1.8	-1.1	0.0	0.5	-0.2	-0.8	-0.7	-0.6	-0.5	-0.4	-0.3	-0.1
Cyprus	-5.1	-5.2	-6.0	-3.2	2.1	4.9	4.5	4.3	5.0	4.4	4.1	3.7	3.5	3.3	3.7
Czech Republic	-4.4	-3.1	-1.9	-2.1	1.1	0.0	0.1	1.3	1.4	1.0	0.9	0.6	0.7	0.8	0.9
Denmark	-0.2	-1.1	-0.8	-1.9	0.3	2.2	-0.2	0.3	0.1	-1.1	-1.1	-0.8	-0.3	0.1	0.4
Estonia	1.5	3.6	2.4	0.3	0.4	0.8	0.2	-0.1	-0.7	-1.0	-0.6	-0.3	-0.1	-0.1	-0.1
Finland	-0.7	-1.8	-1.5	-1.5	-1.1	-0.7	0.2	0.4	-0.6	-1.0	-1.0	-0.6	-0.5	-0.3	-0.3
France	-3.4	-3.5	-2.1	-1.4	-0.7	-0.6	-0.5	-0.5	-0.5	-0.6	-1.2	-0.1	0.5	1.0	1.7
Germany	1.1	-1.4	0.5	1.6	1.6	1.6	1.8	1.8	1.5	1.2	1.2	1.2	1.3	1.3	1.3
Greece	-3.1	5.0	12.4	12.0	12.4	10.5	9.9	12.0	11.7	9.2	10.9	10.3	10.1	10.4	9.0
Hong Kong SAR ¹	-2.6	-0.8	-1.4	-1.4	-3.5	2.6	-0.1	1.6	2.4	-0.7	-1.2	-1.0	-1.6	-1.4	-1.4
Iceland	-7.0	-5.0	-2.0	0.2	1.8	3.5	2.7	14.3	3.8	3.0	2.7	2.8	2.7	2.5	2.4
Ireland ¹	-8.5	-6.6	-4.7	-1.8	0.1	1.2	1.4	1.2	1.0	1.1	1.1	1.4	1.9	2.2	2.4
Israel	-1.3	0.0	0.2	-1.2	-1.0	-0.3	1.0	0.5	0.6	-0.4	-0.6	-0.6	-0.6	-0.6	-0.5
Italy	0.5	0.5	1.0	3.4	3.6	3.4	2.9	2.5	2.4	2.2	2.6	3.1	3.4	3.5	3.5
Japan	-5.8	-6.9	-6.8	-6.3	-6.4	-4.6	-3.6	-3.4	-3.6	-3.1	-2.7	-2.0	-1.9	-1.8	-1.8
Korea	-0.2	0.8	0.9	1.0	0.0	-0.1	-0.1	1.0	1.1	1.2	0.9	0.9	1.0	1.2	1.2
Latvia	-2.2	-2.0	-0.1	2.4	0.5	0.0	0.4	1.1	0.9	0.2	-0.1	0.5	0.6	0.6	0.6
Lithuania	-5.6	-2.6	-5.8	-0.4	-0.4	1.1	1.5	1.9	1.8	2.0	2.0	2.2	1.9	1.8	1.6
Luxembourg	0.4	-0.8	0.0	1.0	1.3	0.6	1.0	1.5	1.4	0.5	-0.4	-0.3	-0.6	-0.9	-1.1
Malta	0.6	0.6	1.2	0.5	1.5	1.3	0.4	2.9	3.4	3.0	2.5	2.2	2.2	2.1	2.1
Netherlands	-3.8	-3.4	-3.0	-2.0	-0.1	-0.2	-0.5	1.6	1.3	0.6	0.5	0.5	0.6	0.7	0.7
New Zealand	-1.5	-4.1	-3.2	-0.5	0.1	0.6	1.1	1.6	2.0	1.6	1.5	2.3	2.7	2.8	2.9
Norway ¹	-7.9	-7.5	-6.6	-6.7	-7.1	-8.2	-9.5	-10.2	-10.5	-10.6	-10.6	-10.7	-10.7	-10.7	-10.7
Portugal	-6.1	-8.3	-2.7	0.8	1.5	-0.9	1.1	2.9	2.8	2.3	2.1	1.9	2.0	1.9	1.9
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovak Republic	-4.4	-4.7	-1.7	-1.6	0.0	-0.6	-1.6	-1.2	-0.7	0.0	0.5	0.7	0.7	0.7	0.8
Slovenia	-3.7	-3.6	-3.0	-0.4	0.7	0.5	1.8	2.3	2.5	1.7	0.8	0.6	0.5	0.7	0.8
Spain ¹	-9.2	-6.9	-5.5	-0.9	0.4	0.9	0.0	-0.5	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
Sweden ¹	1.6	0.8	0.2	-0.4	-0.5	-0.5	-0.2	0.8	0.7	0.6	0.3	0.3	0.2	0.2	0.1
Switzerland ¹	1.3	0.8	1.1	0.9	-0.1	-0.1	0.9	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4
United Kingdom ¹	-7.4	-5.0	-3.1	-3.6	-2.5	-2.8	-2.4	-1.2	-0.5	-0.2	0.0	0.2	0.4	0.6	0.7
United States ¹	-5.9	-7.6	-6.0	-4.2	-2.4	-1.9	-1.7	-2.0	-2.5	-3.0	-3.9	-3.2	-2.8	-2.5	-1.6
Average	-4.2	-5.0	-3.8	-2.7	-1.6	-1.1	-1.0	-1.0	-1.2	-1.4	-1.7	-1.2	-0.9	-0.7	-0.3
Euro Area	-2.2	-2.4	-1.0	0.2	1.2	1.1	1.1	1.1	1.0	0.7	0.7	1.0	1.1	1.3	1.4
G7	-4.4	-5.6	-4.3	-3.2	-2.0	-1.4	-1.2	-1.4	-1.6	-1.8	-2.2	-1.6	-1.3	-1.1	-0.6
G20 Advanced	-4.3	-5.4	-4.1	-3.0	-1.9	-1.4	-1.2	-1.3	-1.5	-1.6	-2.0	-1.4	-1.1	-0.9	-0.4

Source: IMF staff estimates and projections. Projections are based on staff assessment 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 B.

¹The data for these countries include adjustments beyond the output cycle.

Table A5. Advanced Economies: General Government Revenue, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia	33.4	32.0	31.9	33.2	33.8	34.0	34.6	34.8	34.9	35.1	35.2	35.5	35.6	35.6	35.6
Austria	48.8	48.4	48.3	49.0	49.7	49.6	49.9	49.0	48.8	48.9	48.9	48.9	48.9	48.9	48.9
Belgium	48.8	49.3	50.3	51.6	52.7	52.1	51.3	50.7	51.1	50.4	50.1	49.9	49.9	49.9	49.9
Canada	39.6	38.4	38.4	38.5	38.6	38.6	39.8	39.6	39.3	39.4	39.5	39.5	39.5	39.5	39.5
Cyprus	36.5	37.3	36.7	36.4	37.7	39.8	39.0	38.8	40.4	40.3	40.5	40.4	40.4	40.3	40.3
Czech Republic	38.7	39.3	40.3	40.5	41.4	40.3	41.1	40.1	40.6	41.3	41.4	41.5	41.6	41.7	41.8
Denmark	53.7	54.0	54.4	54.5	54.6	56.4	53.3	53.2	52.1	51.3	50.8	50.6	50.4	50.0	49.9
Estonia	43.9	40.7	38.6	39.0	38.3	39.1	40.3	40.3	40.1	40.3	40.4	40.4	40.2	40.1	40.0
Finland	52.2	52.1	53.3	54.0	54.9	54.9	54.2	54.0	52.7	51.5	51.2	51.4	51.2	51.2	51.2
France	49.6	49.6	50.8	52.0	52.9	53.2	53.1	53.0	53.4	53.0	51.8	51.4	51.3	51.0	51.0
Germany	44.3	43.0	43.8	44.3	44.5	44.6	44.5	45.0	45.2	45.4	45.5	45.5	45.4	45.3	45.3
Greece	38.9	41.3	43.8	45.8	47.8	46.2	48.1	50.2	48.8	48.7	48.2	47.7	46.8	46.5	45.0
Hong Kong SAR	18.8	20.7	22.4	21.4	21.0	20.8	18.6	22.6	22.6	21.5	20.7	20.6	20.7	20.7	20.6
Iceland	38.6	39.4	39.9	41.4	41.9	44.9	41.7	57.6	43.1	42.2	42.0	42.0	41.8	41.6	41.7
Ireland	33.2	33.0	33.6	33.9	34.2	34.0	27.0	26.4	25.7	25.9	25.7	25.6	25.6	25.5	25.5
Israel	35.9	37.1	37.0	36.1	36.5	36.9	37.0	36.7	38.1	36.9	36.7	36.7	36.7	36.7	36.7
Italy	45.9	45.6	45.7	47.8	48.1	47.9	47.7	46.9	46.6	46.7	47.5	47.5	47.5	47.5	47.5
Japan	29.3	29.0	30.0	30.8	31.6	33.3	34.2	34.1	33.2	33.1	33.1	33.8	33.9	33.8	33.8
Korea	21.3	21.0	21.6	22.1	21.5	21.2	21.5	22.5	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Latvia	35.8	36.5	35.6	37.4	36.7	36.1	36.2	36.4	37.3	37.0	35.9	36.3	36.0	35.9	35.7
Lithuania	34.3	34.3	32.6	32.1	32.1	33.4	34.1	33.7	33.8	35.4	35.1	35.1	34.8	34.7	34.6
Luxembourg	44.5	43.5	42.9	44.4	44.3	43.1	42.8	43.8	43.2	42.4	42.0	41.8	41.7	41.5	41.4
Malta	38.6	38.7	38.8	39.2	39.5	39.6	39.0	38.2	39.5	39.2	38.8	38.6	38.6	38.6	38.6
Netherlands	42.7	43.2	42.7	43.2	43.9	43.9	42.8	43.8	43.9	43.9	43.9	43.9	43.9	43.9	43.9
New Zealand	35.1	34.3	34.1	34.2	34.0	33.9	34.3	34.3	34.1	34.1	34.2	34.3	34.1	34.1	34.2
Norway	55.3	54.9	56.1	55.7	53.8	53.6	53.9	53.9	54.1	51.7	52.2	52.9	53.2	53.5	53.9
Portugal	40.4	40.6	42.6	42.9	45.1	44.6	43.8	43.0	43.1	43.0	42.8	42.7	42.6	42.5	42.4
Singapore	17.4	21.1	23.1	22.2	21.4	21.2	21.4	21.0	23.3	20.8	21.2	21.4	21.6	21.8	22.0
Slovak Republic	36.3	34.7	36.5	36.3	38.7	39.3	42.5	39.3	39.4	38.7	39.4	39.1	39.4	38.8	38.8
Slovenia	39.8	40.8	40.6	41.6	40.6	41.2	40.5	39.2	38.8	39.3	39.0	39.0	39.1	39.2	39.3
Spain	34.8	36.2	36.2	37.6	38.6	38.9	38.5	37.7	38.2	38.2	38.0	37.9	37.7	37.6	37.4
Sweden	51.0	49.7	49.1	49.3	49.6	48.5	48.9	49.7	49.3	48.2	47.9	48.1	48.1	48.1	48.1
Switzerland	32.7	32.4	32.7	32.6	32.7	32.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
United Kingdom	34.2	35.3	36.0	35.9	36.3	35.3	35.6	36.0	36.4	36.7	36.7	36.7	36.4	36.5	36.5
United States	28.4	29.1	29.4	29.4	31.6	31.5	31.6	31.2	31.3	30.8	30.5	31.0	31.3	31.7	32.0
Average	35.0	34.9	35.5	35.7	36.9	36.9	36.5	36.4	36.4	36.3	36.2	36.4	36.5	36.7	36.8
Euro Area	44.4	44.3	44.9	46.0	46.7	46.7	46.2	46.1	46.1	46.0	45.7	45.5	45.5	45.4	45.3
G7	34.2	34.2	34.8	34.9	36.4	36.5	36.3	36.0	36.0	36.0	35.8	36.1	36.3	36.5	36.7
G20 Advanced	33.8	33.7	34.3	34.4	35.8	35.9	35.7	35.5	35.5	35.5	35.3	35.6	35.7	35.9	36.1

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

Table A6. Advanced Economies: General Government Expenditure, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia	37.9	37.1	36.4	36.6	36.6	36.9	37.4	37.4	37.0	36.8	36.3	35.7	35.4	35.4	35.4
Austria	54.1	52.8	50.9	51.2	51.0	52.3	51.0	50.5	49.7	49.2	49.0	49.1	49.2	49.2	49.4
Belgium	54.2	53.3	54.5	55.9	55.8	55.2	53.8	53.2	52.2	51.7	51.4	51.1	51.1	51.2	51.2
Canada	43.5	43.2	41.7	41.0	40.1	38.5	39.9	40.7	40.3	40.2	40.3	40.3	40.2	40.2	40.3
Cyprus	41.9	42.0	42.3	41.9	41.0	40.0	39.2	38.3	38.5	38.3	38.8	38.8	38.8	38.9	38.8
Czech Republic	44.2	43.5	43.0	44.5	42.6	42.2	41.7	39.4	39.3	40.1	40.4	41.0	41.1	41.2	41.3
Denmark	56.5	56.7	56.4	58.0	55.8	55.2	54.8	53.6	52.2	52.1	51.3	50.9	50.4	49.9	49.5
Estonia	46.1	40.5	37.4	39.3	38.5	38.4	40.2	40.6	40.3	40.7	40.6	40.4	40.2	40.1	40.0
Finland	54.8	54.8	54.4	56.2	57.5	58.1	56.9	55.7	54.0	52.9	52.0	51.6	51.3	51.3	51.3
France	56.8	56.4	55.9	56.8	57.0	57.1	56.7	56.4	56.3	55.7	55.0	53.4	52.7	52.0	51.3
Germany	47.6	47.3	44.7	44.3	44.7	44.3	43.9	44.2	44.1	44.0	43.9	44.0	44.1	44.1	44.1
Greece	54.1	52.5	54.1	52.4	51.4	50.2	50.9	49.7	48.8	48.7	48.2	47.6	46.7	46.6	47.6
Hong Kong SAR	17.3	16.6	18.6	18.3	20.0	17.3	18.0	18.3	17.5	18.8	18.9	18.9	19.5	19.5	19.5
Iceland	48.2	49.1	45.5	45.2	43.7	45.0	42.5	45.0	41.4	41.0	40.9	40.8	40.5	40.4	40.5
Ireland	47.0	65.1	46.3	42.0	40.3	37.6	28.9	27.1	26.1	26.0	25.9	25.5	25.0	24.7	24.5
Israel	41.6	40.7	40.0	40.9	40.6	40.2	39.1	38.8	40.2	40.1	40.0	40.1	40.1	40.1	40.1
Italy	51.2	49.9	49.4	50.8	51.1	50.9	50.3	49.3	48.6	48.2	48.4	47.8	47.5	47.6	47.6
Japan	39.5	38.5	39.4	39.4	39.5	38.9	38.0	37.8	37.5	36.6	36.0	36.0	35.9	35.8	35.8
Korea	21.3	19.5	19.9	20.6	20.9	20.8	20.9	20.7	21.1	21.0	21.1	21.2	21.2	21.2	21.1
Latvia	42.8	43.0	38.8	37.2	37.3	37.8	37.8	36.8	37.3	37.5	36.8	36.7	36.2	36.1	35.9
Lithuania	43.6	41.2	41.5	35.2	34.7	34.0	34.3	33.5	33.2	34.7	34.3	34.2	34.1	34.0	34.0
Luxembourg	45.1	44.1	42.4	44.1	43.3	41.8	41.5	42.1	41.8	41.7	41.8	41.3	41.3	41.2	41.2
Malta	41.9	41.1	41.2	42.7	42.0	41.3	40.1	37.1	37.6	37.6	37.7	37.9	38.0	38.2	38.2
Netherlands	48.2	48.1	47.0	47.1	46.3	46.2	44.9	43.4	43.3	43.4	43.2	43.1	43.0	42.9	42.9
New Zealand	36.4	39.1	38.6	35.9	34.8	34.0	33.7	33.0	32.5	33.1	33.1	32.3	31.6	31.5	31.5
Norway	45.0	44.0	43.0	42.2	43.3	45.1	48.0	50.0	49.2	48.0	48.5	48.9	49.2	49.5	49.8
Portugal	50.2	51.8	50.0	48.5	49.9	51.8	48.2	44.9	44.3	44.0	43.7	43.5	43.3	43.1	43.1
Singapore	17.3	15.0	14.5	14.4	14.8	15.8	17.8	17.7	17.4	18.5	19.3	19.7	19.6	19.8	20.1
Slovak Republic	44.1	42.1	40.8	40.6	41.4	42.0	45.2	41.5	41.0	39.6	39.7	39.2	39.6	38.9	38.9
Slovenia	45.3	46.0	46.1	44.7	54.4	47.0	43.8	40.9	39.6	39.3	39.3	39.4	39.7	39.9	40.2
Spain	45.8	45.6	45.8	48.1	45.6	44.8	43.8	42.2	41.3	40.7	40.1	40.0	39.8	39.8	39.6
Sweden	51.7	49.8	49.3	50.3	51.0	50.1	48.7	48.5	48.1	47.1	47.2	47.5	47.6	47.7	47.8
Switzerland	32.2	32.0	32.0	32.2	33.1	32.7	32.9	33.5	33.5	33.1	33.1	33.2	33.2	33.2	33.2
United Kingdom	44.3	44.7	43.5	43.5	41.7	40.7	39.8	39.0	38.7	38.6	38.3	38.0	37.6	37.3	37.2
United States	41.6	40.0	38.9	37.3	36.0	35.5	35.2	35.7	35.9	35.8	36.1	36.2	36.5	36.9	36.6
Average	43.8	42.6	41.8	41.1	40.6	40.1	39.1	39.1	39.0	38.9	38.9	38.8	38.8	38.8	38.7
Euro Area	50.7	50.5	49.1	49.7	49.7	49.2	48.3	47.6	47.2	46.8	46.3	45.8	45.5	45.3	45.2
G7	44.1	43.0	42.2	41.3	40.7	40.1	39.3	39.4	39.4	39.4	39.4	39.3	39.3	39.4	39.3
G20 Advanced	43.3	42.0	41.3	40.4	39.9	39.3	38.5	38.6	38.6	38.5	38.5	38.4	38.5	38.5	38.4

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

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

Table A7. Advanced Economies: General Government Gross Debt, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia ¹	16.7	20.5	24.1	27.7	30.6	34.1	37.8	40.6	41.6	41.7	41.0	38.7	36.1	34.2	32.2
Austria	79.6	82.4	82.2	81.6	81.0	83.8	84.3	83.7	78.8	75.4	72.0	69.3	66.8	64.9	63.2
Belgium	99.5	99.7	102.6	104.3	105.5	106.8	106.0	105.7	103.2	101.0	99.1	97.4	95.6	94.0	93.0
Canada ¹	79.3	81.1	81.5	84.8	85.8	85.0	90.5	91.1	89.7	86.6	83.8	81.2	78.7	76.4	74.3
Cyprus	52.8	55.8	65.2	79.2	102.1	107.5	107.5	107.1	99.3	112.8	104.5	97.2	92.3	86.0	79.9
Czech Republic	33.6	37.4	39.8	44.5	44.9	42.2	40.0	36.8	34.7	32.9	31.3	29.4	27.6	26.0	24.5
Denmark	40.2	42.6	46.1	44.9	44.0	43.9	39.6	37.7	36.4	35.9	35.1	34.1	32.8	31.4	29.8
Estonia	7.0	6.6	6.1	9.7	10.2	10.7	10.0	9.4	8.8	8.5	8.1	7.6	7.2	6.8	6.4
Finland	41.7	47.1	48.5	53.9	56.5	60.2	63.6	63.0	61.4	60.5	59.6	57.8	56.3	54.6	53.0
France	78.9	81.6	85.2	89.5	92.3	94.9	95.6	96.3	96.5	96.2	96.2	95.1	93.5	91.4	88.8
Germany	72.6	80.9	78.6	79.8	77.4	74.6	70.9	68.1	64.1	59.8	55.8	52.4	49.1	46.0	43.1
Greece	126.7	146.2	172.1	159.6	177.9	180.2	178.8	183.5	181.9	194.3	184.6	179.8	174.9	171.5	168.0
Hong Kong SAR ¹	0.7	0.6	0.6	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Iceland	82.3	87.8	94.7	92.1	84.3	81.8	67.6	52.7	40.9	38.4	34.9	32.1	29.2	25.6	23.5
Ireland	61.5	86.1	110.4	119.7	119.6	104.7	77.1	72.9	69.2	68.6	67.1	63.7	61.7	58.5	55.4
Israel	74.6	70.7	68.8	68.4	67.1	66.1	64.2	62.3	61.0	61.6	61.4	61.3	61.2	61.0	60.9
Italy	112.5	115.4	116.5	123.4	129.0	131.8	131.5	132.0	131.5	129.7	127.5	124.9	122.1	119.3	116.6
Japan	201.0	207.9	222.1	229.0	232.5	236.1	231.3	235.6	236.4	236.0	234.2	232.3	231.4	230.7	229.6
Korea	31.4	30.8	31.5	32.2	35.4	37.3	39.5	40.0	39.8	38.9	38.3	37.9	37.6	37.3	37.0
Latvia	32.5	40.3	37.5	36.7	35.8	38.5	34.9	37.4	34.8	32.9	31.9	30.6	29.3	28.1	26.9
Lithuania	29.0	36.2	37.2	39.8	38.8	40.5	42.6	40.2	36.5	34.2	31.4	28.9	26.6	24.6	22.7
Luxembourg	15.7	19.8	18.7	21.7	23.7	22.7	22.0	20.8	23.0	22.9	22.8	22.4	22.1	21.8	21.7
Malta	67.6	67.5	70.1	67.8	68.4	63.8	58.7	56.2	52.6	48.6	45.9	43.1	41.2	40.0	38.0
Netherlands	56.5	59.3	61.6	66.3	67.8	68.0	64.6	61.8	56.7	53.5	50.9	49.0	47.4	44.9	42.5
New Zealand	21.1	26.0	30.8	31.3	29.9	29.1	28.4	28.2	26.5	24.4	23.0	22.0	20.0	21.4	17.9
Norway	41.9	42.3	28.8	30.2	30.4	28.3	33.1	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
Portugal	83.6	96.2	111.4	126.2	129.0	130.6	128.8	129.9	125.6	121.2	117.5	114.1	110.8	107.7	104.7
Singapore	99.7	97.0	100.7	105.1	101.5	96.6	100.5	106.8	110.9	110.2	108.8	108.1	106.8	105.8	107.2
Slovak Republic	35.9	40.7	43.2	52.2	54.7	53.5	52.3	51.8	50.4	49.0	46.6	43.9	42.3	41.1	40.3
Slovenia	34.5	38.2	46.4	53.8	70.4	80.3	82.6	78.4	75.4	72.1	69.8	68.0	66.5	65.3	64.4
Spain	52.7	60.1	69.5	85.7	95.5	100.4	99.4	99.0	98.3	97.0	95.6	94.4	93.3	92.3	91.4
Sweden	40.3	38.6	37.9	38.1	40.8	45.5	44.2	42.2	40.9	38.0	34.4	32.0	30.6	29.3	27.9
Switzerland	45.2	44.0	44.1	44.7	43.8	43.7	43.6	43.3	42.8	41.9	41.1	39.6	38.2	36.9	35.7
United Kingdom	64.1	75.6	81.3	84.5	85.6	87.4	88.2	88.2	87.0	86.5	86.2	85.5	84.9	84.1	83.1
United States ¹	87.0	95.6	99.9	103.5	105.3	105.0	105.2	107.1	108.4	108.5	109.7	111.3	113.0	114.9	116.3
Average	91.5	98.2	102.3	106.6	105.3	104.8	104.4	106.9	105.7	104.1	103.3	102.5	101.8	101.3	100.4
Euro Area	78.4	83.8	86.1	89.4	91.3	91.8	89.9	88.9	86.8	84.6	82.3	79.9	77.5	74.9	72.3
G7	103.2	111.5	116.7	121.0	118.8	117.7	116.5	119.6	118.9	117.6	117.1	116.7	116.4	116.3	115.8
G20 Advanced	98.8	105.8	110.2	114.2	112.4	111.6	111.0	114.1	113.2	111.8	111.3	110.7	110.3	110.0	109.4

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

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

¹ For cross-country comparability, gross debt levels reported by national statistical agencies for countries 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.

Table A8. Advanced Economies: General Government Net Debt, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia ¹	-0.6	3.9	8.0	11.2	13.1	15.5	17.8	19.1	19.1	19.2	18.7	17.3	15.6	13.9	12.3
Austria	56.7	60.5	60.3	60.3	60.2	59.0	58.0	57.5	54.3	51.9	49.4	47.5	45.8	44.6	43.6
Belgium ²	88.3	88.4	90.8	91.6	92.5	93.7	93.1	92.4	90.3	88.6	87.1	85.7	84.3	83.0	82.4
Canada ¹	24.4	26.8	27.1	28.3	29.3	28.0	27.7	28.5	28.8	27.8	27.0	26.1	25.3	24.6	23.9
Cyprus	44.4	48.6	53.0	67.5	78.6	89.5	91.3	88.8	...	...	...	...	...	...	...
Czech Republic	20.7	26.4	26.8	28.3	29.1	29.4	28.1	24.8	22.9	...	...	...	...	...	...
Denmark	11.5	15.0	15.1	18.5	18.3	17.8	16.2	16.8	16.3	16.5	16.4	16.1	15.5	14.7	13.8
Estonia	-9.7	-8.5	-6.8	-4.9	-4.4	-3.9	-2.2	-2.7	-0.6	-0.2	0.0	0.0	0.0	0.0	0.1
Finland ³	-3.7	1.4	3.4	9.6	13.2	14.6	20.9	22.0	22.6	23.1	23.1	22.5	21.9	21.3	20.7
France	70.2	74.0	76.9	80.6	83.5	86.1	86.9	87.7	87.8	87.5	87.5	86.4	84.8	82.8	80.2
Germany	59.4	60.9	59.2	58.4	57.4	54.0	51.0	48.3	45.0	41.5	38.2	35.4	32.7	30.2	27.9
Greece	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong SAR	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Iceland ⁴	65.8	65.4	61.4	63.5	61.9	55.4	48.9	40.4	33.3	31.1	27.6	18.8	16.4	13.8	11.1
Ireland ⁵	36.5	66.2	78.6	86.7	89.7	86.1	66.0	63.8	60.5	59.4	58.0	57.2	55.4	52.9	50.5
Israel	66.4	64.2	63.3	63.1	62.0	62.0	60.2	58.6	57.9	58.6	58.6	58.6	58.6	58.6	58.6
Italy	102.8	104.7	106.8	111.6	116.7	118.8	119.5	120.2	119.9	118.5	116.5	114.1	111.6	109.0	106.5
Japan	122.7	131.1	142.4	146.7	146.4	148.5	147.6	152.8	153.0	152.6	150.8	148.9	148.1	147.4	146.3
Korea	30.0	29.2	29.9	-2.0	1.9	3.5	6.4	6.8	6.6	5.7	5.1	4.8	4.4	4.1	3.8
Latvia	15.3	22.4	25.8	24.7	26.1	27.1	29.2	28.0	26.9	25.6	25.0	24.1	23.1	22.2	21.4
Lithuania	20.8	26.3	33.1	33.4	34.2	32.7	35.0	32.8	29.7	27.7	25.3	23.1	21.1	19.4	17.8
Luxembourg	-20.3	-13.4	-10.9	-10.4	-8.8	-10.8	-12.0	-11.8	-8.3	-6.7	-5.2	-4.2	-3.1	-2.2	-1.2
Malta	57.3	57.2	58.1	58.0	59.0	54.3	50.2	43.7	...	...	...	...	...	...	...
Netherlands	41.6	45.7	48.2	51.9	53.5	54.7	52.6	50.4	46.2	43.6	41.5	40.0	38.7	36.6	34.6
New Zealand	-0.6	2.5	6.3	7.9	7.9	7.7	6.4	6.0	4.7	5.3	6.5	6.3	5.6	4.6	1.1
Norway ⁶	-43.8	-47.4	-48.3	-49.8	-61.2	-76.0	-86.7	-87.7	-90.5	-90.7	-92.1	-94.0	-96.3	-98.5	-101.0
Portugal	76.0	87.7	96.1	104.8	107.3	111.9	113.1	112.3	108.1	105.2	102.6	100.0	97.4	94.8	92.1
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovak Republic	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovenia	21.0	26.6	32.2	36.7	45.5	46.5	50.4	52.1	...	...	...	...	...	...	...
Spain	36.6	46.0	56.5	71.8	81.1	85.5	85.7	86.5	86.2	85.4	84.5	83.6	82.9	82.3	81.7
Sweden	13.5	13.6	11.9	11.5	11.7	11.4	11.1	8.8	9.0	7.5	5.1	3.8	3.2	2.7	2.3
Switzerland	26.8	25.6	25.6	25.0	23.8	23.8	23.9	24.1	23.1	22.2	21.4	19.9	18.5	17.2	15.9
United Kingdom	57.3	68.4	72.9	76.0	77.2	79.1	79.6	79.1	78.1	77.5	77.3	76.6	76.0	75.2	74.1
United States ¹	62.7	70.0	76.5	80.4	81.2	80.7	80.4	81.4	82.9	81.9	83.0	84.5	86.2	88.1	89.6
Average	64.2	69.6	74.0	76.6	75.8	75.6	75.6	77.3	76.6	75.2	74.8	74.2	73.9	73.6	73.0
Euro Area	61.9	66.0	68.4	72.2	74.5	74.9	73.7	73.2	71.1	69.2	67.5	65.6	63.5	61.4	59.2
G7	73.6	80.0	85.4	88.7	87.5	86.9	86.2	88.1	87.9	86.5	86.2	85.9	85.8	85.9	85.6
G20 Advanced	70.2	75.7	80.6	82.6	81.6	81.2	80.9	82.8	82.4	80.9	80.6	80.2	79.9	79.9	79.4

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

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

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

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

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

⁴ Net debt for Iceland is defined as gross debt less currency and deposits.

⁵ Net debt for Ireland is defined as gross general debt less debt instrument assets, namely, currency and deposits (F2), debt securities (F3), and loans (F4). It was previously defined as general government debt less currency and deposits.

⁶ Norway's net debt series has been revised because of a change in the net debt calculation by excluding the equity and shares from financial assets and including accounts receivable in the financial assets, following *Government Finance Statistics* and the Maastricht definition.

Table A9. Emerging Market and Middle-Income Economies: General Government Overall Balance, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	-5.8	0.0	-0.1	-4.4	-0.4	-7.3	-15.3	-13.1	-6.4	-7.9	-4.6	-3.2	-2.1	0.0	0.0
Angola	-7.4	3.4	8.7	4.6	-0.3	-6.6	-3.3	-4.8	-5.6	-1.7	-2.2	-2.4	-2.6	-2.3	-2.0
Argentina	-2.6	-1.4	-2.7	-3.0	-3.3	-4.3	-5.9	-6.5	-6.6	-5.6	-4.9	-4.1	-4.2	-4.6	-4.8
Azerbaijan	5.9	13.8	10.9	3.7	1.6	2.7	-4.8	-1.2	0.9	2.4	2.1	1.8	0.6	-0.6	-1.6
Belarus	-7.2	-4.2	-2.8	0.4	-1.0	0.1	-2.2	-3.4	-1.7	-2.4	-3.0	-1.2	-0.9	-0.6	-0.5
Brazil	-3.2	-2.7	-2.5	-2.5	-3.0	-5.4	-10.3	-9.0	-7.8	-9.4	-9.0	-8.3	-7.7	-7.2	-6.7
Chile	-4.2	-0.4	1.4	0.7	-0.5	-1.5	-2.1	-2.7	-2.8	-1.0	-0.6	-0.4	0.0	0.0	0.0
China	-1.7	-0.4	-0.1	-0.3	-0.8	-0.9	-2.8	-3.7	-4.0	-4.1	-4.3	-4.3	-4.3	-4.4	-4.3
Colombia	-2.8	-3.3	-2.0	0.1	-0.9	-1.8	-3.4	-3.0	-3.2	-2.7	-2.1	-1.1	-0.7	-0.9	-0.9
Croatia	-6.0	-6.2	-7.8	-5.3	-5.3	-5.4	-3.3	-0.9	0.6	-0.5	-0.3	0.2	0.4	0.6	0.7
Dominican Republic	-3.0	-2.7	-3.1	-6.6	-3.5	-3.0	-0.2	-2.8	-3.4	-3.0	-3.2	-3.2	-3.4	-3.7	-3.7
Ecuador	-3.6	-1.4	-0.1	-0.9	-4.6	-5.2	-5.3	-8.3	-5.3	-5.0	-3.7	-2.9	-2.8	-1.8	-1.6
Egypt ¹	-6.2	-7.4	-9.6	-10.0	-12.9	-11.3	-10.9	-10.7	-11.4	-10.0	-6.6	-5.8	-3.5	-3.3	-3.2
Hungary	-4.6	-4.5	-5.4	-2.3	-2.5	-2.1	-1.5	-1.8	-2.0	-2.1	-1.9	-1.9	-2.1	-2.3	-2.3
India	-9.5	-8.6	-8.3	-7.5	-7.0	-7.2	-7.0	-6.7	-7.2	-6.7	-6.5	-6.4	-6.2	-6.1	-5.9
Indonesia	-1.6	-1.2	-0.7	-1.6	-2.2	-2.1	-2.6	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Iran	0.8	2.6	0.6	-0.3	-0.9	-1.1	-1.8	-2.3	-2.4	-1.8	-3.2	-3.3	-3.4	-3.6	-3.7
Kazakhstan	-1.3	1.5	5.8	4.4	4.9	2.5	-6.3	-5.5	-6.3	-2.3	-2.2	-1.8	-2.0	-1.7	-1.4
Kuwait	27.5	26.0	33.3	32.4	34.1	22.4	5.6	0.6	4.0	7.1	6.2	4.3	2.6	1.9	1.4
Libya	-6.5	12.5	-17.2	28.6	-5.1	-73.8	-131.0	-113.3	-43.2	-39.3	-35.5	-38.0	-40.0	-42.0	-42.6
Malaysia	-6.5	-4.5	-3.6	-3.8	-4.1	-2.7	-2.6	-2.6	-2.9	-2.7	-2.5	-2.3	-2.1	-1.9	-1.7
Mexico	-4.9	-3.9	-3.4	-3.7	-3.7	-4.5	-4.0	-2.8	-1.1	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Morocco	-1.8	-4.3	-6.6	-7.2	-5.1	-4.8	-4.2	-4.1	-3.6	-3.0	-2.8	-2.7	-2.4	-2.2	-2.1
Oman	-0.3	5.5	9.4	4.6	4.7	-1.1	-15.9	-21.3	-11.4	-5.7	-4.9	-5.5	-6.7	-7.1	-7.2
Pakistan	-5.0	-6.0	-6.7	-8.6	-8.4	-4.9	-5.3	-4.4	-5.7	-5.3	-5.7	-5.7	-5.7	-5.7	-5.7
Peru	-1.4	0.1	2.0	2.1	0.7	-0.3	-2.2	-2.3	-3.1	-3.4	-2.8	-1.8	-1.0	-1.0	-1.0
Philippines	-2.7	-2.4	-0.3	-0.3	0.2	0.9	0.6	-0.4	-0.3	-0.5	-0.6	-0.7	-0.7	-0.8	-0.9
Poland	-7.3	-7.3	-4.8	-3.7	-4.1	-3.6	-2.6	-2.5	-1.7	-1.9	-1.8	-1.5	-1.4	-1.3	-1.2
Qatar	14.9	6.7	7.5	11.2	22.7	15.3	5.3	-4.5	-1.3	3.6	10.0	9.2	7.7	7.7	7.2
Romania	-6.9	-6.3	-4.2	-2.5	-2.5	-1.9	-1.5	-2.4	-2.9	-3.5	-3.4	-3.4	-3.3	-3.1	-3.0
Russia	-5.9	-3.2	1.4	0.4	-1.2	-1.1	-3.4	-3.7	-1.5	0.0	0.1	0.3	0.5	0.5	0.5
Saudi Arabia	-5.4	4.4	11.6	11.9	5.6	-3.5	-15.8	-17.2	-9.0	-7.3	-5.6	-5.3	-5.0	-4.4	-4.0
South Africa	-5.2	-5.0	-4.1	-4.4	-4.3	-4.3	-4.8	-4.1	-4.5	-4.2	-4.1	-4.1	-4.0	-4.1	-4.1
Sri Lanka	-8.6	-7.0	-6.2	-5.6	-5.2	-6.2	-7.0	-5.4	-5.4	-4.5	-3.6	-3.5	-3.5	-3.5	-3.5
Thailand	-2.2	-1.3	0.0	-0.9	0.5	-0.8	0.1	0.6	-0.6	-1.0	-1.1	-1.4	-1.5	-1.6	-1.7
Turkey	-5.9	-3.4	-0.7	-1.8	-1.5	-1.4	-1.3	-2.3	-2.3	-2.9	-3.2	-2.8	-2.4	-2.3	-2.2
Ukraine	-6.0	-5.8	-2.8	-4.3	-4.8	-4.5	-1.2	-2.2	-2.4	-2.5	-2.7	-2.4	-2.3	-2.3	-2.2
United Arab Emirates	-6.1	0.6	5.3	9.0	8.4	1.9	-3.4	-2.5	-1.8	-1.4	-0.8	-0.5	-0.1	0.3	0.7
Uruguay	-1.6	-1.1	-0.9	-2.7	-2.3	-3.5	-3.6	-3.9	-3.5	-2.9	-2.5	-2.5	-2.5	-2.5	-2.5
Venezuela	-8.7	-9.2	-10.6	-14.6	-14.1	-16.5	-17.6	-17.8	-31.9	-28.1	-28.5	-28.4	-28.0	-27.6	-29.0
Average	-3.7	-2.2	-1.0	-1.0	-1.5	-2.4	-4.4	-4.8	-4.5	-4.2	-4.1	-4.0	-3.9	-3.9	-3.8
Asia	-3.3	-2.2	-1.6	-1.6	-1.8	-1.9	-3.2	-3.9	-4.2	-4.3	-4.3	-4.3	-4.3	-4.4	-4.3
Europe	-5.8	-3.7	-0.2	-0.7	-1.5	-1.4	-2.7	-3.0	-2.0	-1.4	-1.4	-1.2	-1.0	-1.0	-1.0
Latin America	-3.8	-3.1	-2.8	-3.1	-3.3	-4.8	-7.2	-6.6	-6.4	-6.3	-5.8	-5.3	-4.9	-4.7	-4.5
MENAP	-1.3	2.4	4.3	5.7	4.0	-1.4	-8.4	-9.3	-5.8	-4.6	-3.4	-3.3	-3.2	-2.9	-2.9
G20 Emerging	-3.9	-2.3	-1.1	-1.2	-1.8	-2.5	-4.4	-4.8	-4.5	-4.5	-4.5	-4.4	-4.3	-4.3	-4.2

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

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

¹Based on nominal GDP series prior to the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

Table A10. Emerging Market and Middle-Income Economies: General Government Primary Balance, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	-6.3	-0.5	-1.3	-5.3	-0.5	-7.4	-15.9	-13.2	-6.4	-8.1	-4.9	-3.3	-2.2	-0.1	-0.1
Angola	-5.6	4.6	9.6	5.6	0.5	-5.4	-1.3	-1.8	-2.3	2.5	2.0	1.7	1.5	1.6	1.6
Argentina	-1.3	-0.6	-1.6	-1.7	-2.6	-3.5	-4.5	-4.8	-4.6	-3.5	-2.4	-1.4	-1.1	-1.0	-0.9
Azerbaijan	6.0	13.8	10.9	3.8	1.7	2.9	-4.4	-0.8	1.5	3.2	3.3	3.2	2.1	1.0	0.4
Belarus	-6.5	-3.5	-1.7	1.7	0.0	1.1	-0.5	-1.4	0.4	0.0	-0.5	1.4	1.9	2.0	2.0
Brazil	1.9	2.3	2.9	1.9	1.7	0.0	-2.0	-2.5	-1.7	-2.3	-1.8	-1.1	-0.4	0.1	0.5
Chile	-4.4	-0.3	1.5	0.8	-0.4	-1.3	-1.9	-2.4	-2.4	-0.5	-0.1	0.1	0.4	0.5	0.5
China	-1.3	0.1	0.4	0.2	-0.3	-0.4	-2.2	-2.9	-3.0	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1
Colombia	-1.1	-1.6	-0.1	1.6	1.2	0.3	-0.7	0.0	-0.3	0.0	0.6	1.5	1.7	1.5	1.3
Croatia	-4.1	-4.1	-5.1	-2.3	-2.2	-2.3	-0.1	2.0	3.3	2.0	2.1	2.4	2.4	2.5	2.5
Dominican Republic	-1.2	-0.9	-1.0	-4.2	-1.2	-0.5	2.4	0.1	-0.3	0.4	0.4	0.6	0.6	0.6	0.5
Ecuador	-3.0	-0.8	0.5	-0.2	-3.5	-4.2	-3.9	-6.8	-3.2	-2.9	-1.0	0.2	0.7	1.8	2.2
Egypt ¹	-3.2	-3.2	-4.8	-4.9	-5.9	-4.2	-4.1	-3.0	-2.8	-1.2	1.2	1.6	2.0	1.8	1.8
Hungary	-0.6	-0.7	-1.7	1.9	1.7	1.7	1.8	1.3	0.4	0.0	0.1	0.0	-0.1	-0.1	0.1
India	-5.0	-4.4	-4.0	-3.2	-2.4	-2.7	-2.5	-1.9	-2.3	-1.9	-1.8	-1.8	-1.7	-1.6	-1.6
Indonesia	-0.1	0.0	0.5	-0.4	-1.0	-0.9	-1.2	-1.0	-0.9	-0.9	-0.8	-0.8	-0.8	-0.8	-0.8
Iran	0.8	2.6	0.7	-0.2	-0.8	-1.1	-1.7	-2.2	-2.2	-1.4	1.7	1.8	2.0	2.0	2.0
Kazakhstan	-1.4	1.8	5.7	3.8	4.4	2.0	-5.9	-4.8	-6.3	-2.1	-1.9	-1.4	-1.5	-1.1	-0.8
Kuwait	18.1	16.9	26.5	25.4	25.8	12.7	-7.5	-13.8	-9.8	-5.5	-6.4	-8.1	-9.3	-9.4	-9.4
Libya	-6.5	12.5	-17.2	28.6	-5.1	-73.8	-131.0	-113.3	-43.2	-39.3	-35.5	-38.0	-40.0	-42.0	-42.6
Malaysia	-5.0	-2.9	-2.0	-2.0	-2.2	-0.8	-0.9	-0.8	-1.1	-0.8	-0.4	-0.2	0.0	0.2	0.4
Mexico	-2.2	-1.4	-1.0	-0.6	-0.7	-1.5	-1.0	0.6	3.0	1.0	0.6	0.6	0.8	0.9	1.0
Morocco	0.6	-2.0	-4.4	-4.7	-2.5	-2.1	-1.4	-1.4	-1.0	-0.6	-0.5	-0.4	-0.2	-0.1	0.0
Oman	-1.3	4.6	8.9	3.3	2.6	-2.1	-16.1	-21.8	-11.7	-5.3	-4.5	-5.0	-5.8	-5.8	-5.4
Pakistan	-0.2	-1.7	-2.9	-4.2	-3.9	-0.3	-0.5	-0.1	-1.4	-1.3	-1.4	-1.4	-1.3	-1.1	-1.1
Peru	-0.3	1.2	3.1	3.0	1.7	0.7	-1.3	-1.4	-2.0	-2.3	-1.7	-0.7	0.1	0.2	0.2
Philippines	0.6	0.7	2.3	2.3	2.7	3.1	2.7	1.5	1.4	1.4	1.2	1.0	1.0	1.0	0.8
Poland	-4.8	-4.9	-2.3	-1.1	-1.6	-1.6	-0.9	-0.8	-0.1	-0.2	-0.1	0.2	0.3	0.4	0.5
Qatar	16.0	7.9	9.0	12.7	23.9	16.5	6.7	-3.7	-0.3	4.6	11.1	10.2	8.7	8.5	8.0
Romania	-5.9	-5.1	-2.8	-0.7	-0.8	-0.4	-0.2	-1.1	-1.7	-2.2	-2.1	-2.0	-1.9	-1.7	-1.6
Russia	-6.2	-3.1	1.7	0.7	-0.8	-0.7	-3.1	-3.2	-0.9	0.4	0.6	0.9	1.0	1.1	1.1
Saudi Arabia	-5.5	4.7	11.6	11.7	5.2	-4.2	-17.9	-20.2	-10.5	-8.2	-6.2	-5.7	-5.2	-4.5	-3.9
South Africa	-2.9	-2.6	-1.5	-1.7	-1.4	-1.3	-1.6	-0.7	-1.0	-0.5	-0.1	0.0	0.0	0.0	0.0
Sri Lanka	-3.0	-1.5	-1.3	-0.9	-0.6	-2.0	-2.2	-0.2	0.0	1.0	2.0	2.2	2.3	2.3	2.3
Thailand	-1.5	-0.7	0.8	-0.1	1.3	-0.1	0.7	1.0	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6
Turkey	-1.5	0.1	1.8	0.7	0.8	0.5	0.6	-1.0	-0.9	-1.3	-1.3	-0.7	-0.3	-0.2	-0.2
Ukraine	-4.9	-4.1	-0.8	-2.4	-2.3	-1.2	3.0	1.9	1.4	1.5	1.8	1.8	1.8	1.8	1.8
United Arab Emirates	-5.9	0.9	5.5	9.3	8.8	2.2	-3.2	-2.3	-1.7	-1.3	-0.7	-0.3	0.0	0.4	0.8
Uruguay	1.1	1.9	1.9	-0.2	0.4	-0.6	0.0	-0.5	-0.2	0.1	0.6	0.6	0.9	1.0	0.8
Venezuela	-7.2	-7.4	-8.5	-11.3	-10.6	-12.6	-15.9	-16.8	-31.5	-28.1	-28.5	-28.3	-28.0	-27.6	-29.0
Average	-2.0	-0.4	0.7	0.6	0.1	-0.8	-2.7	-3.0	-2.6	-2.3	-2.0	-1.9	-1.8	-1.7	-1.7
Asia	-1.9	-0.8	-0.3	-0.4	-0.6	-0.7	-2.0	-2.4	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.5
Europe	-4.3	-2.3	1.0	0.5	-0.3	-0.3	-1.5	-1.8	-0.9	-0.3	-0.1	0.2	0.3	0.4	0.4
Latin America	-0.6	0.2	0.7	0.1	-0.1	-1.3	-2.8	-2.8	-2.4	-1.9	-1.4	-0.8	-0.3	0.0	0.2
MENAP	-1.0	2.9	4.8	6.2	4.6	-0.8	-7.9	-9.0	-5.4	-4.0	-2.1	-2.0	-1.9	-1.5	-1.4
G20 Emerging	-2.0	-0.5	0.8	0.4	-0.2	-0.8	-2.6	-3.0	-2.4	-2.4	-2.3	-2.2	-2.1	-2.1	-2.0

Source: IMF staff estimates and projections. Projections are based on staff assessment 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. MENAP = Middle East, North Africa, and Pakistan.

¹Based on nominal GDP series prior to the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

Table A11. Emerging Market and Middle-Income Economies: General Government Cyclically Adjusted Balance, 2009–23
(Percent of potential GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	-12.2	-4.1	0.5	-3.1	1.2	-10.4	-19.3	-17.0	-8.9	-10.5	-5.7	-3.8	-2.1	1.1	2.7
Angola	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Argentina	-0.5	-1.4	-3.9	-3.1	-3.9	-3.7	-6.4	-5.6	-6.0	-4.9	-4.4	-3.7	-3.8	-4.3	-4.6
Azerbaijan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Belarus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brazil	-3.7	-4.8	-5.0	-4.7	-5.0	-6.9	-10.2	-7.5	-6.5	-8.4	-8.5	-8.1	-7.7	-7.2	-6.7
Chile ¹	-4.3	-2.5	-1.1	0.0	-1.0	-1.6	-2.2	-2.6	-2.3	-2.4	-2.8	-2.8	-2.5	-2.5	-2.5
China	-1.8	-0.4	-0.1	-0.1	-0.5	-0.5	-2.5	-3.6	-4.0	-4.2	-4.4	-4.4	-4.4	-4.4	-4.3
Colombia	-2.3	-2.7	-2.1	0.1	-1.1	-2.1	-3.7	-3.0	-2.7	-2.2	-1.7	-0.8	-0.6	-0.8	-0.9
Croatia	-5.4	-5.1	-6.8	-3.5	-3.2	-3.2	-2.0	-0.4	0.5	-0.6	-0.4	0.2	0.4	0.6	0.7
Dominican Republic	-2.4	-3.2	-3.1	-6.3	-3.2	-2.9	-0.3	-3.0	-3.4	-3.1	-3.3	-3.3	-3.5	-3.7	-3.7
Ecuador	-3.2	-2.4	-2.4	-3.6	-8.7	-9.4	-7.6	-7.9	-4.6	-4.8	-3.0	-1.5	-0.9	0.0	0.5
Egypt ²	-7.1	-8.6	-9.6	-10.0	-13.0	-11.4	-15.3	-15.9	-20.0	-20.2	-15.9	-15.2	-11.2	-11.2	-11.6
Hungary	-3.3	-3.1	-4.3	0.1	-0.3	-1.0	-1.0	-1.2	-2.1	-2.7	-2.7	-2.6	-2.8	-2.8	-2.7
India	-9.3	-9.0	-8.6	-7.5	-6.8	-7.1	-7.0	-6.5	-6.4	-6.4	-6.5	-6.4	-6.2	-6.1	-5.9
Indonesia	-1.8	-1.5	-1.0	-1.9	-2.5	-2.3	-2.7	-2.5	-2.4	-2.4	-2.5	-2.5	-2.5	-2.5	-2.5
Iran	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kuwait	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Libya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	-5.5	-4.2	-2.9	-3.8	-3.5	-2.4	-3.0	-2.9	-3.1	-2.7	-2.6	-2.5	-2.2	-2.0	-1.7
Mexico	-4.0	-3.6	-3.3	-3.9	-3.7	-4.5	-4.3	-4.1	-2.6	-2.4	-2.5	-2.5	-2.5	-2.5	-2.5
Morocco	-1.9	-4.3	-6.9	-7.7	-5.9	-6.3	-4.6	-4.8	-4.2	-3.7	-3.1	-2.8	-2.8	-2.9	-3.1
Oman	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peru ¹	-0.2	-0.4	1.2	1.4	0.1	-0.2	-1.6	-1.9	-2.8	-3.3	-2.8	-1.9	-1.0	-1.0	-1.0
Philippines	-1.8	-2.5	0.0	-0.3	0.1	0.6	0.6	-0.4	-0.3	-0.5	-0.7	-0.7	-0.7	-0.8	-0.8
Poland	-6.7	-7.2	-5.4	-3.6	-3.2	-3.2	-2.6	-2.5	-2.3	-2.7	-2.6	-2.2	-1.9	-1.6	-1.3
Qatar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Romania	-8.3	-5.8	-3.5	-1.1	-1.2	-0.6	-0.3	-1.7	-3.1	-4.3	-4.2	-4.0	-3.9	-3.7	-3.5
Russia	-5.0	-2.8	1.4	0.2	-1.3	0.1	-2.4	-2.9	-1.4	0.0	0.1	0.3	0.5	0.5	0.5
Saudi Arabia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Africa	-3.6	-3.8	-3.7	-4.2	-4.1	-4.1	-4.1	-3.8	-3.8	-3.7	-3.6	-3.4	-3.5	-3.6	-3.7
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	-1.4	-1.4	0.0	-0.7	0.3	-0.5	0.5	0.8	-0.7	-1.0	-1.2	-1.4	-1.5	-1.6	-1.8
Turkey	-3.3	-2.1	-1.1	-1.7	-2.0	-1.6	-1.5	-2.1	-2.9	-3.6	-3.8	-3.3	-2.9	-2.8	-2.7
Ukraine	-2.1	-2.7	-3.2	-4.5	-4.6	-3.2	1.8	-1.1	-1.7	-2.2	-2.5	-2.3	-2.2	-2.3	-2.2
United Arab Emirates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay	-1.9	-2.1	-2.1	-3.6	-3.3	-4.4	-3.6	-3.5	-3.4	-2.9	-2.6	-2.5	-2.5	-2.5	-2.6
Venezuela	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Average	-3.7	-3.0	-2.1	-2.0	-2.3	-2.4	-3.8	-4.1	-4.1	-4.2	-4.2	-4.1	-4.1	-4.0	-3.9
Asia	-3.2	-2.2	-1.6	-1.4	-1.5	-1.5	-3.0	-3.7	-4.1	-4.3	-4.4	-4.4	-4.4	-4.4	-4.3
Europe	-4.9	-3.5	-0.7	-1.0	-1.8	-1.0	-1.9	-2.4	-2.0	-1.7	-1.7	-1.5	-1.3	-1.2	-1.1
Latin America	-3.2	-3.7	-3.8	-3.5	-3.9	-5.1	-6.7	-5.5	-4.8	-5.4	-5.2	-4.9	-4.6	-4.5	-4.3
MENAP	-7.1	-6.5	-6.4	-7.8	-7.9	-10.1	-14.2	-13.8	-11.4	-11.3	-7.8	-6.5	-4.6	-3.2	-2.8
G20 Emerging	-3.5	-2.7	-2.0	-1.9	-2.2	-2.3	-3.8	-4.2	-4.2	-4.4	-4.5	-4.4	-4.4	-4.3	-4.2

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

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

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

²Based on nominal GDP series prior to the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

Table A12. Emerging Market and Middle-Income Economies: General Government Cyclically Adjusted Primary Balance, 2009–23
(Percent of potential GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	-12.9	-4.8	-1.5	-4.5	1.1	-10.5	-20.0	-17.1	-8.8	-10.8	-6.0	-3.9	-2.2	1.0	2.5
Angola	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Argentina	0.8	-0.6	-2.7	-1.8	-3.3	-3.0	-5.0	-3.9	-4.0	-3.0	-1.9	-1.0	-0.7	-0.8	-0.7
Azerbaijan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Belarus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brazil	1.5	0.6	0.8	0.1	0.0	-1.3	-1.9	-1.3	-0.7	-1.5	-1.4	-0.9	-0.4	0.1	0.5
Chile ¹	-4.5	-2.4	-1.0	0.1	-0.9	-1.4	-1.9	-2.3	-1.9	-1.9	-2.4	-2.3	-2.0	-2.0	-2.0
China	-1.4	0.0	0.4	0.4	0.0	0.1	-1.9	-2.8	-3.1	-3.2	-3.2	-3.2	-3.2	-3.2	-3.1
Colombia	-0.7	-1.1	-0.2	1.6	1.0	0.0	-1.0	0.1	0.1	0.5	0.9	1.8	1.8	1.5	1.3
Croatia	-3.5	-3.0	-4.1	-0.6	-0.3	-0.4	1.1	2.4	3.2	1.9	2.0	2.4	2.4	2.5	2.5
Dominican Republic	-0.6	-1.4	-1.1	-3.9	-0.9	-0.5	2.3	-0.1	-0.4	0.3	0.4	0.5	0.5	0.5	0.5
Ecuador	-2.6	-1.8	-1.7	-2.8	-7.7	-8.4	-6.2	-6.3	-2.5	-2.7	-0.4	1.6	2.5	3.7	4.3
Egypt ²	-4.0	-4.1	-4.7	-4.9	-6.1	-4.4	-6.3	-5.1	-5.2	-1.6	2.9	4.2	4.3	4.2	4.5
Hungary	0.6	0.6	-0.7	4.2	3.8	2.8	2.4	1.8	0.3	-0.6	-0.7	-0.7	-0.8	-0.5	-0.2
India	-4.8	-4.7	-4.2	-3.1	-2.3	-2.6	-2.4	-1.7	-1.5	-1.6	-1.7	-1.8	-1.7	-1.6	-1.6
Indonesia	-0.2	-0.1	0.2	-0.7	-1.3	-1.1	-1.3	-1.0	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
Iran	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kuwait	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Libya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	-4.0	-2.7	-1.3	-2.0	-1.7	-0.5	-1.3	-1.0	-1.3	-0.8	-0.5	-0.3	0.0	0.2	0.4
Mexico	-1.5	-1.1	-0.9	-0.8	-0.6	-1.5	-1.2	-0.7	1.5	1.1	0.6	0.6	0.8	0.9	1.1
Morocco	0.4	-2.0	-4.7	-5.2	-3.3	-3.6	-1.9	-2.2	-1.7	-1.2	-0.8	-0.5	-0.6	-0.7	-0.9
Oman	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peru ¹	0.9	0.6	2.2	2.3	1.1	0.7	-0.8	-1.0	-1.7	-2.2	-1.8	-0.8	0.1	0.1	0.1
Philippines	1.5	0.5	2.6	2.3	2.6	2.9	2.7	1.4	1.4	1.3	1.1	1.0	1.0	1.0	0.9
Poland	-4.3	-4.7	-2.9	-1.0	-0.7	-1.3	-0.9	-0.8	-0.7	-1.0	-0.9	-0.5	-0.2	0.1	0.3
Qatar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Romania	-7.3	-4.5	-2.0	0.6	0.4	0.9	0.9	-0.5	-2.0	-3.0	-2.8	-2.6	-2.5	-2.3	-2.1
Russia	-5.3	-2.7	1.7	0.5	-1.0	0.5	-2.1	-2.4	-0.8	0.4	0.6	0.9	1.0	1.1	1.1
Saudi Arabia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Africa	-1.3	-1.3	-1.2	-1.5	-1.2	-1.1	-0.9	-0.4	-0.3	0.1	0.4	0.6	0.6	0.5	0.5
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	-0.7	-0.8	0.9	0.2	1.0	0.3	1.1	1.2	-0.2	-0.5	-0.6	-0.7	-0.6	-0.6	-0.6
Turkey	0.7	1.2	1.5	0.7	0.3	0.4	0.3	-0.7	-1.5	-1.9	-1.9	-1.2	-0.7	-0.7	-0.7
Ukraine	-1.1	-1.1	-1.2	-2.6	-2.2	0.0	5.7	2.9	2.1	1.7	1.9	1.9	1.8	1.8	1.8
United Arab Emirates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay	0.9	0.9	0.8	-1.0	-0.5	-1.4	-0.1	-0.2	-0.1	0.1	0.6	0.6	0.9	1.0	0.8
Venezuela	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Average	-1.8	-1.0	-0.2	-0.3	-0.5	-0.6	-1.8	-2.1	-1.9	-2.0	-2.0	-1.9	-1.8	-1.8	-1.7
Asia	-1.9	-0.9	-0.3	-0.2	-0.4	-0.3	-1.8	-2.3	-2.5	-2.6	-2.7	-2.7	-2.7	-2.6	-2.5
Europe	-3.4	-2.0	0.6	0.3	-0.5	0.3	-0.6	-1.2	-0.8	-0.5	-0.4	-0.1	0.1	0.3	0.3
Latin America	0.1	-0.3	-0.1	-0.3	-0.6	-1.5	-2.0	-1.5	-0.7	-1.0	-0.8	-0.3	0.0	0.3	0.5
MENAP	-5.2	-3.8	-3.9	-4.8	-3.6	-5.9	-9.2	-7.9	-5.6	-5.2	-1.9	-0.7	0.0	1.2	1.8
G20 Emerging	-1.6	-0.8	0.0	-0.2	-0.5	-0.5	-1.9	-2.2	-2.1	-2.2	-2.2	-2.2	-2.1	-2.0	-2.0

Source: IMF staff estimates and projections. Projections are based on staff assessment 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. MENAP = Middle East, North Africa, and Pakistan.

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

²Based on nominal GDP series prior to the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

Table A13. Emerging Market and Middle-Income Economies: General Government Revenue, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	36.8	37.2	40.0	39.1	35.8	33.3	30.6	28.8	29.9	28.7	26.4	25.3	24.6	24.2	23.6
Angola	34.6	43.4	48.8	46.5	40.2	35.3	27.3	18.6	16.5	18.4	18.3	17.7	17.3	17.1	16.8
Argentina	31.9	31.9	32.2	33.8	34.3	34.6	36.0	35.7	34.6	34.2	33.8	33.5	33.2	33.0	32.9
Azerbaijan	40.4	45.8	44.6	40.3	39.4	39.1	33.9	34.3	37.0	38.9	39.9	40.4	39.9	39.2	38.9
Belarus	44.5	40.1	37.5	39.3	39.8	38.9	41.3	42.4	41.7	41.2	40.9	40.7	40.9	41.1	41.1
Brazil	34.0	36.1	35.1	34.7	34.5	32.5	28.1	30.5	30.1	28.8	28.4	28.5	29.0	28.9	28.8
Chile	20.6	23.0	24.2	23.8	22.6	22.2	22.9	22.9	22.9	24.1	24.2	24.2	24.3	24.3	24.3
China	23.8	24.6	26.9	27.8	27.7	28.1	28.5	28.2	27.6	27.5	27.4	27.1	27.0	26.8	26.7
Colombia	26.7	26.1	26.7	28.3	28.1	27.7	26.4	25.0	25.6	25.1	25.0	25.6	25.6	25.6	25.5
Croatia	41.6	41.2	40.9	41.7	42.8	42.7	44.5	46.3	46.9	46.4	46.4	46.3	46.4	46.5	46.5
Dominican Republic	13.2	13.1	12.9	13.6	14.4	14.8	17.5	14.8	15.1	15.1	15.0	15.1	15.0	15.0	15.0
Ecuador	29.4	33.3	39.3	39.3	39.2	38.4	33.8	30.7	32.0	33.6	32.8	32.1	31.7	31.4	31.2
Egypt ¹	26.3	23.9	20.9	20.8	21.7	24.4	22.0	21.5	21.3	20.8	20.9	20.5	20.7	20.7	21.0
Hungary	45.8	44.7	44.0	46.1	46.6	46.7	48.0	45.1	47.7	47.5	46.4	45.4	43.1	43.2	43.3
India	18.5	18.8	19.3	19.8	19.6	19.2	20.3	20.9	20.9	21.3	21.3	21.3	21.4	21.4	21.5
Indonesia	15.4	15.6	17.0	17.2	16.9	16.5	14.9	14.3	14.0	14.2	14.1	14.0	14.1	14.2	14.3
Iran	20.7	21.0	18.9	13.9	13.5	14.3	16.1	17.3	15.6	18.4	19.2	19.2	19.2	19.2	18.9
Kazakhstan	22.1	23.9	27.0	26.3	24.8	23.7	16.6	16.6	18.6	19.4	19.7	20.1	19.9	20.2	20.3
Kuwait	69.7	70.7	72.3	71.2	72.3	66.6	60.0	53.4	54.3	54.3	54.1	52.4	50.4	48.5	46.7
Libya	65.6	70.4	42.4	74.2	83.0	69.3	51.2	31.7	47.1	41.2	43.4	39.0	35.4	33.0	31.2
Malaysia	24.8	22.5	23.9	25.0	24.1	23.7	22.5	20.7	19.6	19.0	19.2	19.2	19.2	19.3	19.3
Mexico	23.2	22.7	23.5	24.5	24.1	23.4	23.5	24.6	24.8	22.1	22.2	22.3	22.4	22.4	22.4
Morocco	28.7	26.8	27.2	28.0	27.8	28.0	26.5	26.1	26.1	26.6	26.0	26.0	26.2	26.3	26.5
Oman	37.9	39.4	48.7	48.7	49.4	46.3	34.9	29.3	29.5	34.7	35.3	34.1	32.7	31.8	31.2
Pakistan	14.2	14.3	12.6	13.0	13.5	15.2	14.5	15.5	15.7	15.8	15.8	15.8	15.8	16.0	16.0
Peru	20.1	21.2	22.0	22.8	22.8	22.3	20.1	18.6	18.2	18.2	18.4	18.7	18.9	18.9	18.8
Philippines	17.4	16.8	17.6	18.6	18.8	19.0	19.4	19.1	19.6	19.8	19.9	20.0	20.1	20.0	20.1
Poland	37.8	38.5	39.1	39.1	38.5	38.7	38.9	38.7	39.8	40.8	41.1	40.9	40.7	40.7	40.6
Qatar	47.8	37.4	36.0	42.2	51.0	48.7	46.8	35.5	31.1	33.6	37.3	36.4	34.7	33.1	32.2
Romania	29.7	31.8	32.3	32.4	31.4	32.0	32.8	29.0	28.3	29.0	29.5	29.2	29.4	29.5	29.3
Russia	32.6	32.2	34.6	34.4	33.4	33.8	31.8	32.8	33.3	33.2	32.5	32.3	32.2	32.4	32.4
Saudi Arabia	31.7	37.5	44.4	45.1	41.2	36.7	25.0	21.5	24.4	29.1	29.9	30.7	30.7	30.7	30.7
South Africa	26.5	26.4	26.8	26.9	27.3	27.6	28.1	28.6	28.4	29.0	29.3	29.5	29.7	29.8	29.9
Sri Lanka	13.1	13.0	13.6	12.2	12.0	11.6	13.3	14.3	14.2	14.8	15.8	16.1	16.2	16.1	16.1
Thailand	19.5	20.7	21.1	21.3	22.2	21.4	22.3	22.0	21.1	21.4	21.5	21.5	21.5	21.5	21.5
Turkey	32.5	32.8	32.7	32.6	32.8	31.9	32.2	32.8	31.5	30.7	30.7	30.7	31.0	31.1	31.1
Ukraine	40.8	43.4	42.9	44.7	43.3	40.3	41.9	38.4	40.1	40.9	41.4	41.3	41.2	41.1	41.0
United Arab Emirates	28.9	32.8	36.5	38.1	38.7	35.0	29.0	29.8	30.3	29.6	29.2	28.3	27.6	27.0	26.4
Uruguay	28.1	29.4	28.3	27.8	29.5	28.8	28.8	29.5	29.5	29.7	30.1	30.1	30.4	30.5	30.3
Venezuela	24.6	21.0	27.6	25.1	25.9	30.1	18.9	17.1	12.5	16.9	15.6	15.7	16.1	16.4	15.1
Average	26.9	27.5	28.9	29.4	29.1	28.5	27.2	26.9	26.7	26.8	26.7	26.5	26.4	26.3	26.2
Asia	21.9	22.4	24.3	25.3	25.3	25.5	26.1	25.8	25.2	25.3	25.3	25.0	25.0	24.9	24.8
Europe	34.1	34.2	35.3	35.1	34.4	34.3	33.3	33.8	34.0	34.1	33.9	33.7	33.7	33.8	33.7
Latin America	28.8	29.8	30.3	30.3	30.2	29.2	26.7	27.4	27.3	26.6	26.4	26.4	26.7	26.6	26.6
MENAP	31.1	32.6	33.8	36.3	35.5	32.6	26.6	24.4	25.1	27.1	27.5	27.2	26.8	26.3	26.0
G20 Emerging	26.0	26.9	28.5	29.0	28.6	28.1	27.3	27.3	26.9	26.8	26.7	26.5	26.4	26.3	26.2

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

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

¹Based on nominal GDP series prior to the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

Table A14. Emerging Market and Middle-Income Economies: General Government Expenditure, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	42.6	37.3	40.1	43.5	36.2	40.6	45.8	41.9	36.3	36.5	31.1	28.5	26.7	24.2	23.6
Angola	41.9	40.0	40.2	41.8	40.5	41.9	30.6	23.4	22.0	20.1	20.4	20.1	19.9	19.4	18.8
Argentina	34.5	33.4	34.9	36.8	37.6	38.9	41.9	42.1	41.2	39.7	38.7	37.6	37.4	37.6	37.7
Azerbaijan	34.5	32.0	33.7	36.6	37.8	36.4	38.7	35.4	36.1	36.6	37.8	38.6	39.3	39.8	40.4
Belarus	51.7	44.3	40.3	38.9	40.8	38.8	43.5	45.8	43.4	43.6	43.9	41.9	41.8	41.7	41.6
Brazil	37.1	38.8	37.6	37.2	37.5	37.8	38.4	39.5	37.9	38.3	37.4	36.8	36.7	36.1	35.5
Chile	24.9	23.4	22.8	23.1	23.1	23.7	25.0	25.6	25.7	25.1	24.8	24.6	24.3	24.3	24.3
China	25.5	25.0	27.0	28.1	28.5	29.0	31.3	31.9	31.5	31.6	31.6	31.3	31.3	31.2	31.0
Colombia	29.5	29.4	28.7	28.3	29.0	29.4	29.8	28.1	28.8	27.8	27.1	26.6	26.4	26.5	26.4
Croatia	47.6	47.3	48.7	47.0	48.1	48.0	47.9	47.1	46.3	46.9	46.7	46.1	46.0	45.9	45.8
Dominican Republic	16.2	15.8	16.0	20.1	17.9	17.7	17.7	17.6	18.5	18.1	18.2	18.3	18.5	18.7	18.7
Ecuador	33.0	34.7	39.5	40.3	43.7	43.6	39.1	39.1	37.4	38.6	36.5	35.0	34.4	33.2	32.8
Egypt ¹	32.5	31.4	30.5	30.8	34.6	35.7	33.0	32.2	32.7	30.9	27.6	26.2	24.2	24.0	24.2
Hungary	50.3	49.2	49.4	48.4	49.1	48.7	49.6	46.9	49.8	49.6	48.2	47.2	45.2	45.4	45.6
India	28.1	27.4	27.6	27.4	26.6	26.3	27.3	27.5	28.0	28.0	27.8	27.7	27.6	27.5	27.4
Indonesia	17.0	16.9	17.7	18.8	19.1	18.6	17.5	16.8	16.5	16.7	16.6	16.5	16.6	16.7	16.8
Iran	19.9	18.4	18.3	14.3	14.4	15.4	17.9	19.5	18.0	20.2	22.4	22.5	22.7	22.8	22.7
Kazakhstan	23.5	22.5	21.2	21.9	19.8	21.3	22.9	22.1	24.9	21.7	21.9	21.9	21.9	21.9	21.8
Kuwait	42.2	44.7	39.1	38.8	38.1	44.3	54.4	52.8	50.4	47.2	47.9	48.1	47.8	46.6	45.3
Libya	72.1	57.9	59.7	45.7	88.1	143.1	182.2	145.1	90.4	80.6	78.9	77.1	75.4	75.0	73.8
Malaysia	31.3	27.0	27.5	28.8	28.2	26.3	25.1	23.3	22.5	21.7	21.7	21.6	21.4	21.2	21.1
Mexico	28.1	26.6	26.9	28.2	27.8	28.0	27.5	27.4	25.9	24.6	24.7	24.8	24.9	24.9	24.9
Morocco	30.4	31.1	33.8	35.2	32.9	32.9	30.7	30.2	29.7	29.6	28.8	28.7	28.5	28.5	28.6
Oman	38.2	33.9	39.3	44.0	44.8	47.4	50.9	50.6	40.9	40.3	40.2	39.5	39.4	38.8	38.4
Pakistan	19.3	20.3	19.3	21.7	21.8	20.1	19.8	19.9	21.3	21.2	21.5	21.5	21.6	21.7	21.7
Peru	21.5	21.1	20.0	20.7	22.0	22.5	22.2	21.0	21.3	21.6	21.2	20.5	20.0	19.8	19.8
Philippines	20.1	19.2	17.9	18.9	18.7	18.1	18.8	19.5	19.9	20.3	20.5	20.7	20.8	20.8	21.0
Poland	45.0	45.8	43.9	42.9	42.6	42.3	41.6	41.2	41.5	42.7	42.8	42.4	42.1	42.0	41.8
Qatar	32.9	30.6	28.5	31.0	28.3	33.4	41.5	39.9	32.3	30.0	27.4	27.3	27.0	25.3	25.0
Romania	36.6	38.2	36.5	34.9	33.9	33.9	34.2	31.4	31.2	32.5	32.9	32.6	32.6	32.6	32.3
Russia	38.5	35.4	33.2	34.0	34.6	34.9	35.1	36.5	34.7	33.1	32.3	31.9	31.8	31.9	31.9
Saudi Arabia	37.1	33.1	32.8	33.2	35.5	40.2	40.8	38.7	33.4	36.4	35.5	36.0	35.6	35.1	34.7
South Africa	31.7	31.4	30.9	31.4	31.6	31.9	32.9	32.7	32.9	33.2	33.4	33.6	33.7	33.8	34.0
Sri Lanka	21.7	20.0	19.9	17.8	17.2	17.9	20.4	19.7	19.6	19.4	19.4	19.6	19.7	19.6	19.6
Thailand	21.7	22.0	21.1	22.2	21.6	22.2	22.2	21.4	21.7	22.4	22.7	22.9	23.0	23.1	23.2
Turkey	38.3	36.2	33.4	34.4	34.2	33.3	33.4	35.1	33.8	33.6	33.8	33.5	33.4	33.3	33.3
Ukraine	46.8	49.2	45.7	49.0	48.1	44.8	43.0	40.6	42.5	43.4	44.1	43.7	43.5	43.4	43.2
United Arab Emirates	35.0	32.2	31.1	29.1	30.3	33.1	32.4	32.3	32.1	31.0	30.1	28.8	27.8	26.7	25.7
Uruguay	29.7	30.5	29.2	30.5	31.8	32.3	32.3	33.3	33.1	32.7	32.6	32.6	32.9	33.0	32.9
Venezuela	33.3	30.2	38.2	39.7	40.0	46.6	36.4	34.8	44.4	45.1	44.1	44.1	44.1	44.1	44.0
Average	30.6	29.7	29.8	30.4	30.5	30.9	31.6	31.7	31.1	31.1	30.8	30.5	30.4	30.2	30.0
Asia	25.2	24.6	26.0	26.9	27.1	27.4	29.3	29.6	29.4	29.6	29.6	29.4	29.3	29.3	29.1
Europe	39.9	37.9	35.5	35.8	35.9	35.7	36.0	36.7	36.0	35.5	35.3	34.9	34.7	34.7	34.7
Latin America	32.6	32.9	33.1	33.4	33.4	34.0	34.0	34.1	33.7	32.9	32.2	31.7	31.6	31.3	31.1
MENAP	32.4	30.2	29.5	30.6	31.5	34.1	35.0	33.6	30.9	31.8	30.9	30.6	29.9	29.3	28.9
G20 Emerging	29.9	29.2	29.6	30.2	30.4	30.7	31.7	32.1	31.4	31.4	31.1	30.8	30.8	30.6	30.4

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

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

¹Based on nominal GDP series prior to the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

Table A15. Emerging Market and Middle-Income Economies: General Government Gross Debt, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	9.8	10.5	9.3	9.3	7.6	7.7	8.8	20.6	25.8	33.3	38.4	39.4	38.4	35.1	31.5
Angola	22.7	44.3	33.8	29.9	32.9	40.7	64.6	79.8	65.3	73.0	71.6	68.6	66.4	63.2	60.5
Argentina	53.8	42.0	37.5	38.9	41.7	43.6	56.0	54.2	53.5	54.3	52.7	52.4	52.2	52.7	53.7
Azerbaijan	12.4	12.5	11.2	13.8	12.6	14.4	35.0	50.7	54.7	54.9	56.4	56.4	55.7	55.4	56.0
Belarus	32.5	36.8	58.2	36.9	36.9	38.8	53.0	53.5	51.0	49.5	49.9	49.6	47.5	46.1	43.2
Brazil ¹	65.0	63.1	61.2	62.2	60.2	62.3	72.6	78.4	84.0	87.3	90.2	92.7	94.6	95.7	96.3
Chile	5.8	8.6	11.1	11.9	12.7	14.9	17.4	21.3	23.9	24.2	25.0	25.6	25.9	26.1	26.1
China	34.3	33.7	33.6	34.3	37.0	39.9	41.1	44.3	47.8	51.2	54.4	57.6	60.5	63.1	65.5
Colombia	35.2	36.4	35.7	34.1	37.8	43.7	50.6	50.2	49.2	48.6	47.9	46.0	43.7	41.5	39.8
Croatia	49.0	58.2	65.0	70.6	81.7	85.8	85.4	82.7	78.2	75.3	72.4	69.4	66.4	63.1	60.6
Dominican Republic	22.6	23.7	25.9	30.0	34.3	33.7	33.0	35.0	37.7	36.9	37.9	38.8	39.9	41.2	42.6
Ecuador ²	25.3	23.1	21.4	20.6	21.1	27.1	33.8	42.9	45.0	48.0	50.1	51.4	52.4	52.4	52.1
Egypt ³	69.5	69.6	72.8	73.8	84.0	85.1	88.5	96.9	103.3	91.0	86.3	80.6	77.2	72.5	67.8
Hungary	77.5	80.1	80.3	77.9	76.3	75.2	74.0	73.3	69.9	67.4	65.9	64.7	64.0	63.6	61.8
India	72.5	67.5	69.6	69.1	68.5	67.8	69.6	68.9	70.2	69.1	67.5	66.0	64.5	63.0	61.6
Indonesia	26.5	24.5	23.1	23.0	24.8	24.7	27.5	28.3	28.9	29.6	30.3	30.7	31.1	31.5	31.7
Iran	10.1	11.7	8.9	12.1	10.7	11.8	41.6	48.9	40.9	54.5	50.3	47.1	44.5	42.4	40.9
Kazakhstan	10.2	10.7	10.2	12.1	12.6	14.5	21.9	21.0	21.2	21.6	23.1	24.5	25.8	26.8	27.8
Kuwait	6.7	6.2	4.6	3.6	3.1	3.4	4.7	9.9	18.9	25.1	30.9	35.9	40.0	43.4	45.6
Libya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	51.1	51.9	52.6	54.6	56.4	56.2	57.9	56.2	54.2	53.6	52.6	51.4	50.0	48.2	46.2
Mexico	43.7	42.0	42.9	42.7	45.9	48.9	52.9	56.8	54.2	53.5	53.4	53.4	53.3	53.3	53.3
Morocco	46.1	49.0	52.5	56.5	61.7	63.3	63.7	64.7	64.4	64.1	62.4	61.5	60.0	58.4	57.3
Oman	6.7	5.7	5.2	4.9	5.0	4.9	15.5	33.3	44.2	46.8	48.3	50.6	53.5	55.9	58.6
Pakistan	58.5	60.6	58.9	63.2	63.9	63.5	63.3	67.6	67.2	67.2	67.4	67.3	66.9	66.2	65.5
Peru	28.4	25.5	23.3	21.6	20.8	20.7	24.0	24.4	25.5	27.0	28.0	28.2	27.6	27.1	26.6
Philippines	52.1	49.7	47.5	47.9	45.7	42.1	41.5	39.0	37.8	37.3	36.3	35.7	35.1	34.6	34.2
Poland	49.4	53.1	54.1	53.7	55.7	50.2	51.1	54.1	51.4	50.8	49.8	48.6	47.4	46.2	45.0
Qatar	36.0	31.9	38.2	36.9	35.4	31.1	44.5	67.2	74.0	70.7	64.0	60.2	56.4	51.9	47.5
Romania	22.6	30.8	34.1	37.7	38.9	40.5	39.3	39.1	38.0	38.8	39.8	40.3	41.2	41.9	42.3
Russia	9.9	10.6	10.8	11.5	12.7	15.6	15.9	15.7	17.4	18.7	19.5	19.9	20.0	20.1	20.4
Saudi Arabia	14.0	8.4	5.4	3.0	2.1	1.6	5.8	13.1	17.3	20.0	23.8	26.0	27.1	27.6	29.4
South Africa	30.1	34.7	38.2	41.0	44.1	47.0	49.3	51.6	52.7	54.9	55.7	56.4	57.0	57.6	58.1
Sri Lanka	75.2	71.6	71.1	69.6	71.8	72.2	78.5	80.1	79.7	77.3	75.2	73.0	70.8	68.7	66.4
Thailand	42.4	39.8	39.1	41.9	42.2	43.3	42.5	41.8	41.9	41.1	40.6	40.6	40.8	40.8	40.9
Turkey	43.9	40.1	36.5	32.7	31.4	28.8	27.6	28.3	28.5	27.8	27.9	27.9	28.0	28.1	28.1
Ukraine	34.1	40.6	36.9	37.5	40.5	70.3	79.3	81.2	75.6	78.4	76.9	71.7	66.9	63.1	59.4
United Arab Emirates	24.1	21.9	17.4	17.0	15.7	15.5	18.7	20.7	19.5	19.0	19.3	19.3	19.1	19.0	18.7
Uruguay	63.1	59.4	58.1	58.0	60.2	61.4	64.6	61.9	66.2	66.2	65.2	64.9	65.0	64.8	64.7
Venezuela	27.6	36.5	50.6	58.1	72.3	63.5	31.9	31.3	34.9	159.9	169.7	165.7	163.3	158.6	156.3
Average	39.0	38.3	37.5	37.5	38.7	40.8	44.1	47.1	49.1	51.3	53.0	54.4	55.7	56.8	57.7
Asia	41.8	40.4	39.8	39.8	41.5	43.6	44.8	47.2	50.1	52.3	54.5	56.6	58.5	60.2	61.6
Europe	28.3	28.2	26.9	25.5	26.4	28.5	30.9	32.1	31.9	32.1	32.5	32.6	32.4	32.3	32.1
Latin America	49.8	48.7	48.6	48.7	49.3	51.4	55.6	59.1	61.7	66.4	67.4	67.9	68.3	68.5	68.5
MENAP	25.8	24.1	21.9	23.1	23.8	24.1	34.3	42.3	41.5	43.5	44.1	43.9	43.5	42.6	42.2
G20 Emerging	40.5	39.0	37.9	37.5	38.6	41.1	44.0	46.8	49.7	51.6	53.8	55.8	57.6	59.1	60.5

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

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

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

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

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

Table A16. Emerging Market and Middle-Income Economies: General Government Net Debt, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Algeria	-39.6	-33.7	-31.1	-29.0	-29.5	-21.8	-7.6	13.4	20.5	28.8	33.7	34.8	34.3	31.4	28.2
Angola	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Argentina	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Azerbaijan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Belarus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brazil	40.4	38.0	34.5	32.2	30.5	32.6	35.6	46.2	51.6	55.4	59.3	63.5	67.1	70.0	72.0
Chile	-10.5	-7.0	-8.6	-6.8	-5.6	-4.3	-3.5	1.0	5.3	5.9	6.8	7.5	7.9	8.0	8.1
China	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Colombia	26.1	28.4	27.1	24.9	27.0	33.2	42.2	40.5	41.2	41.1	41.0	39.8	38.1	36.4	35.0
Croatia	37.8	45.8	54.1	59.1	66.6	71.0	72.5	70.9	...	...	...	...	...	...	...
Dominican Republic	15.8	16.6	18.7	24.0	26.5	26.1	25.2	26.4	28.6	27.5	28.3	29.1	30.1	31.4	32.8
Ecuador	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Egypt ¹	55.9	57.1	61.3	63.5	73.7	77.1	78.8	88.2	94.0	79.7	76.8	72.4	70.0	66.1	65.2
Hungary	71.8	74.7	74.0	71.7	70.8	70.1	70.1	69.6	66.4	64.2	62.8	61.8	61.2	61.0	59.3
India	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	21.3	19.7	17.8	18.6	20.6	20.4	22.5	23.8	24.8	25.9	26.8	27.5	28.2	28.8	29.2
Iran	2.5	1.9	-2.5	1.3	-5.6	-5.6	24.9	35.9	29.8	46.2	42.7	39.9	38.2	37.1	36.4
Kazakhstan	-11.0	-10.2	-12.7	-15.9	-17.6	-19.2	-30.9	-22.8	-11.8	-8.2	-5.5	-3.4	-1.1	0.6	2.0
Kuwait	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Libya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mexico	36.0	36.0	37.2	37.2	40.0	42.6	46.6	48.7	46.1	45.4	45.3	45.3	45.3	45.2	45.2
Morocco	45.5	48.5	52.1	56.0	61.2	62.8	63.1	64.2	64.0	63.7	62.1	61.1	59.6	58.0	56.9
Oman	-32.0	-29.2	-29.7	-29.0	-43.8	-44.1	-43.1	-26.9	-10.8	-1.2	3.4	8.3	14.4	20.7	26.9
Pakistan	54.5	56.5	55.8	59.2	60.1	58.0	58.2	61.2	61.6	62.4	63.3	63.7	63.8	63.4	63.2
Peru	12.3	10.3	7.2	4.6	3.6	3.6	5.6	7.5	10.1	12.9	14.9	15.9	16.0	16.1	16.2
Philippines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poland	42.8	47.2	48.3	47.9	50.9	44.5	46.4	48.1	46.7	46.1	45.1	43.9	42.7	41.5	40.3
Qatar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Romania	15.4	22.9	27.3	28.9	29.5	29.7	29.7	31.2	30.3	31.2	32.3	32.9	33.9	34.7	41.3
Russia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saudi Arabia	-39.3	-37.8	-37.7	-47.7	-50.9	-47.1	-35.9	-17.1	-7.7	2.0	7.6	12.7	17.2	21.0	24.2
South Africa	25.4	28.5	31.3	34.8	38.2	40.8	44.1	45.2	47.9	50.1	51.5	52.6	53.5	54.3	55.0
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Turkey	37.4	34.9	31.1	27.5	25.9	23.8	23.0	23.4	22.7	23.1	23.5	23.8	23.9	24.1	24.0
Ukraine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
United Arab Emirates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay	30.7	31.1	28.8	25.9	24.2	22.9	25.8	30.1	32.3	33.7	33.6	33.9	34.2	34.2	34.2
Venezuela	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Average	26.0	25.9	23.9	22.5	22.6	23.9	28.4	34.5	35.9	38.2	39.7	40.9	41.9	42.6	43.2
Asia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Europe	35.8	36.7	34.9	32.0	31.6	29.6	28.7	31.8	30.8	31.3	31.4	31.3	31.1	31.0	31.3
Latin America	33.8	33.0	31.1	29.4	29.4	31.9	35.2	40.9	43.4	45.2	47.3	49.3	50.9	52.2	53.0
MENAP	1.1	0.9	-1.2	-3.2	-4.0	-0.7	15.2	28.6	29.0	34.7	37.0	38.2	39.6	40.3	41.3
G20 Emerging	28.1	27.1	24.7	21.8	21.7	23.2	26.2	32.1	35.2	37.6	39.9	42.0	43.8	45.2	46.2

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

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

¹ Based on nominal GDP series prior to the recent revision; therefore, data in the tables are not comparable to the authorities' numbers.

Table A17. Low-Income Developing Countries: General Government Overall Balance, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bangladesh	-3.2	-2.7	-3.6	-3.0	-3.4	-3.1	-4.0	-3.4	-2.7	-4.1	-4.2	-3.8	-3.7	-3.5	-3.3
Benin	-3.1	-0.4	-1.3	-0.3	-1.9	-2.3	-7.6	-5.9	-5.8	-4.7	-2.0	-0.7	-0.2	0.6	1.2
Burkina Faso	-4.7	-4.6	-2.3	-3.1	-4.0	-2.0	-2.4	-3.5	-8.2	-5.0	-3.0	-3.0	-3.0	-3.0	-3.0
Cambodia	-4.1	-2.8	-4.1	-3.8	-2.1	-1.1	-1.6	-1.7	-3.6	-4.8	-4.7	-4.3	-4.2	-4.0	-3.9
Cameroon	0.0	-1.0	-2.1	-1.1	-4.0	-4.5	-5.3	-7.0	-4.2	-1.9	-1.6	-1.2	-1.3	-1.3	-1.3
Chad	-9.2	-4.2	2.4	0.5	-2.1	-4.2	-4.4	-2.0	-0.9	0.9	-0.1	0.6	0.6	1.4	1.6
Congo, Democratic Republic of the	1.0	-0.9	-0.9	2.0	2.0	0.1	-0.2	-1.0	-2.5	0.1	0.1	0.1	0.0	0.0	0.0
Congo, Republic of	4.9	15.5	15.4	7.5	-5.0	-16.7	-27.2	-22.6	-7.2	3.9	5.0	4.1	2.0	2.1	0.7
Côte d'Ivoire	-1.4	-1.8	-4.0	-3.1	-2.2	-2.2	-2.8	-3.9	-4.3	-3.7	-3.0	-2.9	-2.9	-2.7	-2.6
Ethiopia	-0.9	-1.3	-1.6	-1.2	-1.9	-2.6	-1.9	-2.3	-3.3	-2.5	-2.4	-2.3	-2.2	-2.1	-2.7
Ghana	-7.2	-10.1	-7.4	-11.3	-12.0	-10.9	-5.4	-8.9	-5.0	-5.0	-3.6	-3.5	-3.8	-3.7	-0.1
Guinea	-4.9	-9.6	-0.9	-2.5	-3.9	-3.2	-6.9	-0.1	-0.3	-2.1	-2.0	-1.7	-1.6	-1.9	-2.0
Haiti	-3.5	-2.7	-2.5	-4.8	-7.2	-6.4	-2.5	-0.1	-1.0	-2.5	-1.4	-1.3	-1.0	-0.8	-0.6
Honduras	-4.9	-3.4	-2.9	-3.5	-5.7	-2.9	-0.8	-0.4	-0.1	-0.8	-1.0	-1.0	-1.0	-1.0	-0.6
Kenya	-4.3	-4.4	-4.1	-5.0	-5.7	-7.4	-8.1	-8.3	-8.5	-7.5	-6.2	-5.3	-4.8	-4.4	-4.2
Kyrgyz Republic	-1.5	-5.9	-4.7	-5.9	-3.7	0.5	-1.2	-4.6	-3.3	-2.5	-2.5	-2.3	-2.1	-1.9	-1.9
Lao P.D.R.	-3.6	-2.9	-1.6	-0.5	-5.0	-4.1	-2.4	-4.7	-4.9	-4.3	-4.2	-4.3	-4.7	-5.0	-5.0
Madagascar	-2.5	-0.9	-2.4	-2.6	-4.0	-2.3	-3.3	-1.3	-3.5	-3.0	-5.1	-5.4	-4.7	-4.0	-2.2
Mali	-3.7	-2.6	-3.4	-1.0	-2.4	-2.9	-1.8	-3.9	-2.9	-3.3	-3.0	-3.0	-3.0	-3.0	-3.0
Moldova	-6.4	-2.6	-2.5	-2.3	-1.9	-1.9	-2.3	-2.1	-1.0	-3.2	-3.8	-3.6	-2.8	-2.8	-2.8
Mozambique	-4.9	-3.8	-4.8	-3.9	-2.7	-10.7	-7.2	-6.2	-5.5	-7.5	-10.8	-9.9	-9.6	-10.6	-9.9
Myanmar	-4.4	-5.5	-3.5	0.9	-1.3	-0.9	-4.4	-2.5	-3.5	-3.9	-4.0	-4.1	-4.1	-4.1	-4.2
Nepal	-2.6	-0.8	-0.8	-1.3	1.8	1.5	0.7	1.4	-1.4	-3.7	-3.2	-2.7	-2.8	-2.8	-2.7
Nicaragua	-1.2	0.1	0.1	-0.1	-0.7	-1.2	-1.4	-1.6	-1.7	-2.0	-2.1	-2.0	-2.1	-2.2	-2.4
Niger	-5.3	-2.4	-1.5	-1.1	-2.6	-8.0	-9.1	-6.1	-5.1	-6.1	-5.8	-4.2	-2.8	-2.8	-2.8
Nigeria	-5.4	-4.2	0.4	0.2	-2.3	-2.1	-3.5	-3.9	-5.8	-4.8	-4.6	-4.2	-4.3	-4.2	-4.2
Papua New Guinea	-5.5	3.1	2.2	-1.2	-6.9	-6.3	-4.0	-4.4	-2.9	-2.3	-2.1	-2.1	-2.1	-2.1	-2.0
Rwanda	0.3	-0.7	-0.9	-2.5	-1.3	-4.0	-2.8	-2.3	-3.0	-2.4	-2.4	-1.6	-0.9	-0.8	-0.6
Senegal	-4.6	-4.9	-6.1	-5.2	-5.5	-5.0	-4.8	-4.2	-4.5	-3.5	-3.0	-3.0	-3.0	-3.0	-3.0
Somalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudan	-3.7	0.2	0.0	-3.1	-2.7	-1.3	-1.7	-1.6	-1.4	-3.1	-2.9	-2.9	-2.9	-3.1	-3.0
Tajikistan	-5.2	-3.0	-2.1	0.6	-0.8	0.0	-1.9	-9.8	-2.4	-7.4	-5.4	-2.5	-2.5	-2.5	-2.5
Tanzania	-4.5	-4.8	-3.6	-4.1	-3.9	-3.0	-3.3	-2.2	-2.7	-4.4	-4.6	-4.1	-3.3	-2.6	-2.3
Timor-Leste	40.7	41.1	43.7	39.9	41.7	22.9	3.7	-33.9	-2.6	-22.8	-34.4	-28.0	-24.0	-18.7	-17.4
Uganda	-2.1	-5.7	-2.7	-3.0	-4.0	-4.7	-4.6	-4.9	-3.2	-5.3	-6.5	-7.0	-2.8	-2.3	-1.7
Uzbekistan	2.3	3.3	7.4	8.1	2.6	3.0	0.4	1.2	-1.3	-0.6	0.4	0.8	0.0	0.2	0.5
Vietnam	-6.0	-2.8	-1.1	-6.9	-7.4	-6.3	-6.2	-6.3	-4.7	-4.7	-4.8	-4.7	-4.6	-4.5	-4.5
Yemen	-10.2	-4.1	-4.5	-6.3	-6.9	-4.1	-11.5	-16.5	-7.6	-14.0	-8.6	-2.7	-1.4	-1.2	-0.8
Zambia	-2.1	-2.4	-1.8	-2.8	-6.2	-5.7	-9.3	-5.8	-7.3	-7.8	-7.4	-7.3	-6.5	-6.5	-6.0
Zimbabwe	-2.0	0.7	-0.5	0.0	-1.7	-1.4	-1.0	-8.4	-9.6	-3.1	-1.9	-1.8	-1.8	-1.5	-1.5
Average	-3.9	-2.8	-0.9	-1.7	-3.3	-3.2	-4.0	-4.2	-4.2	-4.2	-4.0	-3.7	-3.6	-3.4	-3.3
Oil Producers	-4.5	-2.8	0.7	0.2	-2.5	-2.6	-4.3	-5.1	-5.5	-4.5	-4.3	-3.7	-3.9	-3.8	-3.8
Asia	-4.0	-2.3	-1.6	-3.0	-4.0	-3.7	-4.5	-4.3	-3.6	-4.3	-4.4	-4.2	-4.1	-4.0	-3.9
Latin America	-3.5	-2.3	-2.0	-2.8	-4.6	-3.2	-1.3	-0.7	-0.7	-1.5	-1.4	-1.4	-1.4	-1.4	-1.2
Sub-Saharan Africa	-4.0	-3.6	-1.0	-1.3	-3.2	-3.4	-4.1	-4.5	-5.2	-4.3	-4.0	-3.7	-3.6	-3.4	-3.3
Others	-3.5	-0.3	0.8	-0.4	-1.8	-0.4	-2.8	-2.8	-2.2	-3.7	-2.6	-1.4	-1.4	-1.2	-0.9

Source: IMF staff estimates and projections. Projections are based on staff assessment 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, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bangladesh	-1.0	-0.8	-1.9	-1.1	-1.4	-1.0	-1.9	-1.5	-1.0	-2.4	-2.4	-1.9	-1.8	-1.7	-1.5
Benin	-2.6	0.1	-0.9	0.3	-1.4	-1.9	-6.9	-4.7	-3.8	-2.4	0.5	1.5	1.9	2.5	2.8
Burkina Faso	-4.3	-4.1	-1.7	-2.4	-3.4	-1.2	-1.7	-2.5	-7.3	-3.8	-1.8	-1.7	-1.7	-1.6	-1.6
Cambodia	-3.9	-2.5	-3.8	-3.3	-1.4	-0.8	-1.3	-1.3	-3.2	-4.4	-4.3	-4.0	-3.9	-3.7	-3.6
Cameroon	0.2	-0.7	-1.7	-0.8	-3.7	-4.1	-5.0	-6.3	-3.3	-1.1	-0.9	-0.7	-0.8	-0.7	-0.7
Chad	-8.8	-3.6	3.0	0.9	-1.5	-3.6	-2.7	0.1	0.7	2.1	0.9	1.7	1.5	2.3	2.4
Congo, Democratic Republic of the	1.3	-0.7	-0.3	2.5	2.4	0.4	0.0	-0.8	-2.2	0.4	0.4	0.5	0.5	0.5	0.5
Congo, Republic of	6.3	16.4	15.5	7.5	-4.7	-16.5	-26.4	-20.0	-4.8	6.3	7.1	6.2	4.1	4.1	2.6
Côte d'Ivoire	0.1	-0.3	-2.2	-1.4	-0.9	-0.9	-1.3	-2.2	-2.7	-1.9	-1.2	-1.0	-1.0	-0.8	-0.8
Ethiopia	-0.6	-0.9	-1.2	-0.9	-1.6	-2.2	-1.5	-1.9	-2.9	-1.9	-1.9	-1.8	-1.6	-1.5	-1.6
Ghana	-4.4	-6.9	-4.8	-7.8	-7.3	-4.7	1.3	-2.0	1.6	1.4	2.5	2.3	2.1	1.9	1.6
Guinea	-3.5	-8.3	0.5	-1.2	-3.0	-2.2	-6.1	1.0	0.9	-0.9	-0.9	-0.7	-0.8	-1.1	-1.2
Haiti	-2.9	-2.2	-2.1	-4.4	-6.7	-5.9	-2.2	0.2	-0.6	-2.0	-0.8	-0.8	-0.5	-0.2	-0.1
Honduras	-5.8	-4.1	-3.2	-3.6	-5.6	-2.6	0.0	0.2	0.7	0.3	0.0	-0.1	-0.2	-0.2	0.3
Kenya	-2.7	-2.5	-2.2	-2.9	-3.3	-4.8	-5.3	-5.2	-5.3	-4.0	-2.7	-1.9	-1.4	-1.2	-1.2
Kyrgyz Republic	-0.7	-5.1	-3.7	-4.9	-2.9	1.4	-0.2	-3.4	-2.2	-1.3	-1.3	-1.2	-1.0	-0.8	-0.8
Lao P.D.R.	-3.3	-2.5	-1.1	0.2	-4.0	-3.3	-1.5	-3.5	-3.8	-2.8	-2.6	-2.7	-3.0	-3.3	-3.4
Madagascar	-1.8	-0.1	-1.5	-1.9	-3.3	-1.7	-2.5	-0.4	-2.6	-2.0	-4.1	-4.5	-3.8	-3.1	-1.1
Mali	-3.4	-2.2	-2.8	-0.4	-1.9	-2.3	-1.2	-3.3	-2.0	-2.5	-2.1	-2.1	-2.1	-2.0	-1.9
Moldova	-5.0	-1.8	-1.6	-1.5	-1.3	-1.3	-1.4	-0.8	0.3	-2.1	-2.6	-2.4	-1.7	-1.6	-1.6
Mozambique	-4.4	-3.1	-3.9	-2.9	-1.9	-9.6	-5.9	-3.3	-1.8	-3.2	-5.1	-5.5	-6.4	-7.6	-7.6
Myanmar	-3.6	-4.6	-2.5	2.3	-0.1	0.3	-3.3	-1.2	-2.3	-2.4	-2.5	-2.5	-2.5	-2.5	-2.6
Nepal	-1.9	0.0	0.0	-0.5	2.6	2.1	1.1	1.7	-0.9	-3.2	-2.7	-2.2	-2.3	-2.3	-2.1
Nicaragua	-0.8	0.4	0.6	0.5	-0.4	-0.9	-0.9	-0.9	-0.8	-1.3	-1.3	-1.2	-1.3	-1.3	-1.3
Niger	-5.1	-2.2	-1.1	-0.8	-2.3	-7.7	-8.4	-5.2	-4.1	-5.1	-4.6	-3.0	-1.8	-1.8	-1.8
Nigeria	-4.7	-3.6	1.2	1.2	-1.3	-1.2	-2.4	-2.7	-4.2	-3.4	-2.9	-2.3	-2.4	-2.2	-2.1
Papua New Guinea	-4.0	4.0	3.2	-0.2	-5.8	-4.7	-2.3	-2.6	-0.9	-0.2	-0.4	-0.4	-0.4	-0.4	-0.3
Rwanda	0.6	-0.2	-0.5	-2.1	-0.4	-3.2	-1.9	-1.3	-1.9	-1.2	-1.2	-0.4	0.2	0.3	0.3
Senegal	-3.9	-4.0	-4.6	-3.7	-4.0	-3.3	-2.8	-2.1	-2.1	-1.4	-0.7	-0.9	-1.0	-1.0	-1.0
Somalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudan	-2.8	1.2	1.1	-2.0	-2.2	-0.5	-1.0	-1.1	-0.9	-2.7	-2.7	-2.7	-2.7	-2.7	-2.8
Tajikistan	-4.7	-2.5	-1.6	1.1	0.1	0.4	-1.5	-8.3	-1.1	-6.1	-3.9	-0.9	-1.0	-1.0	-1.0
Tanzania	-3.8	-4.1	-2.8	-3.1	-2.7	-1.6	-1.8	-0.6	-1.2	-2.7	-2.6	-2.1	-1.2	-0.5	-0.2
Timor-Leste	40.7	41.1	43.7	39.9	41.7	22.9	3.7	-33.9	-2.6	-22.7	-34.2	-27.7	-23.6	-18.1	-16.8
Uganda	-1.1	-4.8	-1.7	-1.7	-2.7	-3.2	-2.9	-2.4	-0.6	-2.6	-3.7	-4.3	-0.1	0.2	0.7
Uzbekistan	2.3	3.3	7.5	8.1	2.7	3.0	0.5	1.2	-1.3	-0.5	0.4	0.9	0.0	0.2	0.6
Vietnam	-4.9	-1.6	-0.1	-5.6	-5.9	-4.6	-4.3	-4.3	-2.7	-2.6	-2.6	-2.6	-2.4	-2.3	-2.2
Yemen	-7.7	-1.7	-0.2	-0.9	-1.5	1.5	-3.4	-7.3	-7.2	-7.7	-1.9	1.7	0.9	1.0	1.2
Zambia	-0.7	-1.0	-0.8	-1.5	-4.7	-3.5	-6.5	-2.4	-3.3	-3.9	-3.2	-3.1	-2.2	-2.0	-1.3
Zimbabwe	0.3	1.8	-0.2	0.3	-0.9	-0.5	0.0	-7.7	-8.5	-1.9	0.0	0.1	0.2	0.1	0.1
Average	-3.0	-1.8	0.1	-0.5	-2.0	-1.8	-2.5	-2.5	-2.6	-2.4	-2.2	-1.8	-1.7	-1.6	-1.5
Oil Producers	-3.6	-2.0	1.7	1.4	-1.3	-1.4	-2.8	-3.4	-4.0	-2.9	-2.5	-1.9	-2.1	-1.8	-1.8
Asia	-2.6	-1.0	-0.4	-1.6	-2.5	-2.1	-2.8	-2.6	-1.9	-2.6	-2.7	-2.4	-2.3	-2.1	-2.0
Latin America	-3.7	-2.4	-1.9	-2.6	-4.3	-2.8	-0.7	-0.1	0.0	-0.7	-0.6	-0.6	-0.6	-0.6	-0.3
Sub-Saharan Africa	-3.2	-2.8	0.0	-0.2	-2.0	-2.2	-2.7	-2.8	-3.3	-2.4	-2.0	-1.7	-1.5	-1.4	-1.3
Others	-2.5	0.7	2.2	1.2	-0.3	1.2	-0.9	-1.3	-1.8	-2.6	-1.4	-0.4	-0.8	-0.6	-0.4

Source: IMF staff estimates and projections. Projections are based on staff assessment 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, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bangladesh	9.5	10.0	10.4	11.2	11.2	10.9	9.8	10.1	10.5	10.9	10.9	11.0	11.0	11.0	11.0
Benin	20.2	18.9	18.8	19.2	18.5	17.2	17.3	15.3	18.7	18.9	19.1	19.6	19.5	19.9	20.1
Burkina Faso	19.5	19.8	20.7	22.4	24.4	21.6	20.7	21.0	21.7	23.1	23.9	24.1	24.4	24.5	24.6
Cambodia	15.8	17.1	15.6	16.9	18.5	19.8	18.8	19.8	19.5	19.5	19.7	20.1	20.2	20.4	20.8
Cameroon	15.7	15.0	16.6	16.6	16.0	16.3	15.5	14.1	15.0	15.6	15.8	15.9	16.0	16.3	16.3
Chad	14.9	20.2	24.8	24.4	20.7	17.8	14.0	12.6	14.1	15.7	14.8	15.1	14.7	15.3	15.5
Congo, Democratic Republic of the	13.7	15.6	13.7	16.5	14.6	18.6	16.8	11.7	10.4	11.2	11.2	11.4	11.6	11.8	12.0
Congo, Republic of	30.3	36.7	41.4	42.7	45.1	39.7	25.9	27.4	23.1	27.7	28.2	28.9	29.8	30.5	31.1
Côte d'Ivoire	18.5	18.1	14.2	19.2	19.7	18.9	20.0	19.4	19.1	19.3	20.0	20.1	20.1	20.1	20.2
Ethiopia	16.2	17.2	16.6	15.5	15.8	14.9	15.4	15.9	14.9	15.2	15.5	15.6	15.9	16.2	16.8
Ghana	16.4	16.7	19.1	18.5	16.7	18.4	19.6	17.2	17.5	17.9	18.0	17.9	17.7	17.4	17.3
Guinea	11.4	10.8	15.1	17.5	14.8	17.0	14.9	16.2	16.8	18.1	18.6	19.1	19.2	19.1	19.1
Haiti	16.8	19.9	22.0	23.8	21.0	18.9	19.4	18.6	17.7	20.4	19.6	19.3	19.2	19.1	18.6
Honduras	23.5	23.1	23.0	22.9	23.8	24.7	25.2	27.1	27.4	26.6	26.7	26.5	26.4	26.4	26.3
Kenya	18.8	19.8	19.5	19.1	19.7	19.8	19.2	18.8	18.7	19.0	18.9	18.9	19.0	19.1	19.2
Kyrgyz Republic	32.9	31.2	32.7	34.7	34.4	35.4	35.6	34.7	37.8	35.1	33.5	33.3	34.0	34.0	34.2
Lao P.D.R.	15.0	20.1	20.0	21.4	21.1	20.8	21.1	16.2	17.0	17.3	17.8	17.8	17.5	17.1	17.2
Madagascar	11.5	13.2	11.7	10.8	10.9	12.4	11.8	14.7	15.0	15.1	15.0	14.1	14.6	14.9	15.1
Mali	19.1	17.7	17.1	14.6	17.4	17.1	19.1	18.3	20.1	20.6	20.3	20.7	21.2	21.7	22.3
Moldova	38.9	38.3	36.6	37.9	36.7	37.9	35.6	34.1	35.7	35.5	33.9	33.7	33.6	33.4	33.4
Mozambique	24.0	26.1	27.3	27.0	31.4	31.8	28.1	26.1	26.6	23.4	23.2	22.6	22.5	22.3	22.1
Myanmar	9.3	9.1	9.8	19.0	20.1	22.0	18.7	18.8	18.2	17.4	18.3	18.3	17.8	17.8	18.0
Nepal	16.8	18.0	17.8	18.0	19.6	20.4	20.8	23.4	26.3	23.6	23.8	23.7	23.6	23.4	23.6
Nicaragua	21.3	22.5	23.5	23.9	23.5	23.3	23.9	25.2	25.5	25.1	25.1	25.1	25.0	25.1	25.2
Niger	18.6	18.2	17.9	21.4	24.6	23.0	23.5	20.5	21.3	22.1	23.1	24.0	23.5	23.9	23.8
Nigeria	10.1	12.4	17.7	14.3	11.0	10.5	7.6	5.6	6.0	7.6	7.3	7.2	6.9	7.0	7.2
Papua New Guinea	19.2	21.5	21.9	21.2	20.7	21.0	17.2	14.8	13.9	14.9	13.5	13.6	13.7	13.7	13.7
Rwanda	23.8	24.6	25.3	23.2	25.5	24.2	24.7	23.7	22.7	22.6	22.1	22.2	22.3	22.3	22.2
Senegal	22.0	22.1	22.7	23.3	22.6	24.8	25.1	26.8	24.1	25.5	25.3	25.3	25.3	25.3	25.4
Somalia	....	....	....	....	1.8	2.2	2.1	2.5	3.4	3.2	3.5	3.9	4.0	4.1	4.2
Sudan	14.6	17.4	16.5	9.2	10.3	10.8	10.0	8.7	8.5	8.1	6.5	5.7	5.1	4.8	4.6
Tajikistan	23.4	23.2	24.9	25.1	26.9	28.4	29.9	29.9	29.1	28.0	28.2	28.1	28.1	28.1	28.1
Tanzania	15.7	15.5	15.6	15.7	15.5	14.9	14.5	15.5	15.9	15.8	16.2	16.4	16.5	16.8	17.2
Timor-Leste	68.4	67.9	68.1	62.4	65.4	63.2	53.9	36.7	49.0	37.8	34.3	29.8	27.8	29.1	26.8
Uganda	13.2	13.2	14.5	13.6	12.7	13.5	14.8	15.0	15.8	16.1	16.6	16.6	17.7	18.7	20.5
Uzbekistan	36.5	37.3	39.7	41.0	35.6	35.0	34.3	32.9	31.3	32.8	33.1	32.8	32.3	31.5	30.9
Vietnam	25.6	27.3	25.9	22.6	23.1	22.2	23.8	23.7	23.5	23.0	23.0	23.0	23.0	23.1	23.1
Yemen	25.0	26.1	25.3	29.9	23.9	23.6	14.1	12.7	7.6	15.6	20.0	24.7	25.7	26.5	26.3
Zambia	15.7	15.6	17.7	18.7	17.6	18.9	18.8	18.2	17.9	18.8	18.4	18.8	19.2	19.2	19.1
Zimbabwe	11.7	21.8	24.2	24.9	24.6	23.8	24.3	21.7	22.5	23.0	22.8	22.6	22.5	19.4	19.4
Average	16.1	17.4	19.3	18.4	17.1	16.8	15.5	15.1	15.3	15.8	15.7	15.7	15.5	15.4	15.4
Oil Producers	13.1	15.1	19.3	17.0	14.0	13.2	9.8	8.2	8.6	10.3	10.0	10.0	9.6	9.5	9.5
Asia	16.9	17.9	17.9	18.6	18.8	18.4	17.5	17.2	17.4	17.1	17.2	17.2	17.2	17.2	17.2
Latin America	21.4	22.2	22.9	23.4	23.1	23.1	23.6	24.9	25.0	24.9	24.8	24.7	24.6	24.6	24.5
Sub-Saharan Africa	13.8	15.2	18.3	16.6	14.8	14.5	12.9	12.2	12.8	13.8	13.6	13.4	13.1	13.0	13.1
Others	24.0	25.2	26.0	25.5	23.8	23.8	21.4	21.1	19.2	21.1	21.9	22.8	23.2	23.3	23.5

Source: IMF staff estimates and projections. Projections are based on staff assessment 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, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bangladesh	12.7	12.7	14.0	14.2	14.6	14.0	13.8	13.4	13.3	15.0	15.2	14.8	14.7	14.5	14.3
Benin	23.2	19.2	20.1	19.5	20.4	19.4	24.9	21.3	24.4	23.6	21.1	20.4	19.7	19.2	18.8
Burkina Faso	24.2	24.4	23.0	25.5	28.4	23.5	23.1	24.5	29.9	28.1	27.0	27.2	27.4	27.5	27.6
Cambodia	19.9	19.9	19.7	20.7	20.7	21.0	20.4	21.5	23.1	24.4	24.4	24.4	24.4	24.5	24.7
Cameroon	15.7	16.0	18.6	17.8	20.0	20.8	20.9	21.2	19.2	17.5	17.3	17.1	17.3	17.5	17.6
Chad	24.1	24.4	22.4	23.9	22.8	22.0	18.3	14.5	15.0	14.7	14.9	14.5	14.1	13.8	13.9
Congo, Democratic Republic of the	12.6	16.5	14.6	14.5	12.7	18.5	17.0	12.7	12.9	11.1	11.1	11.4	11.6	11.8	12.0
Congo, Republic of	25.3	21.1	26.1	35.2	50.1	56.4	53.2	50.0	30.3	23.8	23.2	24.8	27.8	28.4	30.3
Côte d'Ivoire	19.9	20.0	18.2	22.3	21.9	21.0	22.8	23.3	23.4	23.1	23.0	22.9	23.1	22.8	22.9
Ethiopia	17.1	18.5	18.2	16.6	17.8	17.5	17.3	18.2	18.2	17.6	17.9	17.9	18.1	18.4	19.5
Ghana	23.6	26.8	26.6	29.8	28.7	29.4	25.0	26.1	22.5	23.0	21.7	21.3	21.4	21.1	17.4
Guinea	16.2	20.5	16.0	20.0	18.6	20.2	21.8	16.4	17.1	20.2	20.5	20.8	20.8	21.0	21.0
Haiti	20.3	22.7	24.5	28.6	28.1	25.3	21.9	18.7	18.6	22.8	21.0	20.6	20.2	19.9	19.3
Honduras	28.4	26.5	25.9	26.4	29.6	27.6	26.0	27.5	27.5	27.4	27.6	27.5	27.4	27.4	26.9
Kenya	23.1	24.2	23.6	24.2	25.4	27.2	27.3	27.2	27.2	26.5	25.0	24.3	23.7	23.4	23.2
Kyrgyz Republic	34.4	37.1	37.4	40.6	38.1	34.9	36.8	39.3	41.1	37.6	36.0	35.6	36.1	35.9	36.1
Lao P.D.R.	18.6	23.0	21.6	21.9	26.1	24.9	23.5	21.0	21.9	21.7	22.0	22.1	22.1	22.1	22.2
Madagascar	14.1	14.0	14.1	13.4	14.9	14.7	15.1	16.0	18.5	18.0	20.1	19.5	19.3	18.9	17.3
Mali	22.8	20.3	20.6	15.5	19.7	20.0	20.9	22.2	23.0	23.9	23.3	23.7	24.2	24.7	25.2
Moldova	45.3	40.9	39.1	40.3	38.6	39.8	37.9	36.1	36.7	38.7	37.7	37.3	36.4	36.2	36.2
Mozambique	28.9	29.9	32.2	30.8	34.1	42.5	35.2	32.4	32.1	30.9	34.0	32.5	32.1	33.0	32.1
Myanmar	13.7	14.6	13.4	18.1	21.4	22.9	23.2	21.3	21.7	21.3	22.3	22.4	21.9	21.9	22.1
Nepal	19.4	18.8	18.7	19.3	17.8	18.8	20.1	22.0	27.7	27.3	27.0	26.5	26.4	26.2	26.3
Nicaragua	22.5	22.4	23.3	24.0	24.2	24.5	25.3	26.8	27.1	27.1	27.2	27.1	27.2	27.4	27.5
Niger	23.9	20.6	19.4	22.5	27.2	31.1	32.5	26.6	26.4	28.2	28.8	28.2	26.3	26.8	26.6
Nigeria	15.5	16.6	17.4	14.1	13.4	12.7	11.1	9.5	11.7	12.4	11.9	11.4	11.2	11.2	11.4
Papua New Guinea	24.7	18.4	19.7	22.4	27.6	27.3	21.2	19.2	16.9	17.2	15.7	15.7	15.8	15.8	15.7
Rwanda	23.5	25.3	26.2	25.7	26.8	28.3	27.5	26.0	25.7	25.0	24.5	23.8	23.2	23.1	22.9
Senegal	26.6	27.0	28.8	28.5	28.1	29.8	29.9	31.0	28.6	29.0	28.2	28.3	28.3	28.4	28.4
Somalia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sudan	18.3	17.2	16.5	12.3	13.0	12.1	11.7	10.3	9.9	11.2	9.4	8.5	8.0	7.9	7.6
Tajikistan	28.6	26.1	27.0	24.6	27.7	28.4	31.8	39.7	31.5	35.4	33.6	30.6	30.6	30.6	30.6
Tanzania	20.2	20.2	19.1	19.8	19.4	17.9	17.8	17.7	18.6	20.2	20.8	20.5	19.9	19.5	19.5
Timor-Leste	27.7	26.7	24.5	22.5	23.7	40.3	50.2	70.6	51.6	60.6	68.7	57.8	51.9	47.7	44.2
Uganda	15.3	18.8	17.2	16.6	16.7	18.2	19.4	19.9	19.0	21.4	23.0	23.6	20.5	21.1	22.2
Uzbekistan	34.2	34.0	32.3	32.8	33.0	32.0	33.9	31.7	32.6	33.4	32.7	32.0	32.3	31.3	30.4
Vietnam	31.6	30.0	27.0	29.5	30.5	28.5	30.0	30.0	28.2	27.6	27.7	27.7	27.6	27.6	27.6
Yemen	35.2	30.2	29.8	36.2	30.8	27.8	25.6	29.2	15.1	29.5	28.5	27.4	27.1	27.6	27.1
Zambia	17.8	18.1	19.5	21.5	23.8	24.6	28.1	24.0	25.2	26.6	25.8	26.2	25.8	25.7	25.2
Zimbabwe	13.7	21.2	24.7	24.8	26.2	25.2	25.3	30.2	32.1	26.2	24.7	24.4	24.3	20.9	20.9
Average	20.1	20.2	20.2	20.0	20.5	20.0	19.6	19.3	19.6	20.0	19.8	19.4	19.1	18.9	18.7
Oil Producers	17.6	17.9	18.6	16.8	16.5	15.8	14.1	13.2	14.1	14.8	14.3	13.7	13.4	13.3	13.3
Asia	20.9	20.1	19.5	21.6	22.8	22.1	22.0	21.5	20.9	21.4	21.6	21.4	21.3	21.1	21.1
Latin America	24.9	24.5	24.9	26.2	27.7	26.2	24.9	25.6	25.7	26.4	26.2	26.0	25.9	25.9	25.6
Sub-Saharan Africa	17.9	18.8	19.3	17.9	18.1	17.9	17.0	16.7	18.0	18.1	17.6	17.1	16.7	16.5	16.3
Others	27.5	25.5	25.2	25.9	26.4	24.9	24.9	24.7	22.2	26.1	25.5	25.2	25.5	25.5	25.3

Source: IMF staff estimates and projections. Projections are based on staff assessment 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, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bangladesh	39.5	36.6	35.3	33.8	34.5	33.9	31.4	30.6	29.8	30.3	30.9	31.0	31.0	30.9	30.7
Benin	25.6	28.7	29.9	26.7	25.3	30.5	42.4	49.7	54.6	55.1	52.6	48.2	44.1	40.4	36.4
Burkina Faso	29.1	30.7	28.1	28.2	28.8	30.4	35.8	38.3	38.3	41.0	41.3	41.8	41.6	41.5	41.6
Cambodia	32.1	33.5	34.9	34.7	35.4	34.1	32.5	33.7	35.1	35.8	36.2	36.7	37.9	38.6	39.2
Cameroon	9.1	10.4	12.0	14.0	17.4	24.0	31.5	32.1	31.8	30.8	30.2	28.9	27.4	25.8	24.2
Chad	31.6	30.1	30.6	28.8	30.5	41.5	43.8	52.4	52.5	48.1	45.4	41.7	38.6	35.3	32.6
Congo, Democratic Republic of the	84.5	30.9	24.5	22.7	20.0	17.5	16.1	16.8	15.7	14.5	13.3	12.4	11.6	10.8	9.2
Congo, Republic of	63.3	22.2	23.8	28.6	34.2	47.6	97.1	114.6	119.1	110.4	105.0	109.4	114.4	111.5	108.3
Côte d'Ivoire	64.2	63.0	69.2	45.0	43.4	44.8	47.3	47.0	46.4	48.0	46.9	46.0	45.3	44.5	43.8
Ethiopia	37.8	40.5	45.3	37.7	42.9	46.8	54.0	55.0	56.2	58.3	56.7	54.0	51.3	48.8	47.5
Ghana	36.1	46.3	42.6	47.9	57.2	70.2	72.2	73.4	71.8	69.1	65.9	63.6	61.8	60.3	54.8
Guinea	61.3	68.8	58.1	27.2	34.0	35.1	42.1	42.9	39.7	43.7	44.7	44.3	42.4	41.2	40.0
Haiti	27.8	17.3	11.8	16.3	21.5	26.3	30.2	33.9	31.1	33.2	34.3	34.2	33.5	32.5	31.8
Honduras	27.2	24.5	25.1	32.1	40.1	39.9	39.8	41.2	43.9	43.8	44.1	43.1	40.9	38.7	35.4
Kenya	41.1	44.4	43.0	43.9	44.0	48.6	51.6	53.5	55.6	58.1	56.9	54.6	52.8	52.0	51.0
Kyrgyz Republic	58.1	59.7	49.4	49.0	46.2	52.3	64.9	58.1	59.1	55.1	55.1	52.7	51.7	50.0	48.9
Lao P.D.R.	55.2	55.1	50.8	55.2	54.3	58.6	58.1	58.4	62.8	65.5	66.7	67.2	67.7	68.3	68.8
Madagascar	33.7	31.7	32.2	33.0	33.9	34.7	35.5	38.4	37.3	37.2	38.0	37.8	37.2	36.5	34.9
Mali	21.9	25.3	24.0	25.4	26.4	27.3	30.7	35.9	35.6	35.9	36.6	37.7	38.7	39.9	40.6
Moldova	32.4	30.5	29.0	30.9	29.6	36.0	44.8	42.1	37.7	39.8	42.0	41.9	41.8	41.9	41.7
Mozambique	41.9	43.3	38.0	40.1	53.1	62.4	88.1	118.8	102.2	110.1	116.6	122.1	126.7	130.3	112.5
Myanmar	55.1	49.6	46.1	40.7	33.2	29.9	34.5	35.7	34.7	35.6	34.9	35.0	35.1	35.3	35.5
Nepal	38.5	34.0	31.7	33.9	31.9	28.3	25.0	27.3	27.2	27.4	28.8	30.1	31.1	32.2	33.7
Nicaragua	29.3	30.3	28.8	27.9	28.8	28.7	28.9	31.0	33.6	34.1	34.6	35.0	35.7	36.3	36.9
Niger	27.7	24.3	27.8	26.9	26.3	32.0	41.0	45.1	46.5	46.2	47.5	47.6	46.7	45.9	45.3
Nigeria	8.6	9.6	12.1	12.7	12.9	13.1	16.0	19.6	23.4	26.8	27.4	27.3	27.8	28.1	28.3
Papua New Guinea	21.7	17.3	16.3	19.1	24.9	27.1	28.9	31.7	32.6	30.5	30.7	30.7	31.3	31.8	32.2
Rwanda	19.5	20.0	19.9	20.0	26.7	29.1	33.4	37.6	41.6	43.6	44.9	45.0	44.5	43.5	42.4
Senegal	34.2	35.5	40.7	42.8	46.9	54.4	56.9	60.4	71.5	70.0	67.4	65.0	63.0	61.0	59.3
Somalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudan	64.0	64.4	62.9	87.4	84.9	56.0	116.9	91.4	126.0	176.5	176.0	176.8	176.9	173.7	173.2
Tajikistan	36.9	36.8	35.9	32.4	29.1	27.5	34.3	41.8	47.8	50.2	49.9	46.8	44.4	42.8	41.4
Tanzania	24.4	27.3	27.8	29.2	30.9	33.8	37.2	38.0	38.2	39.3	40.7	41.3	40.8	39.6	38.2
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uganda	19.2	22.4	23.4	24.6	27.7	30.8	33.5	37.2	39.0	41.5	44.5	46.6	46.4	44.7	42.3
Uzbekistan	10.9	10.0	9.0	8.4	7.9	8.4	11.5	12.8	29.5	26.9	23.5	22.8	22.5	22.8	22.7
Vietnam	45.2	48.1	44.6	48.4	51.8	55.0	57.0	59.8	58.2	58.4	58.1	58.2	58.3	58.5	58.8
Yemen	49.8	42.4	45.7	47.3	48.2	48.7	72.7	118.7	141.0	128.8	96.1	75.9	70.0	64.4	58.9
Zambia	20.5	18.9	20.8	25.4	27.1	36.1	62.3	60.7	62.2	65.5	68.0	69.1	70.9	72.1	72.4
Zimbabwe	71.7	59.3	48.3	45.3	48.3	49.6	51.9	69.8	78.4	75.2	72.6	70.8	68.7	66.4	63.9
Average	31.7	30.3	30.0	30.8	31.2	31.7	38.0	40.7	44.2	45.3	44.6	43.6	42.9	42.1	41.1
Oil Producers	16.4	15.1	17.4	17.0	17.6	18.4	23.1	28.1	31.8	33.3	32.6	31.7	31.4	31.1	30.8
Asia	42.9	41.9	39.6	40.1	40.9	41.4	41.5	42.4	41.5	41.9	42.2	42.4	42.6	42.7	42.8
Latin America	27.9	24.6	23.3	27.5	32.7	33.7	34.6	36.7	38.4	38.8	39.2	38.8	37.8	36.7	35.2
Sub-Saharan Africa	23.9	22.1	23.2	22.9	24.4	26.3	31.5	36.7	40.1	42.1	41.6	40.4	39.6	38.7	37.4
Others	45.5	44.7	42.6	50.0	44.9	36.5	63.0	57.7	83.5	94.6	84.7	77.9	73.5	69.0	64.9

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

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

Table A22. Low-Income Developing Countries: General Government Net Debt, 2009–23
(Percent of GDP)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bangladesh
Benin
Burkina Faso
Cambodia
Cameroon	5.1	6.2	8.9	11.8	15.1	22.4	27.2	30.4	28.4	27.1	26.3	25.0	23.7	22.2	20.9
Chad
Congo, Democratic Republic of the
Congo, Republic of
Côte d'Ivoire
Ethiopia	29.2	32.4	40.0	32.5	37.3	42.2	49.2	50.9	52.2	55.0	53.9	51.6	49.3	47.1	46.0
Ghana	32.6	43.0	38.8	45.8	53.2	63.4	66.7	66.8	65.3	63.0	60.5	58.7	57.3	56.2	51.1
Guinea
Haiti
Honduras
Kenya	36.9	40.2	39.1	40.1	40.1	44.4	46.5	48.2	50.4	53.7	54.1	52.8	51.1	50.2	49.3
Kyrgyz Republic
Lao P.D.R.
Madagascar
Mali	12.4	16.9	17.1	21.2	20.5	19.9	24.7	29.6	29.9	32.4	32.5	33.1	33.5	34.1	35.3
Moldova
Mozambique
Myanmar
Nepal
Nicaragua
Niger	23.2	20.2	24.1	21.9	20.6	25.6	35.7	40.5	40.9	41.1	42.6	42.7	41.1	39.4	37.7
Nigeria	4.1	6.3	7.2	5.8	6.1	9.3	11.5	15.4	19.6	23.7	24.7	25.0	25.7	26.1	26.7
Papua New Guinea
Rwanda
Senegal
Somalia
Sudan
Tajikistan
Tanzania
Timor-Leste
Uganda
Uzbekistan
Vietnam
Yemen	43.6	38.3	42.3	45.3	46.7	47.8	71.5	117.0	139.4	127.5	95.3	75.3	69.4	63.9	58.4
Zambia	16.5	15.9	16.4	20.1	25.2	31.8	56.1	51.3	56.3	61.3	64.8	68.0	69.9	71.2	71.6
Zimbabwe
Average
Oil Producers
Asia
Latin America
Sub-Saharan Africa
Others

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

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

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

	Pension Spending Change, 2015–30 ¹	Net Present Value of Pension Spending Change, 2015–50 ^{1,2}	Health Care Spending Change, 2015–30	Net Present Value of Health Care Spending Change, 2015–50 ²	Gross Financing Need, 2018 ³	Average Term to Maturity, 2018 (years) ⁴	Debt-to-Average Maturity, 2018	Projected Interest Rate–Growth Differential, 2018–23 (percent)	Precrisis Overall Balance, 2000–07	Projected Overall Balance, 2018–23	Nonresident Holding of General Government Debt, 2017 (percent of total) ⁵
Australia	0.8	25.3	1.6	59.6	3.3	7.4	5.6	-1.3	1.1	-0.4	42.0
Austria	0.5	14.3	1.5	59.0	6.2	8.3	9.1	-1.4	-2.2	-0.3	81.2
Belgium	0.5	17.9	2.0	76.8	18.3	9.4	10.8	-1.1	-0.5	-1.3	60.5
Canada	1.1	29.0	1.2	46.8	9.4	5.4	15.9	-0.1	1.1	-0.8	25.4
Cyprus	0.5	0.6	...	...	6.2	4.9	22.9	-2.7	-2.3	1.6	87.4
Czech Republic	0.0	2.0	0.7	25.1	4.2	1.5	22.7	-1.9	-3.8	0.7	54.8
Denmark	-1.1	-45.0	1.3	46.0	4.8	7.8	4.6	-0.6	2.5	-0.2	34.7
Estonia	-0.5	-14.2	0.4	21.1	...	...	...	-5.7	1.4	-0.1	74.6
Finland	1.3	23.0	1.6	50.8	7.7	6.2	9.8	-1.9	4.0	-0.5	73.1
France	-0.1	-17.6	0.8	30.6	13.1	7.4	13.1	-1.1	-2.7	-1.8	61.1
Germany	1.4	41.7	1.0	47.8	3.6	5.8	10.3	-2.2	-2.4	1.4	55.5
Hong Kong SAR	1.8	55.1	...	...	...	...	...	-0.4	0.0	1.6	...
Iceland	0.3	7.5	2.6	94.0	1.9	13.4	2.9	1.0	1.2	1.2	22.4
Ireland	1.1	38.9	1.0	38.3	6.8	10.7	6.5	-1.4	1.5	0.3	59.6
Israel	0.6	26.1	0.4	15.4	...	7.4	10.4	0.5	-4.4	-3.3	14.0
Italy ⁶	0.2	-1.9	1.0	40.8	22.2	6.9	18.9	0.6	-3.0	-0.5	35.6
Japan	-1.2	-31.7	2.2	72.0	40.7	7.7	30.8	-0.9	-6.0	-2.4	10.3
Korea	2.0	75.4	2.1	84.3	0.6	6.4	6.1	-1.4	2.0	1.9	12.8
Latvia	-1.2	-48.7	0.9	32.8	...	7.8	4.2	-2.9	-1.3	-0.4	90.5
Lithuania	1.7	36.1	0.7	27.5	6.8	6.3	5.5	-0.2	-1.8	0.8	95.0
Luxembourg	1.9	59.9	1.7	74.1	...	6.9	3.3	-3.8	2.4	0.4	48.6
Malta	-0.1	6.0	...	...	3.2	9.0	5.4	-2.2	-4.9	0.8	11.1
Netherlands	0.7	24.7	2.8	94.6	6.8	6.9	7.8	-1.9	-0.6	0.8	51.7
New Zealand	1.6	53.8	2.0	66.4	0.3	6.8	3.6	0.6	3.3	2.0	74.0
Norway	0.7	24.0	1.9	78.2	...	5.0	7.3	-1.6	13.2	3.9	51.2
Portugal	0.8	22.6	2.0	74.3	13.7	6.2	19.4	-0.3	-4.4	-0.8	62.7
Singapore ⁷	0.8	27.8	...	...	...	3.7	29.7	...	5.6	2.0	...
Slovak Republic	-0.5	-1.0	0.6	26.5	8.4	7.5	6.5	-3.0	-5.0	-0.3	66.6
Slovenia	0.9	39.2	1.0	42.9	5.2	8.5	8.5	-1.9	-1.0	-0.5	74.3
Spain	-0.6	-1.3	1.7	60.0	18.4	7.0	13.9	-0.7	0.4	-2.2	50.4
Sweden	-0.6	-26.0	0.6	25.0	3.0	4.7	8.1	-2.9	1.2	0.6	35.6
Switzerland	0.4	15.8	3.1	116.1	1.6	10.4	4.0	-1.5	-0.3	0.3	11.6
United Kingdom	0.3	8.7	1.9	65.0	8.5	14.9	5.8	-0.4	-1.9	-1.3	35.2
United States	1.5	31.4	3.6	122.3	23.7	5.8	18.7	-0.6	-3.1	-5.1	31.1
Average	0.8	18.5	2.4	83.7	18.7	6.9	16.2	-0.9	-2.2	-2.3	36.0
G7	0.9	17.2	2.5	88.9	21.5	6.9	18.1	-0.7	-3.1	-3.1	33.6
G20 Advanced	0.9	19.8	2.5	87.7	20.2	6.9	17.2	-0.8	-2.8	-2.8	33.2

Sources: Bloomberg Finance L.P.; 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 U.S. dollars at average market exchange rates in the years indicated and based on data availability.

¹ Pension projections rely on authorities' estimates when these are available. For the European Union countries, pension projections are based on *The 2015 Ageing Report of the European Commission*. When authorities' estimates are not available, staff projections use the methodology described in Clements, Eich, and Gupta, *Equitable and Sustainable Pensions: Challenges and Experience* (IMF, 2014). Staff projections for health care spending are driven by demographic 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 country specific historic average and converge to the advanced economy historic average by 2050 (0.8 percent).² For net present value calculations, a discount rate of 1 percent a year in excess of GDP growth is used for each country.³ Gross financing need is defined as the projected overall deficit and maturing government debt in 2018. Data are from Bloomberg Finance L.P. and IMF staff projections.⁴ For most countries, average term to maturity data refer to central government securities; the source is Bloomberg Finance L.P.⁵ Nonresident holding of general government debt data are for the fourth quarter of 2017 or latest available from the Joint External Debt Hub (JEDH), Quarterly External Debt Statistics, which include marketable and nonmarketable debt. For some countries, tradable instruments in the JEDH are reported at market value. External debt in U.S. dollars is converted to local currency, then taken as a percentage of 2017 gross general government debt.⁶ Italy's pension projections do not reflect the new demographic assumptions. Taking more prudent assumptions for the employment rate, productivity growth, and demographics, staff calculations show that the change in pension spending over 2015–30 would be about 3 percent of GDP, see Italy 2017 Article IV Staff Report Box 4.⁷ Singapore's general government debt is covered by financial assets and issued to develop the bond market.

Table A24. Emerging Market and Middle-Income Economies: Structural Fiscal Indicators

(Percent of GDP, except where otherwise indicated)

	Pension Spending Change, 2015–30 ¹	Net Present Value of Pension Spending Change, 2015–50 ^{1,2}	Health Care Spending Change, 2015–30	Net Present Value of Health Care Spending Change, 2015–50 ²	Gross Financing Need, 2018 ³	Average Term to Maturity, 2018 (years) ⁴	Debt-to-Average Maturity, 2018	Projected Interest Rate–Growth Differential, 2018–23 (percent)	Precrisis Overall Balance, 2000–07	Projected Overall Balance, 2018–23	Nonresident Holding of General Government Debt, 2017 (percent of total) ⁵
Algeria	3.0	122.4	1.0	44.4	...	...	...	-7.0	7.4	-3.0	3.7
Angola	0.4	16.2	0.2	7.7	...	...	...	-9.4	3.1	-2.2	...
Argentina	0.8	40.7	0.9	37.1	11.4	9.7	5.6	-8.2	-0.2	-4.7	40.0
Azerbaijan	5.1	148.9	0.3	11.7	...	...	...	-3.5	6.3	0.8	...
Belarus	3.8	114.7	0.7	27.6	...	2.9	17.3	-2.1	-7.2	-1.4	60.7
Brazil ⁶	5.1	203.8	1.1	44.2	15.1	6.6	13.2	2.2	-3.6	-8.1	8.7
Chile	-0.8	-22.8	1.3	53.3	3.7	9.6	2.5	-2.3	2.4	-0.3	26.5
China	2.0	70.7	0.8	31.9	...	...	...	-5.7	-1.8	-4.3	...
Colombia	-0.6	-37.8	1.2	48.4	4.4	10.1	4.8	0.3	-1.9	-1.4	31.1
Croatia	-1.0	-49.8	1.2	45.5	12.0	4.6	16.5	-0.3	-4.3	0.2	33.7
Dominican Republic	0.3	15.1	0.7	26.9	7.6	8.3	4.5	1.5	-2.0	-3.4	66.6
Ecuador	0.8	33.4	1.0	39.9	12.4	5.8	8.2	3.0	1.2	-2.9	58.9
Egypt	2.3	51.1	0.2	8.7	42.4	2.9	31.9	-6.7	-4.6	-5.4	14.8
Hungary	-1.5	-36.2	1.0	40.1	19.5	3.7	18.1	-1.8	-6.4	-2.1	42.4
India	0.0	-5.7	0.2	9.0	10.6	9.5	7.3	-4.1	-8.6	-6.3	5.9
Indonesia	0.2	9.2	0.3	10.3	5.0	8.5	3.5	-2.8	-0.7	-2.5	58.7
Iran	2.0	109.9	1.0	43.0	...	...	...	-4.0	3.1	-3.2	...
Kazakhstan	1.7	47.5	0.4	14.9	...	6.7	3.2	-2.8	4.7	-1.9	36.1
Kuwait	7.4	330.1	0.7	31.2	...	6.5	3.9	-4.2	29.0	3.9	...
Malaysia	2.1	82.4	0.5	19.5	10.6	6.5	8.3	-2.4	-3.8	-2.2	27.1
Mexico	0.6	18.6	0.7	31.1	9.3	9.1	5.9	0.4	-2.0	-2.5	32.4
Morocco	1.8	61.4	0.5	22.6	10.5	6.3	10.2	-1.9	-3.3	-2.5	22.2
Oman	0.6	27.8	0.8	36.6	...	8.3	5.7	0.2	10.0	-6.2	...
Pakistan	0.1	5.3	0.1	4.9	32.1	1.8	38.0	-2.9	-2.9	-5.7	...
Peru	0.3	15.3	0.7	30.8	5.4	7.6	3.6	-1.3	-0.4	-1.8	30.7
Philippines	0.2	7.8	0.2	8.8	7.6	9.3	4.0	-4.6	-2.4	-0.7	25.6
Poland	-0.5	-21.7	1.0	40.0	8.5	4.9	10.3	-1.6	-4.1	-1.5	53.1
Qatar	0.9	38.7	0.6	27.5	...	5.9	12.1	-3.7	8.9	7.6	...
Romania	-0.1	1.6	0.9	33.6	8.7	5.3	7.3	-2.9	-2.5	-3.3	49.4
Russia	3.4	96.6	0.6	24.2	2.7	7.3	2.6	-0.3	4.2	0.3	20.4
Saudi Arabia	2.4	92.9	1.0	38.9	...	10.2	2.0	0.6	6.9	-5.2	...
South Africa	0.3	13.2	0.7	26.8	12.8	12.8	4.3	0.5	-0.6	-4.1	36.2
Sri Lanka	1.2	43.2	0.4	14.8	19.6	5.7	13.4	-1.4	-6.9	-3.7	45.7
Thailand	3.8	125.7	0.7	28.7	7.1	6.9	5.9	-1.3	-0.4	-1.4	13.5
Turkey	-0.1	15.5	0.8	33.6	6.3	6.2	4.5	-3.4	-5.8	-2.6	38.4
Ukraine	1.0	99.8	0.5	21.0	9.7	5.8	13.6	-4.6	-2.3	-2.4	47.1
United Arab Emirates	0.6	29.6	0.7	28.2	...	...	...	-4.4	9.1	-0.3	...
Uruguay	-0.4	-3.9	1.2	47.7	11.5	11.8	5.6	-3.8	-2.1	-2.6	40.2
Venezuela	...	...	...	...	...	...	...	...	0.1	-28.3	...
Average	1.7	61.7	0.7	29.1	10.5	7.0	8.3	-3.9	-1.1	-4.0	25.6
G20 Emerging	1.9	66.2	0.7	29.1	9.4	7.2	7.5	-3.9	-1.9	-4.4	22.7

Sources: Bloomberg Finance L.P.; 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 U.S. dollars at average market exchange rates in the years indicated and based on data availability.

¹ Pension projections rely on authorities' estimates when these are available. For the European Union countries, pension projections are based on *The 2015 Ageing Report of the European Commission*. When authorities' estimates are not available, staff projections use the methodology described in Clements, Eich, and Gupta, *Equitable and Sustainable Pensions: Challenges and Experience* (IMF, 2014). Staff projections for health care spending are driven by demographic 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 at the advanced economy historic average by 2050 (0.8 percent).

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

³ Gross financing need is defined as the projected overall balance and maturing government debt in 2018. Data are from IMF staff projections.

⁴ Average term to maturity data refer to government securities; the source is Bloomberg Finance L.P.

⁵ Nonresident holding of general government debt data are the fourth quarter of 2017 or latest available from the Joint External Debt Hub (JEDH), Quarterly External Debt Statistics, which include marketable and nonmarketable debt. For some countries, tradable instruments in the JEDH are reported at market value. External debt in U.S. dollars is converted to local currency, then taken as a percentage of 2017 gross general government debt.

⁶ IMF staff projects an increase in pension spending in Brazil equivalent to 5.9 percent of GDP by 2030. For more detail, refer to *Fiscal Challenges of an Aging Population in Brazil* (IMF, 2016).

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

	Pension Spending Change, 2015–30 ¹	Net Present Value of Pension Spending Change, 2015–50 ^{1,2}	Health Care Spending Change, 2015–30	Net Present Value of Health Care Spending Change, 2015–50 ²	Average Term to Maturity, 2018 (years) ³	Debt-to-Average Maturity, 2018	Projected Interest Rate–Growth Differential, 2018–23 (percent)	Precrisis Overall Balance, 2000–07	Projected Overall Balance, 2018–23	Nonresident Holding of General Government Debt, 2017 (percent of total) ⁴
Bangladesh	0.3	13.1	0.1	3.5	4.8	6.3	-5.8	-2.8	-3.8	41.7
Benin	0.1	3.4	0.2	9.7	3.5	15.8	-4.2	-2.3	-0.9	...
Burkina Faso	0.0	3.2	0.4	17.6	2.3	17.8	-4.2	-1.8	-4.2	63.5
Cambodia	0.1	3.0	0.3	10.8	...	...	-8.3	-3.2	-4.3	...
Cameroon	0.0	0.6	0.1	6.0	6.4	4.8	-3.8	5.3	-1.9	...
Chad	0.0	-0.1	0.2	7.9	...	...	-4.5	-2.4	0.4	...
Congo, Democratic Republic of the	0.0	0.2	0.3	11.2	...	...	-9.2	-0.7	-0.4	...
Congo, Republic of	0.1	6.0	0.3	10.8	...	...	2.0	4.8	1.6	...
Côte d'Ivoire	0.0	2.4	...	...	...	...	-3.8	-1.0	-3.3	...
Ethiopia	0.0	0.9	0.2	9.3	...	...	-14.2	-4.8	-2.5	...
Ghana	0.1	3.5	0.5	19.0	3.8	18.0	-4.0	-4.6	-4.1	...
Guinea	0.0	0.3	0.3	10.7	...	...	-9.9	-2.5	-1.6	...
Haiti	...	...	0.2	6.5	...	...	-6.1	-1.9	-1.3	...
Honduras	0.3	8.8	0.7	26.5	3.4	12.8	-2.0	-2.0	-0.8	...
Kenya	0.2	9.6	0.3	11.7	4.5	12.9	-3.9	-1.4	-6.1	...
Kyrgyz Republic	5.2	148.3	0.6	23.6	...	...	-5.5	-5.2	-2.4	93.3
Lao P.D.R.	0.1	2.6	0.3	10.2	...	...	-6.6	-3.6	-4.6	...
Madagascar	0.3	12.3	0.4	17.3	...	...	-7.8	-3.4	-4.3	74.6
Mali	-0.2	-2.6	0.2	9.0	2.4	15.0	-3.7	1.3	-3.0	...
Moldova	3.7	115.3	0.9	34.4	8.3	4.8	-5.4	-0.4	-2.9	55.3
Mozambique	-0.1	0.1	0.4	17.3	3.3	33.0	-5.3	-3.3	-9.0	...
Myanmar	0.3	11.7	...	...	...	...	-5.9	-4.1	-4.0	...
Nepal	0.1	4.9	0.3	10.9	...	...	-7.0	-1.0	-2.8	...
Nicaragua	1.0	47.6	0.9	36.3	1.3	26.0	-8.1	-1.3	-2.0	80.1
Niger	0.0	-0.4	0.3	13.2	...	...	-5.2	2.6	-4.5	...
Nigeria	0.0	0.2	0.1	4.3	4.6	5.8	-7.2	2.3	-4.6	...
Papua New Guinea	0.0	0.7	0.5	18.1	...	...	-0.4	1.8	-2.3	27.7
Rwanda	0.1	2.7	0.8	32.0	...	...	-8.6	-0.5	-1.9	...
Senegal	0.0	4.6	0.3	10.2	1.5	45.8	-5.0	-1.2	-3.3	...
Somalia	...	...	...	...	...	...	...	...	...	...
Sudan	0.0	1.2	0.3	12.6	...	...	-26.5	-0.9	-2.7	...
Tajikistan	0.5	17.1	0.3	13.6	...	...	-6.2	-2.8	-3.8	...
Tanzania	0.0	4.0	0.4	16.9	3.6	11.0	-5.6	-1.8	-3.6	...
Timor-Leste	...	...	...	...	...	...	...	10.0	-21.8	...
Uganda	0.0	1.0	0.3	12.6	3.3	12.6	-3.7	-1.0	-4.5	67.6
Uzbekistan	4.0	132.9	0.6	23.0	...	...	-18.4	-2.9	-0.1	...
Vietnam	2.5	93.6	0.5	18.5	6.2	9.5	-6.1	-1.7	-4.7	...
Yemen	0.0	1.3	0.1	6.0	...	...	-14.6	-0.7	-5.9	...
Zambia	1.8	58.6	0.4	15.4	4.8	13.6	-5.4	-0.4	-7.1	...
Zimbabwe	...	...	...	...	...	...	-5.4	...	-3.3	...
Average	0.6	22.4	0.3	10.6	1.1	3.1	-7.1	-0.1	-3.9	0.0

Sources: Bloomberg Finance L.P.; 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 U.S. dollars at average market exchange rates in the years indicated and based on data availability.

¹ Pension projections rely on authorities' estimates when these are available. For the European Union countries, pension projections are based on *The 2015 Ageing Report* of the European Commission. When authorities' estimates are not available, staff projections use the methodology described in Clements, Eich, and Gupta, *Equitable and Sustainable Pensions: Challenges and Experience* (IMF, 2014). Staff projections for health care spending are driven by demographic 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 at the advanced economy historic average by 2050 (0.8 percent).

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

³ Average term to maturity data refer to government securities; the source is Bloomberg Finance L.P.

⁴ Nonresident holding of general government debt data are the fourth quarter of 2017 or latest available from the Joint External Debt Hub (JEDH), Quarterly External Debt Statistics, which include marketable and nonmarketable debt. For some countries, tradable instruments in the JEDH are reported at market value. External debt in U.S. dollars is converted to local currency, then taken as a percentage of 2017 gross general government debt.