World Economic and Financial Surveys

Fiscal Monitor

Fiscal Adjustment in an Uncertain World

APR 13

INTERNATIONAL MONETARY FUND

World Economic and Financial Surveys

FISCAL MONITOR
April 2013

Fiscal Adjustment in an Uncertain World

International Monetary Fund

Cover: IMF Multimedia Services Division
Composition: Maryland Composition, Inc.

Cataloging-in-Publication Data

Fiscal monitor—Washington, D.C. : International Monetary Fund, 2009–
v. ; cm. — (World economic and financial surveys, 0258-7440)

Twice a year.
Some issues have also thematic titles.

1. Finance, Public—Periodicals. 2. Finance, Public—Forecasting—Periodicals. 3. Fiscal policy—Periodicals. 4. Fiscal policy—Forecasting—Periodicals. 5. Financial crises—Periodicals. 6. Global Financial Crisis, 2008–2009—Periodicals. I. International Monetary Fund. II. Series: World economic and financial surveys.
HJ101.F57

ISBN: 978-1-47556-625-3 (paper)
ISBN: 978-1-55775-771-5 (ePub)
ISBN: 978-1-47552-586-1 (Mobipocket)
ISBN: 978-1-47556-362-7 (PDF)

Publication orders may be placed online, by fax, or through the mail:
International Monetary Fund, Publication Services
P.O. Box 92780, Washington, DC 20090, U.S.A.
Telephone: (202) 623-7430 Fax: (202) 623-7201
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www.imfbookstore.org
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PREFACE

The projections included in this issue of the *Fiscal Monitor* are based on the same database used for the April 2013 *World Economic Outlook* and *Global Financial Stability Report* (and are referred to as "IMF staff projections"). Fiscal projections refer to the general government unless otherwise indicated. Short-term projections are based on officially announced budgets, adjusted for differences between the national authorities and the IMF staff regarding macroeconomic assumptions. The medium-term fiscal projections incorporate policy measures that are judged by the IMF staff as likely to be implemented. For countries supported by an IMF arrangement, the medium-term projections are those under the arrangement. In cases in which the IMF staff has insufficient information to assess the authorities' budget intentions and prospects for policy implementation, an unchanged cyclically adjusted primary balance is assumed, unless indicated otherwise. Country-specific assumptions are detailed in the Methodological and Statistical Appendix.

The *Fiscal Monitor* is prepared by the IMF Fiscal Affairs Department under the supervision of Carlo Cottarelli, Director of the Department, and Philip Gerson, Deputy Director. This issue is coordinated by Martine Guerguil. Principal contributors include Marialuz Moreno-Badia, Priscilla Muthoora, Anna Shabunina, and Yuanyan Sophia Zhang. Nathalie Carcenac, Petra Dacheva, and Raquel Gomez Sirera provided outstanding research assistance. In addition, contributions were provided by Bernardin Akitoby, Ariel Binder, Elva Bova, David Coady, Till Cordes, Xavier Debrun, Malin Hu, Deniz Igan, Laura Jaramillo Mayor, Mariusz Jarmuzek, Alvar Kangur, Tidiane Kinda, Takuji Komatsuzaki, Goesta Ljungman, Jimmy McHugh, Seokgil Park, Tigran Poghosyan, Rafael Romeu, Andrea Schaechter, Mauricio Soto, Jose Torres, James Walsh, Anke Weber, Jaejoon Woo, and Asad Zaman. Maria Delariarte, Nadia Malikyar, and Liza Prado provided excellent administrative and editorial assistance. From the IMF External Relations Department, Nancy Morrison and Michael Harrup edited the issue, and Michael Harrup managed its production.

Inputs, comments, and suggestions were received from other departments in the IMF, including area departments—namely, the African Department, Asia and Pacific Department, European Department, Middle East and Central Asia Department, and Western Hemisphere Department—as well as the Institute for Capacity Development, Monetary and Capital Markets Department, Research Department, Statistics Department, and Strategy, Policy, and Review Department. Both projections and policy considerations are those of the IMF staff and should not be attributed to Executive Directors or to their national authorities.

The following symbols have been used throughout this publication:

. . . to indicate that data are not available;

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

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

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

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

"Basis points" refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).

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

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

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

EXECUTIVE SUMMARY

Continued progress in reducing advanced economy deficits and a gradually improving external environment have lowered short-term fiscal risks, but global prospects nevertheless remain subdued, and many advanced economies face a lengthy, difficult, and uncertain path to fiscal sustainability. Deficits in advanced economies fell by some ¾ percent of GDP in cyclically adjusted terms last year and are projected to decline at a somewhat faster pace in 2013. Thanks to steady consolidation following the peak of the crisis in 2009, many advanced economies are now close to achieving primary surpluses that will allow them to stabilize their debt ratios. Although this is an important milestone, it is only a first step. High debt—even if stable—retards potential growth, constrains the scope for future discretionary policy, and leaves economies exposed to further market shocks. Sharp increases in public debt have not yet provoked a surge in interest rates in many advanced economies, but lower rates are unlikely to persist indefinitely, especially as they reflect in part very relaxed monetary conditions that must eventually be reversed. Moreover, structural changes in sovereign debt markets may gradually erode some of the special status countries like Japan and the United States currently enjoy. Furthermore, with financial sector reform still proceeding slowly, the potential for contingent liabilities to materialize from future financial sector disturbances remains sizable. For all these reasons, merely stabilizing advanced economy debt at current levels would be detrimental to medium- and longer-term economic prospects.

Sustained consolidation efforts to reduce debt ratios to more appropriate levels are therefore essential, although in practice it is difficult to pinpoint what constitutes a prudent amount of public debt. Several advanced economies are now within about 1 percentage point of a primary surplus that, if maintained, would bring their debt ratios to 60 percent of GDP by 2030. But even maintaining these surpluses over time may be difficult. Altogether, about one-third of advanced economies—representing some 40 percent of global GDP—still face major fiscal challenges. Most of these countries have never experienced debt levels similar to the current ones, and certainly not for decades. They will need to undertake unprecedented fiscal efforts to bring their debt ratios to traditional norms, even if this is to occur only over a relatively long horizon.

While achieving sufficiently large primary surpluses and then maintaining them for an extended period will be difficult, there are no alternative quick fixes. High inflation aimed at eroding the real value of the debt or a debt restructuring would entail substantial and long-lasting economic and social costs, and thus these are not options to be entered into lightly. Privatization of government assets can contribute to the adjustment process, but the stock of salable assets in most advanced economies is insufficient to substantially reduce the debt. The amount of fiscal adjustment that each advanced economy requires depends on its initial conditions, its ultimate objectives, and the macroeconomic conditions that will prevail in the interim. But to make rapid progress in bringing down debt ratios, it will be critical to maintain the minimum possible differential between the interest rate on public debt and the growth rate of the economy. In most cases, there is scope for structural reforms to raise potential growth, which would help lower the debt-to-GDP ratio more quickly both by buoying the fiscal balance and through denominator effects. Of course, faster growth will likewise help reduce the social costs of fiscal consolidation and enhance its political sustainability. And to keep interest rates low, it will be essential that highly indebted advanced economies continue to undertake policies that will maintain market confidence.

The key elements of the required policy package are well known: foremost among them is setting

out—and implementing—a clear and credible plan to bring debt ratios down over the medium term. The continued absence of such plans in Japan and the United States remains a significant concern, particularly given the introduction of new short-term stimulus in Japan (even though temporary) and insufficient progress on measures to restore medium-term fiscal sustainability, including entitlement reform, in the United States. Such a plan could also allow the United States to avoid the excessively large tightening in fiscal policies that would result if the sequestering of expenditure that began in March were to continue beyond the current fiscal year. In conducting near-term policy, authorities in the advanced economies should focus on structural balances and, if financing allows, let the automatic fiscal stabilizers operate fully, to avoid procyclical policies that would accelerate any downturn in growth (while also ensuring that any upside growth surprises would be used to pay down debt more rapidly). However, some advanced economies in which private demand has been chronically disappointing should consider smoothing the pace of consolidation if they have the fiscal policy room for maneuver to do so.

Debt dynamics have remained relatively positive in most emerging market economies and low-income countries, thanks to a negative interest rate–growth differential, and these countries generally allowed automatic stabilizers to operate fully last year while pausing the underlying fiscal adjustment process. Most of them plan to continue to do so this year. Those with low general government debt and deficits can afford to maintain a neutral stance in response to a weaker global outlook. But countries with relatively high or quickly increasing debt levels are exposed to sizable risks, especially once effective interest rates rise as monetary policy normalizes in the advanced economies and concessional financing from advanced economies declines. Many Arab countries in transition have exhausted their fiscal buffers and need to contain rising deficits and debt levels. The widespread use of energy subsidies makes commodity prices an additional source of vulnerability in many emerging market and low-income economies. Subsidy reform, higher revenue from consumption taxes, and broadening of tax bases would help support consolidation efforts. Commodity exporters also need to strengthen non-resource revenue and establish fiscal frameworks to limit short-term volatility and ensure long-term fiscal sustainability.

FISCAL ADJUSTMENT IN AN UNCERTAIN WORLD

1. Recent Fiscal Developments and the Short-Term Outlook

Deficits will continue falling in nearly all advanced economies this year, at a slightly faster overall pace than in 2012.

Fiscal deficits narrowed on average by some ¾ percent of GDP last year, both in headline and in cyclically adjusted terms (Table 1). The average pace of consolidation is projected to increase to about 1¼ percent of GDP this year. Deficits will be somewhat larger than previously projected in many advanced economies, offset by better outturns in a few others (Figure 1).

The largest deviation from previously projected 2013 outturns is expected in *Japan,* where the authorities have introduced a new stimulus package amounting to 1½ percent of GDP over 2013–14, including "shovel-ready" investment projects and contributing to an increase of about 1 percent of GDP in the 2013 deficit forecast relative to earlier projections. Stimulus spending and increasing social security outlays are expected to keep the cyclically adjusted deficit above 9 percent of GDP in 2013, more than twice the advanced economy average. This will mark the fifth consecutive year in which the cyclically adjusted deficit has increased, although this reflects in part reconstruction spending following natural disasters. Implementation of the 2014–15 consumption tax increases, if confirmed, would reverse the trend but would still be insufficient to put Japan's debt on a downward trajectory, and measures to lower the deficit over the medium term are lacking.

In *Spain*, the revision to the fiscal forecasts mainly reflects nonfiscal factors. The estimate of the 2012 deficit (excluding financial sector costs) of 7 percent of GDP is in line with the October 2012 *Fiscal Monitor*'s projection. Financial sector support amounted to approximately 3¼ percent of GDP, bringing the overall deficit to 10¼ percent. The underlying consolidation was nevertheless very sizable: an improvement in the cyclically adjusted primary balance of about 3 percent of GDP (excluding financial sector support) in the face of a large output contraction. Further substantial consolidation is projected for 2013, though the deficit forecast has been revised up by over ½ percent of GDP since the October 2012 *Fiscal Monitor,* reflecting the worse unemployment outlook and the lack of specified medium-term measures.

The *United States,* despite having averted the "fiscal cliff," is set for a decline of 1¾ percent of GDP in its cyclically adjusted primary deficit in 2013, almost ½ percent of GDP more than in 2012, largely reflecting the automatic spending cuts (the so-called sequester) that went into effect on March 1. Currently projected at 6½ percent of GDP in 2013, the headline deficit will fall this year to about half its level at the peak of the crisis in 2009, although some of this decline is due to reduced financial sector support. The overall fiscal tightening is one of the largest in recent decades and is clearly excessive in light of cyclical considerations. Uncertainty about this year's outturn remains. The debt ceiling will need to be raised soon, as it has been suspended only until May (pushing the effective deadline to midsummer, assuming the Treasury again resorts to the available extraordinary measures). Insufficient progress has been made toward an agreement on entitlement reforms and other much-needed measures to control the debt path over the medium term.

Adjustment is expected to continue in most other advanced economies this year largely in line with earlier projections, notwithstanding the weak economic recovery:

- In *France*, a structural adjustment of 1¼ percentage points of GDP is projected, mostly focused—as in previous consolidation efforts—on selective tax increases (with an emphasis on high-income individuals). The deficit is projected to decline to about 3½ percent of GDP in 2014.
- In the *Netherlands,* the 2013 deficit is projected at 3½ percent of GDP, slightly above the authorities'

Table 1. Fiscal Balances, 2008–14

						Projections		Difference from October 2012 *Fiscal Monitor*		
	2008	2009	2010	2011	2012	2013	2014	2012	2013	2014
Overall balance *(Percent of GDP)*										
World	–2.2	–7.4	–6.0	–4.5	–4.3	–3.5	–3.0	–0.1	0.0	–0.2
Advanced economies	–3.5	–9.0	–7.8	–6.6	–5.9	–4.7	–3.8	0.0	0.1	–0.1
United States	–6.7	–13.3	–11.1	–10.0	–8.5	–6.5	–5.4	0.2	0.7	0.1
Euro area	–2.1	–6.4	–6.2	–4.1	–3.6	–2.9	–2.6	–0.3	–0.3	–0.5
France	–3.3	–7.6	–7.1	–5.2	–4.6	–3.7	–3.5	0.1	–0.2	–0.6
Germany	–0.1	–3.1	–4.1	–0.8	0.2	–0.3	–0.1	0.5	0.1	0.2
Greece	–9.9	–15.6	–10.7	–9.4	–6.4	–4.6	–3.4	1.1	0.1	0.1
Ireland[1]	–7.4	–13.9	–30.9	–13.4	–7.7	–7.5	–4.5	0.6	0.0	0.4
Italy	–2.7	–5.4	–4.3	–3.7	–3.0	–2.6	–2.3	–0.3	–0.7	–0.7
Portugal[2]	–3.7	–10.2	–9.8	–4.4	–4.9	–5.5	–4.0	0.1	–1.0	–1.6
Spain[1]	–4.5	–11.2	–9.7	–9.4	–10.3	–6.6	–6.9	–3.3	–0.9	–2.3
Japan	–4.1	–10.4	–9.3	–9.9	–10.2	–9.8	–7.0	–0.1	–0.8	0.2
United Kingdom	–5.1	–11.4	–10.1	–7.9	–8.3	–7.0	–6.4	–0.1	0.3	–0.6
Canada	–0.3	–4.8	–5.2	–4.0	–3.2	–2.8	–2.3	0.6	0.2	0.0
Others	2.6	–0.8	–0.1	0.4	0.4	1.1	1.5	–0.1	–0.2	–0.1
Emerging market economies	0.0	–4.6	–3.1	–1.7	–2.1	–2.2	–2.2	–0.3	–0.5	–0.6
Asia	–2.3	–4.3	–2.9	–2.6	–3.2	–3.2	–3.0	–0.4	–0.7	–0.7
China	–0.7	–3.1	–1.5	–1.3	–2.2	–2.1	–1.8	–0.9	–1.2	–1.2
India	–8.6	–10.1	–8.7	–8.4	–8.3	–8.3	–8.4	1.2	0.8	0.4
Europe	0.6	–6.1	–3.9	0.0	–0.7	–1.2	–1.5	0.0	–0.3	–0.4
Russian Federation	4.9	–6.3	–3.4	1.5	0.4	–0.3	–1.0	–0.1	–0.6	–0.4
Turkey	–2.3	–5.6	–2.3	–0.4	–1.5	–2.2	–2.3	0.3	–0.2	–0.6
Latin America	–0.8	–3.6	–2.8	–2.4	–2.5	–1.6	–1.8	–0.5	0.0	–0.1
Brazil	–1.4	–3.1	–2.7	–2.5	–2.8	–1.2	–1.7	–0.6	0.4	0.3
Mexico	–1.1	–4.7	–4.4	–3.4	–3.7	–3.1	–3.0	–1.3	–1.0	–0.9
Middle East and North Africa	–4.9	–5.5	–7.0	–8.7	–9.7	–9.2	–7.2	–0.2	–1.0	–1.0
South Africa	–0.4	–5.5	–5.1	–4.0	–4.8	–4.8	–4.2	0.2	0.0	0.0
Low-income countries	–0.4	–4.2	–2.0	–1.7	–3.3	–3.2	–3.1	0.1	–0.2	–0.3
Oil producers	7.3	–2.4	–0.5	3.3	2.3	1.4	0.8	–0.6	–0.9	–0.9
Cyclically adjusted balance *(Percent of potential GDP)*										
Advanced economies	–3.7	–6.2	–6.3	–5.5	–4.7	–3.6	–2.9	0.1	0.1	0.0
United States[3]	–5.1	–8.1	–8.5	–7.7	–6.4	–4.6	–3.9	0.4	0.9	0.3
Euro area	–3.1	–4.6	–4.8	–3.4	–2.4	–1.3	–1.3	–0.4	–0.2	–0.4
France	–3.1	–5.1	–5.1	–3.9	–3.1	–1.9	–1.8	0.1	0.0	–0.3
Germany	–1.3	–1.2	–3.5	–1.0	0.1	0.0	0.1	0.6	0.3	0.3
Greece	–14.2	–19.1	–12.2	–8.2	–2.7	0.2	0.8	1.8	1.3	1.1
Ireland[3]	–11.9	–10.3	–8.7	–7.0	–6.0	–5.5	–3.7	0.2	–0.1	–0.1
Italy	–3.6	–3.4	–3.4	–2.8	–1.2	–0.2	–0.2	–0.7	–0.9	–0.9
Portugal[2]	–4.3	–9.4	–9.7	–3.6	–3.0	–3.0	–2.0	0.1	–0.7	–1.0
Spain[3]	–5.6	–10.2	–8.3	–7.6	–5.1	–4.2	–5.1	–0.5	–1.0	–2.4
Japan	–3.5	–7.5	–7.9	–8.5	–9.3	–9.5	–6.9	–0.2	–0.8	0.1
United Kingdom	–7.3	–9.7	–8.6	–6.5	–5.4	–4.3	–3.4	0.0	–0.3	–0.5
Canada	–0.6	–3.3	–4.4	–3.6	–2.8	–2.1	–1.7	0.4	0.2	0.0
Others	–0.1	–2.0	–1.6	–1.5	–1.3	–0.5	–0.1	–0.2	–0.1	–0.1
Emerging market economies	–1.7	–3.7	–2.8	–1.9	–2.1	–2.0	–2.0	–0.3	–0.4	–0.4
Asia	–2.4	–3.9	–2.6	–1.9	–2.3	–2.4	–2.2	–0.4	–0.7	–0.6
China	–0.5	–2.6	–0.9	–0.2	–0.9	–0.9	–0.7	–0.9	–1.1	–1.0
India	–10.4	–10.5	–9.5	–9.2	–8.8	–8.8	–8.9	1.4	0.7	0.6
Europe	–0.3	–3.9	–2.9	–0.3	–0.6	–1.1	–1.4	0.3	0.0	–0.1
Russian Federation	3.9	–3.2	–1.8	2.0	0.5	–0.4	–1.2	0.1	–0.3	–0.4
Turkey	–2.7	–3.2	–1.7	–1.1	–1.6	–2.0	–1.9	0.4	–0.1	–0.3
Latin America	–1.6	–2.7	–3.1	–3.0	–2.7	–1.7	–1.9	–0.7	–0.2	–0.2
Brazil	–2.1	–2.3	–3.3	–3.0	–2.7	–1.2	–1.7	–1.0	0.1	0.2
Mexico	–1.3	–3.8	–3.9	–3.2	–3.7	–3.1	–3.0	–1.3	–1.0	–0.9
South Africa	–2.2	–5.3	–4.8	–4.0	–4.6	–4.5	–4.0	–0.2	–0.4	–0.3
Memorandum items:										
World growth (percent)	*2.8*	*–0.6*	*5.2*	*4.0*	*3.2*	*3.3*	*4.0*	*–0.1*	*–0.3*	*–0.1*

Source: IMF staff estimates and projections.

Note: All fiscal data 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. Projections are based on IMF staff assessment of current policies.

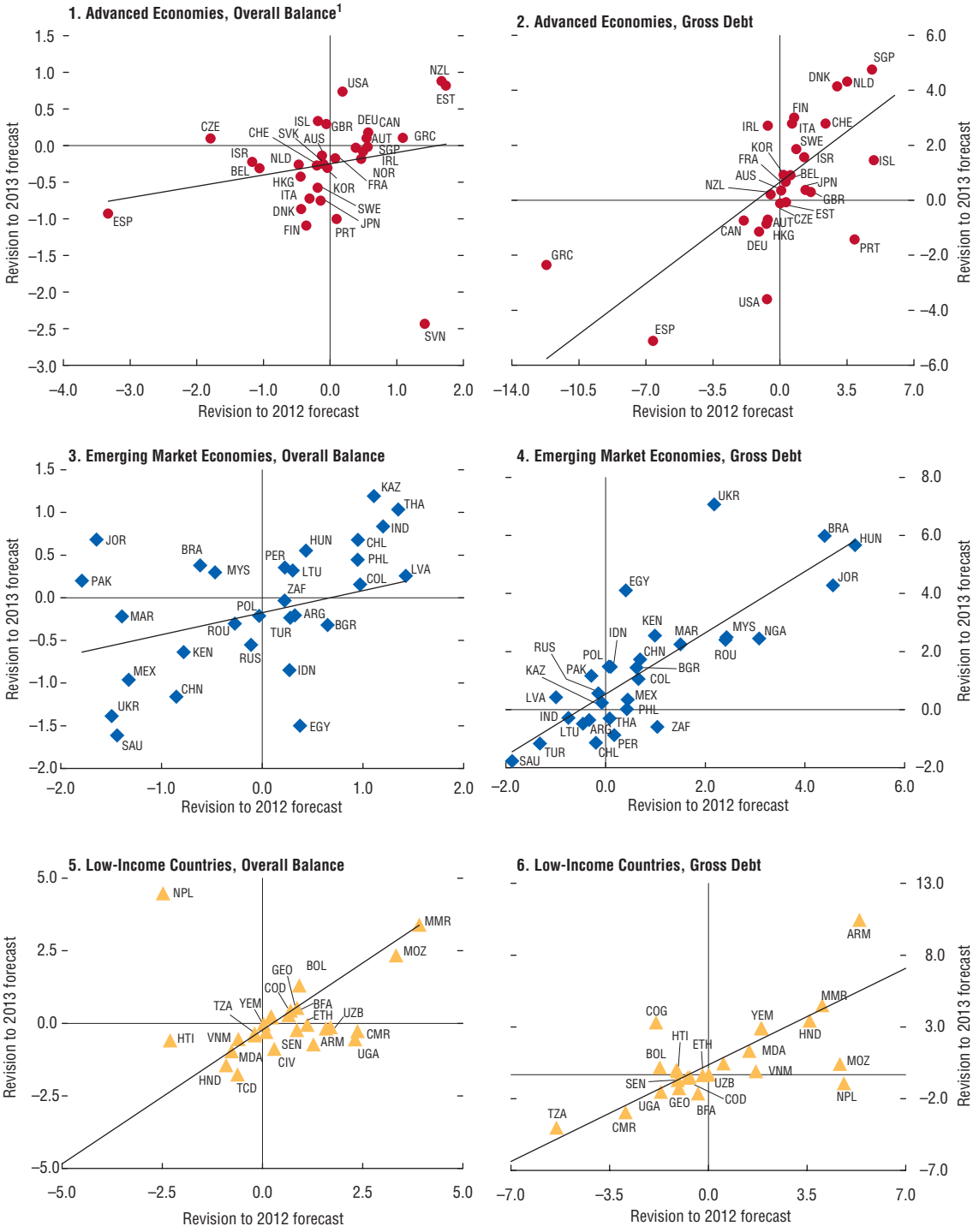
[1]Including financial sector support, estimated for Spain at 0.5 percent of GDP in 2011 and 3.3 percent of GDP in 2012.

[2]The substantial upward revision in the 2012 fiscal outturn by the National Institute of Statistics, owing to reclassification of several large transactions, is not yet reflected in the data.

[3]Excluding financial sector support.

Figure 1. Revisions to Overall Balance and Debt-to-GDP Forecasts since the Last *Fiscal Monitor*

(Percent of GDP)



Source: IMF staff estimates and projections.

Note: "Revision to 2013 (2012) forecast" refers to the difference between the fiscal projections for 2013 (2012) in the April 2013 *Fiscal Monitor* and those for 2013 (2012) in the October 2012 *Fiscal Monitor.*

[1]In the April 2013 *Fiscal Monitor* forecast, for Portugal, the substantial upward revision in the 2012 fiscal outturn by the National Institute of Statistics, owing to reclassification of several large transactions, is not yet reflected in the data. For Spain, the forecast includes financial sector support measures estimated at 3.3 percent of GDP in 2012.

target. The recapitalization of SNS REAAL will have a budgetary cost of about 0.6 percent of GDP, but this is expected to be fully offset by an increase in revenue from an auction of broadcast spectrum rights.

- In *Italy*, the pace of underlying consolidation will slow to 1 percent of GDP,[1] a little less than projected earlier, but enough to broadly balance the budget in structural terms. The 2012 deficit is projected to have been at the 3 percent threshold, allowing Italy to exit the EU Excessive Deficit Procedure.[2]
- In the *United Kingdom,* the 2013 deficit forecast has been revised down by about ¼ percent of GDP, mostly reflecting the transfer of Bank of England profits to the Treasury from January 2013 (1 percentage point of GDP), partly offset by projected lower revenue collections. Despite headwinds, the government will undertake continued consolidation to reduce the cyclically adjusted deficit by another 1 percent of GDP in 2013. Some deficit-neutral measures have been introduced to support growth.
- In *Ireland,* the 2012 fiscal outturn was better than expected. Additional tightening is forecast this year, underpinned by measures amounting to 2.1 percent of GDP. These include reforms in property taxes and welfare services, as outlined in the 2013 budget. Financial transactions associated with the liquidation of the state-owned Irish Bank Resolution Corporation and the associated exchange of promissory notes for long-term government bonds will result in annual interest savings of about 0.6 percent of GDP.[3]
- In *Portugal,* fiscal consolidation is projected to continue in 2013, largely through increases in personal income and property taxation. The deficit target has, however, been revised upward from 4½ percent of GDP to 5½ percent of GDP in 2013 given the weak growth and employment outlook.
- In *Greece*, continued adjustment and a renewed institutional reform agenda (with a focus on revenue administration and expenditure controls) are expected to bring the primary balance to zero in 2013. The overall deficit is expected to fall to 4½ percent of GDP this year, below the advanced economy average and 11 percentage points lower than its 2009 peak.

However, a few advanced economies facing limited fiscal pressures are adopting more neutral stances:

- In *Germany,* the cyclically adjusted fiscal balance strengthened by 1 percent of GDP in 2012 on the back of buoyant revenue and lower interest payments. The cyclically adjusted balance is expected to be largely unchanged this year, with the overall deficit widening by ½ percent of GDP in 2013 as a result of the operation of the automatic stabilizers. The authorities remain on track to meet the requirements of the domestic debt brake rule.
- In *Canada*, the gradual withdrawal of fiscal stimulus is continuing and consolidation plans are being implemented, at both the federal and provincial levels, though at a more modest pace in a number of provinces.

Despite the brisk pace of fiscal consolidation in advanced economies as a group, debt ratios are projected to continue to increase in 2013, with the average ratio peaking only in 2014 (Table 2, Figure 2). This average masks significant disparities across countries: about one-half of advanced economies currently have cyclically adjusted primary balances that are less than 2 percent of GDP below debt-stabilizing levels. However, about one-third of the countries have debt ratios peaking only after 2014. In most cases—especially in European countries under market pressure—this is due to a high interest rate–growth differential ($r - g$), but in Japan and the United States, persistent large primary deficits are the main factor. In a few instances, financial sector support is also playing a role, including in Slovenia and Spain.

The fiscal stance is neutral in emerging market economies and low-income countries

With growth decelerating but gross debt declining in most regions thanks to a still-negative interest rate–growth differential, emerging market economies

[1]Projections do not include the impact of the government's proposal to clear payment arrears.

[2]The large change in the cyclically adjusted balance series relative to the October 2012 *Fiscal Monitor* reflects a revision in the potential output series agreed between Italy and the European Union.

[3]Cash flow benefits in 2013 will be lower because of transaction costs.

Table 2. General Government Debt, 2008–14

(Percent of GDP)

						Projections		Difference from October 2012 *Fiscal Monitor*		
	2008	2009	2010	2011	2012	2013	2014	2012	2013	2014
Gross debt										
World	65.7	75.8	79.5	79.7	81.1	79.3	78.6	–0.2	–2.2	–1.9
Advanced economies	81.3	94.9	101.5	105.5	110.2	109.3	109.5	–0.3	–1.3	–1.7
United States	75.5	89.1	98.2	102.5	106.5	108.1	109.2	–0.7	–3.6	–4.7
Euro area	70.3	80.0	85.6	88.1	92.9	95.0	95.3	–0.8	0.1	0.6
France	68.2	79.2	82.3	86.0	90.3	92.7	94.0	0.3	0.7	1.1
Germany	66.8	74.5	82.5	80.5	82.0	80.4	78.3	–1.1	–1.1	–1.3
Greece	112.5	129.3	147.9	170.6	158.5	179.5	175.6	–12.2	–2.4	–4.7
Ireland	44.5	64.9	92.2	106.5	117.1	122.0	120.2	–0.6	2.7	1.8
Italy	106.1	116.4	119.3	120.8	127.0	130.6	130.8	0.6	2.8	3.5
Portugal	71.6	83.1	93.2	108.0	123.0	122.3	123.7	3.9	–1.4	0.1
Spain	40.2	53.9	61.3	69.1	84.1	91.8	97.6	–6.6	–5.1	–2.4
Japan	191.8	210.2	216.0	230.3	237.9	245.4	244.6	1.4	0.4	–1.6
United Kingdom	52.2	68.1	79.4	85.4	90.3	93.6	97.1	1.6	0.3	1.1
Canada	71.3	81.4	83.0	83.4	85.6	87.0	84.6	–1.9	–0.7	–0.1
Emerging market economies	33.5	36.0	40.3	36.7	35.2	34.3	33.6	0.7	1.5	2.1
Asia	31.4	31.4	40.8	34.4	32.2	31.0	30.0	0.4	1.3	2.2
China[1]	17.0	17.7	33.5	25.5	22.8	21.3	20.0	0.7	1.7	2.7
India	73.3	75.0	68.5	66.4	66.8	66.4	66.7	–0.7	–0.3	1.1
Europe	23.6	29.5	29.1	27.8	26.1	25.9	26.4	0.0	0.8	1.1
Russian Federation	7.9	11.0	11.0	11.7	10.9	10.4	11.8	–0.1	0.6	0.9
Turkey	40.0	46.1	42.4	39.2	36.4	35.5	35.4	–1.3	–1.2	–1.0
Latin America	50.5	53.5	51.9	51.7	52.4	50.9	50.3	2.3	2.9	3.4
Brazil	63.5	66.9	65.2	64.9	68.5	67.2	65.9	4.4	6.0	6.9
Mexico	43.1	44.5	42.9	43.7	43.5	43.5	43.9	0.4	0.3	0.7
Middle East and North Africa	62.3	64.9	66.8	70.1	74.9	78.8	77.1	1.0	3.6	3.8
South Africa	27.8	31.3	35.8	39.6	42.3	42.7	43.7	1.0	–0.6	–1.3
Low-income countries	40.7	43.6	42.3	41.4	42.5	42.0	41.7	–0.7	–0.1	–0.9
Oil producers	22.2	24.8	23.9	22.1	22.2	22.4	22.8	–0.5	0.0	0.1
Net debt										
World	36.8	44.2	45.9	47.8	49.3	48.7	48.5	0.6	0.2	0.1
Advanced economies	51.9	62.4	67.5	72.7	77.4	78.1	79.1	1.0	0.1	–0.2
United States	54.0	66.7	75.1	82.4	87.9	89.0	89.7	4.1	1.4	0.4
Euro area	54.0	62.3	65.5	67.8	71.9	73.9	74.5	–1.5	–0.9	–0.3
France	62.3	72.0	76.1	78.8	84.1	86.5	87.8	0.3	0.7	1.1
Germany	50.1	56.7	56.3	55.3	57.2	56.2	54.7	–1.2	–1.3	–1.5
Greece	112.0	128.9	146.9	168.3	155.4	176.1	172.2	…	…	…
Ireland	23.0	41.8	74.5	94.9	102.3	106.2	107.5	–0.7	–1.5	–1.2
Italy	88.8	97.2	99.2	99.7	103.2	105.8	106.0	0.1	1.8	2.4
Portugal	67.4	79.0	88.8	97.5	111.6	115.0	116.5	–1.6	–4.5	–2.8
Spain	30.8	42.5	49.8	57.5	71.9	79.1	84.7	–6.7	–5.3	–2.7
Japan	95.3	106.2	113.1	127.4	134.3	143.4	146.7	–1.1	–1.3	–2.1
United Kingdom	48.1	63.2	72.9	77.7	82.8	86.1	89.6	–0.9	–2.1	–1.3
Canada	22.4	27.7	29.7	32.3	34.6	35.9	36.6	–1.3	–1.6	–1.4
Emerging market economies	23.2	27.9	28.1	26.7	24.7	23.6	22.9	0.7	1.3	1.8
Asia	55.2	57.6	58.2	57.0	58.8	60.8	61.4	–0.3	1.1	3.1
Europe	22.2	27.7	28.9	28.0	25.7	24.8	24.7	–0.8	–0.1	0.0
Latin America	31.2	34.8	33.9	32.4	31.1	30.0	29.2	–0.1	0.2	0.7
Middle East and North Africa	52.9	55.2	57.6	61.6	66.8	71.6	71.1	0.8	3.3	3.7

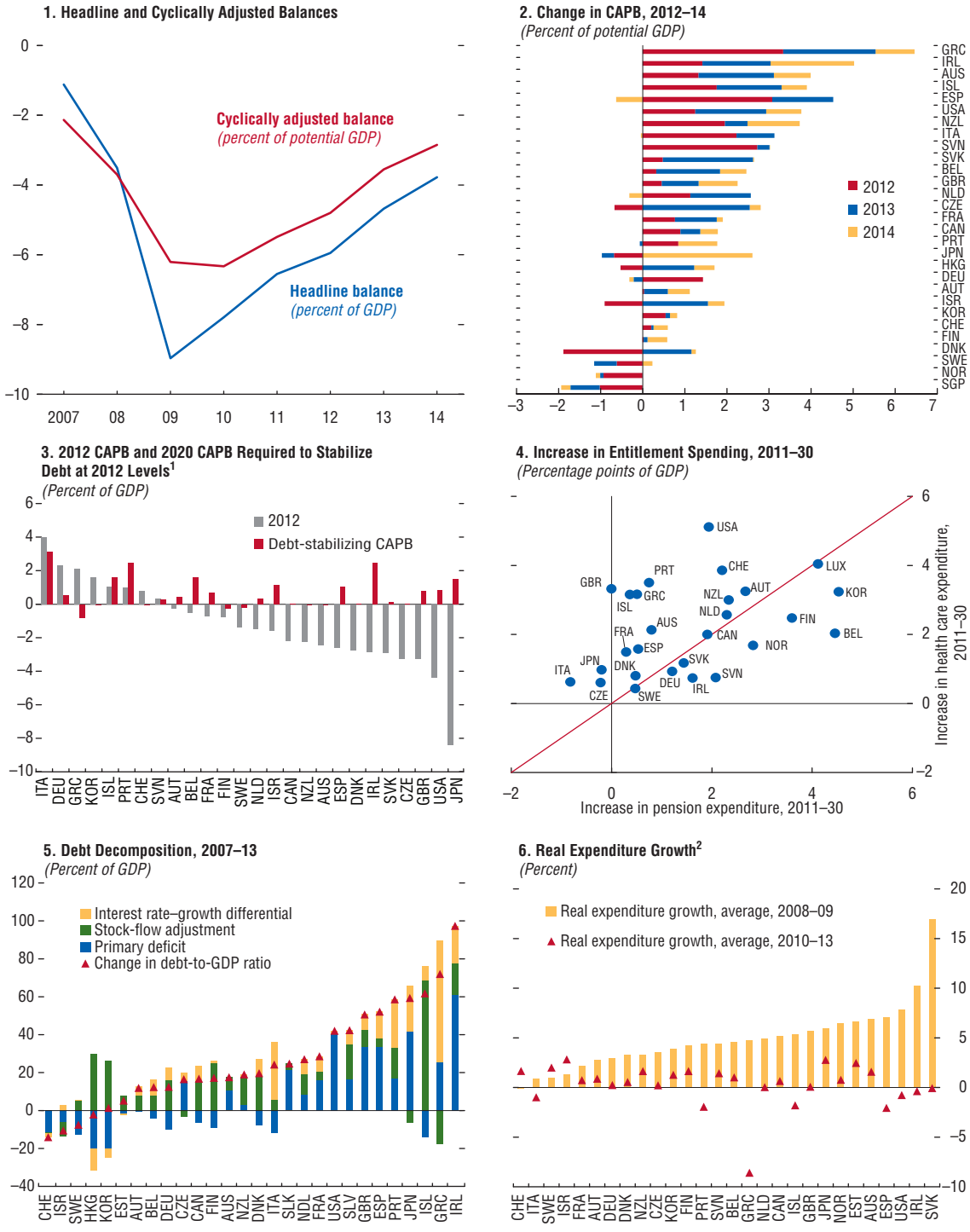
Source: IMF staff estimates and projections.

Note: All fiscal data 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. Projections are based on IMF staff assessment of current policies.

[1] Up to 2009, public debt data include only central government debt as reported by the Ministry of Finance. For 2010, debt data include subnational debt identified in the 2011 *National Audit Report.* Information on new debt issuance by the local governments and some government agencies in 2011 and 2012 is not yet available, hence debt data reflect only amortization plans as specified in the 2011 *National Audit Report.* Public debt projections beyond 2012 assume that about 60 percent of subnational debt will be amortized by 2013, 16 percent over 2014–15, and 24 percent beyond 2016, with no issuance of new debt or rollover of existing debt.

Figure 2. Fiscal Trends in Advanced Economies

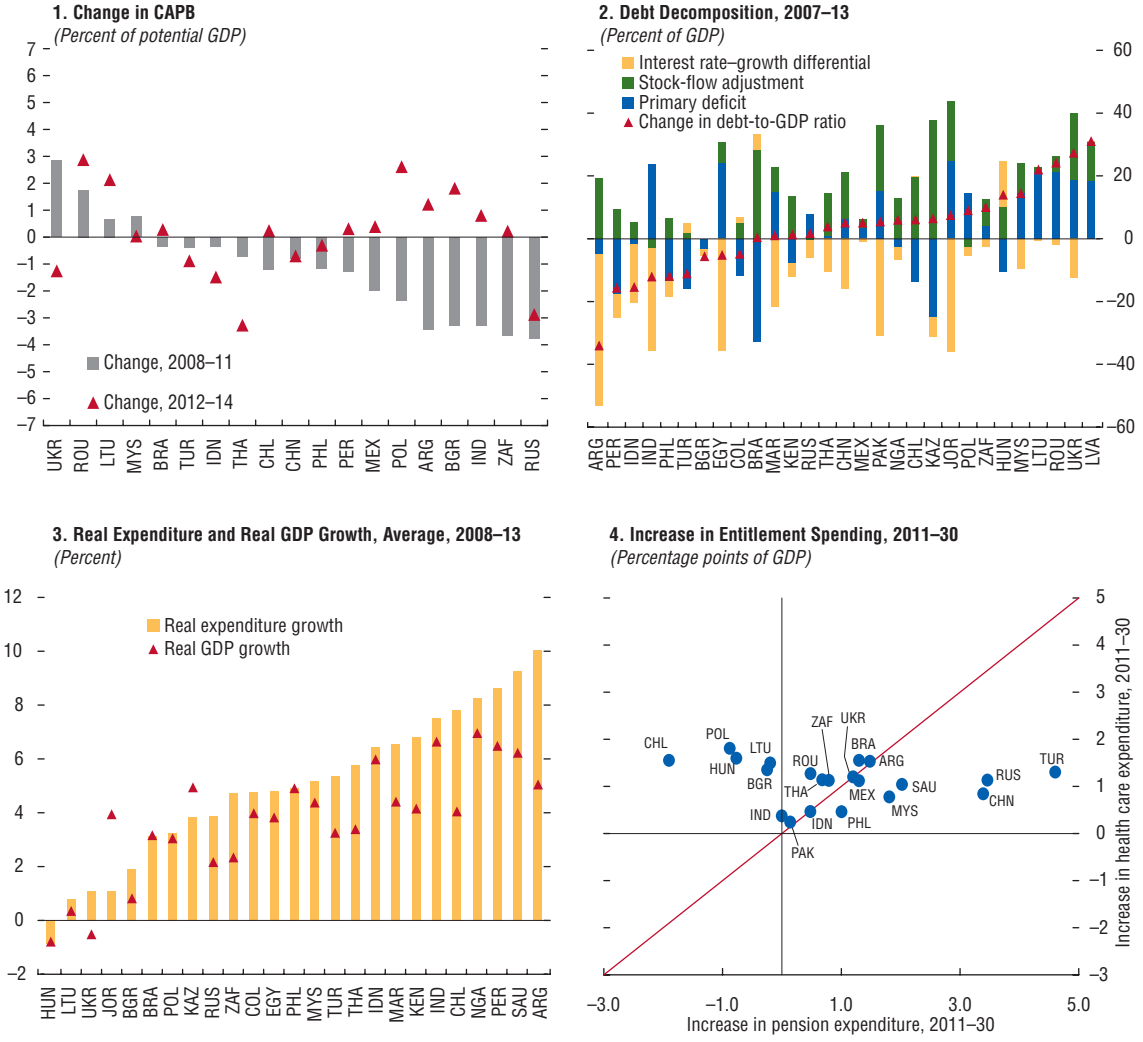
Fiscal adjustment is continuing in most advanced economies, but bringing down debt ratios remains a challenge for a meaningful number of them.



Source: IMF staff estimates and projections.
Note: For country-specific details, see "Data and Conventions" in the Statistical and Methodological Appendix.
[1]The cyclically adjusted primary balance (CAPB) needed to stabilize debt at 2012 levels.
[2]Real expenditure growth is calculated using nominal expenditure growth deflated by the GDP deflator.

Figure 3. Fiscal Trends in Emerging Market Economies

Fiscal consolidation is on hold in most emerging market economies, yet debt buildup remains modest given negative interest rate–growth differentials. However, caution is needed given rapid spending growth and looming future demands.

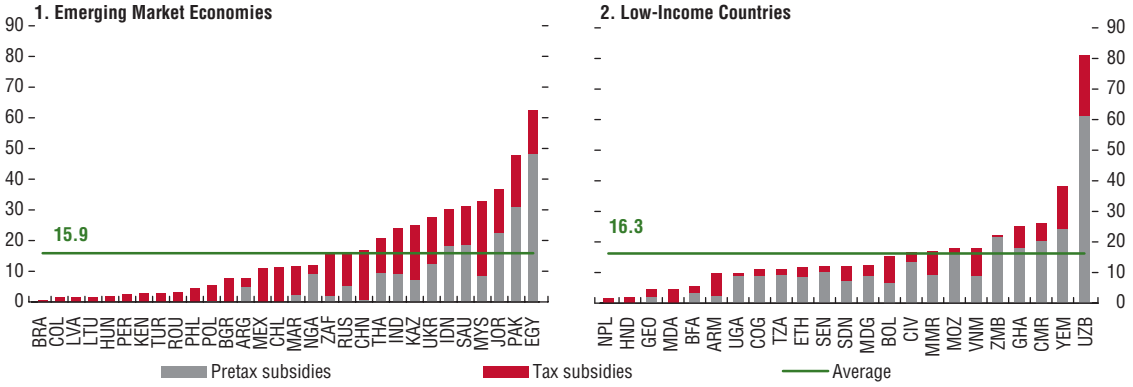


Source: IMF staff estimates and projections.

Note: For country-specific details, see "Data and Conventions" in the Statistical and Methodological Appendix. Real expenditure growth is calculated using nominal expenditure growth deflated by the GDP deflator.

generally allowed automatic stabilizers to operate fully last year. Most of them plan to continue to do so this year (Figure 3). Although relatively low debt and deficits afford many emerging market economies the scope to pause the fiscal adjustment process, many still have work to do to restore policy buffers and address other medium-term concerns: the average overall balance remains some 2 percentage points of GDP weaker than precrisis levels, controlling expenditure will require politically difficult measures (for example, slowing the growth of the public wage bill in South Africa and addressing subsidies in India), and spending pressures are rising in many countries (for example, infrastructure and social benefit spending in China and age-related spending in many emerging market economies). In some

Figure 4. Energy Subsidies in Emerging Market Economies and Low-Income Countries, 2011
(Percent of total revenue)



Source: IMF (2013a).
Note: Pretax subsidies arise when energy consumers pay a price below the cost of supply. Tax subsidies arise when consumers pay a price below the cost of supply plus an efficient tax that reflects both revenue needs and internalization of the negative externalities arising from energy consumption.

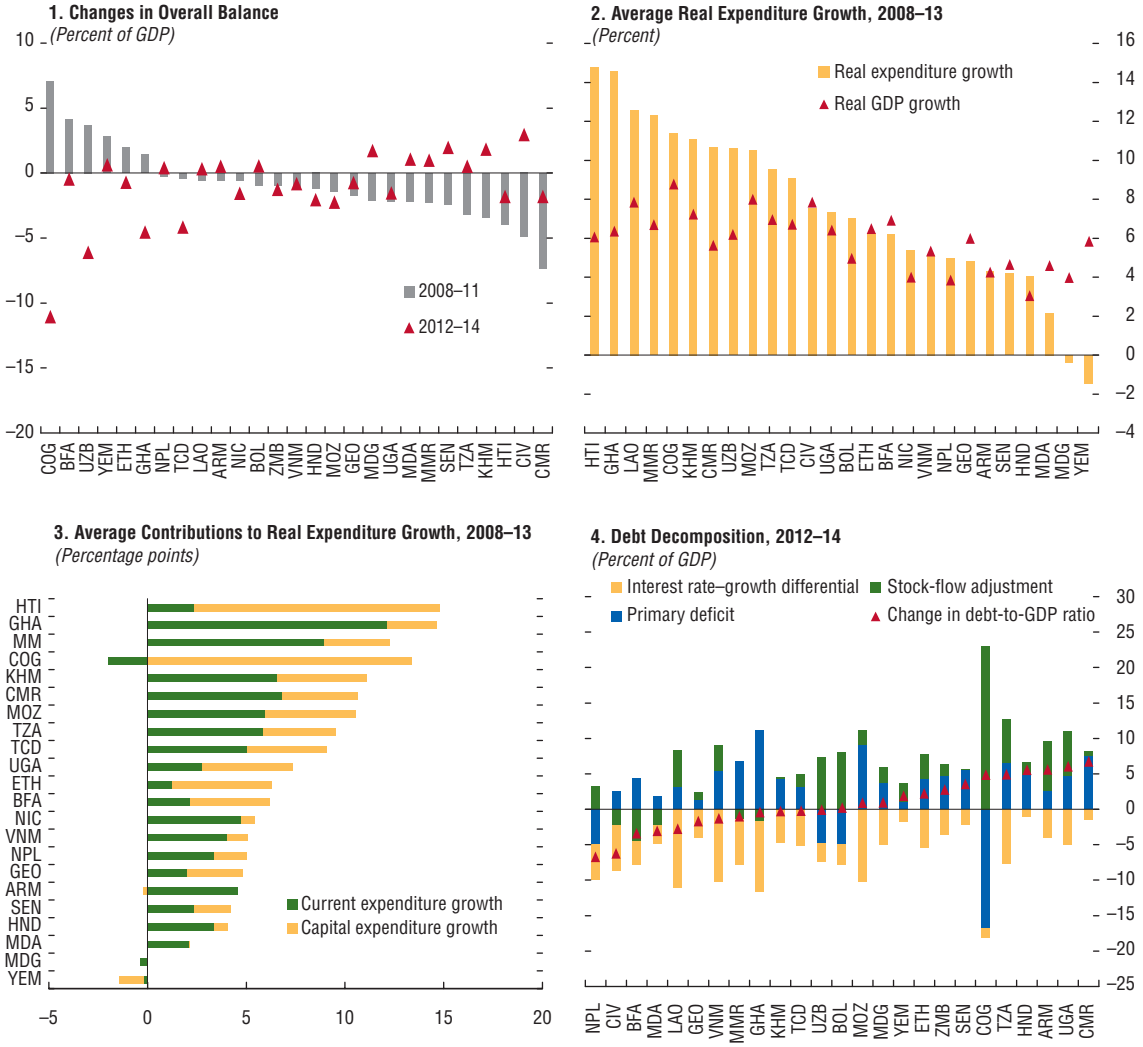
cases medium-term consolidation plans are absent or are not well formulated. Moreover, many emerging market economies and low-income countries have been reluctant to adjust their domestic energy prices to international levels, resulting in significant fiscal costs (Figure 4):

- In the *Russian Federation*, the 2013 overall deficit is expected to increase by ½ percent of GDP relative to previous projections, as a result of the decline in oil prices. The country's new oil-price-based fiscal rule mandates only a moderate fiscal tightening for 2013–14.
- In *China*, the cyclically adjusted primary surplus declined by ¾ percent of GDP in 2012 and is expected to remain unchanged in 2013. Recorded gross debt and deficits remain low, though they exclude the actual and contingent liabilities arising from local government operations (see below).
- In *South Africa*, where the deficit still hovers at about 5 percent of GDP, the medium-term budget policy statement has reaffirmed the commitment to fiscal consolidation but with the onset of tightening delayed by a year, which translates into a neutral stance for this year. The authorities are aiming to deliver about half of the future adjustment through containment of the wage bill, but additional measures are not yet defined.
- In *Brazil,* the authorities are targeting a primary surplus of 3¼ percent of GDP, which would imply a tightening of about 1¼ percent of GDP in cyclically adjusted terms. However, the primary surplus target could be reduced by up to 0.9 percent of GDP to support investment.
- In *India,* subsidy reduction measures, other spending cuts, and tax administrative measures recommended by the government-appointed Kelkar Commission will contribute to a reduction in the projected 2013 deficit of about ¾ percent of GDP relative to previous forecasts, which would leave the deficit almost unchanged from its 2012 level in headline and cyclically adjusted terms.
- In the *Middle East and North Africa*, amidst political instability and volatile oil prices, fiscal vulnerabilities are on the rise. Pressures from public sector wages (for example, in Libya) and on subsidies have caused a deterioration of the fiscal balances of most oil importers and non–Gulf Cooperation Council oil exporters. Many oil importers have exhausted their fiscal buffers.

Fiscal deficits are also still larger than precrisis levels in most low-income countries, suggesting that fiscal buffers should be restored when the environment allows. Compared to 2012 levels, the fiscal performance of petroleum importers is projected to remain stable or even improve this year and next in most countries, although Ethiopia, Mozambique, and Uganda are exceptions. Lower revenue will lead to a deterioration of the medium-term fiscal positions of

Figure 5. Fiscal Trends in Low-Income Countries

Fiscal consolidation is also on hold in most low-income countries. Strong spending growth, due in many cases to large increases in public investment, is pushing up debt ratios markedly in a few countries, despite negative interest rate–growth differentials.



Source: IMF staff estimates and projections.
Note: Real expenditure growth is calculated using nominal expenditure growth deflated by the GDP deflator.

some petroleum exporters like Cameroon and Chad. Fiscal outcomes in some fragile states (Côte d'Ivoire, Haiti, and Sudan) are expected to improve in 2013 because of higher revenue mobilization. Despite a favorable interest rate–growth differential, debt ratios have increased significantly in some countries (e.g., Ghana and Senegal) since the mid-2000 debt relief on account of higher investment expenditure but also rapid current spending growth (including on subsidies) not matched by revenue increases (Figure 5). This situation will need to be monitored carefully.

Fiscal institutional reforms are gaining momentum

To buoy the credibility of their adjustment efforts, a growing number of advanced and emerging market economies have improved their fiscal institutions over the past year. For example, Ireland and Portugal have begun to strengthen their medium-term budget frameworks by introducing enforceable expenditure ceilings, Sweden has established a parliamentary committee to evaluate the budget process, and Peru has set up an expert committee to propose reforms that would strengthen the macro-fiscal framework.

But the operational contours of the most ambitious reforms often have yet to be clarified.

- In Europe, the European Commission blueprint and the Report by the President of the European Council spell out proposals to strengthen fiscal integration. The *Fiscal Compact* entered into force in early 2013, and some countries have already adapted national legislation accordingly.[4] For example, both France and Italy have adopted the legal basis for the introduction of a structural budget balance rule at the general government level, together with provisions for an "automatic" correction mechanism in case of slippages. Concrete implementation of these measures poses significant technical and operational challenges, particularly regarding the timely estimation of structural balances and the effective coordination of fiscal policy across various government levels. Most challenging is the design of automatic correction mechanisms: the Fiscal Compact leaves member states with considerable leeway to define these mechanisms, but practical experience is limited.
- Ongoing reforms in Europe assign an important role to *fiscal councils* in fostering fiscal discipline. These councils are independent institutions expected to raise the reputational costs of undesirable policies through ex ante analyses of fiscal plans, ex post economic assessments of fiscal performance, and objective studies of long-run sustainability (Box 1). A draft European regulation (part of the so-called two-pack which was voted by the European Parliament in March) stipulates that independent bodies, in addition to monitoring compliance with the structural balanced-budget rule, should produce—or at least assess—budgetary forecasts. However, the absence of well-established guidelines for the design and modus operandi of fiscal councils creates a risk that some countries could opt for superficial compliance.
- Many emerging market economies and low-income countries are also seeking to strengthen their fiscal institutions. For example, a number of countries are now publishing reports that discuss fiscal risks (for example, Chile, Indonesia, Mexico, and the Philippines). In addition, some commodity exporters are refining their fiscal rules and are facing their own design issues. The Russian Federation adopted a new oil-price-based fiscal rule at the end of 2012 to help protect the budget from volatile oil price movements. However, the rule is being phased in only gradually, and its effectiveness could still be undermined, including through off-budget state guarantees. Pressures to loosen key parameters of the rule for expanding the expenditure envelope also remain to be contained. Elsewhere, a number of emerging market economies and low-income countries (Croatia, Kenya, South Africa, Tanzania, and Uganda) have enacted or are considering establishing fiscal councils to provide independent oversight of the budget and strengthen transparency and accountability.

[4]The Fiscal Compact (part of the Treaty on Stability, Coordination and Governance) entered into force in January 2013. For more details on the compact, see the April 2012 *Fiscal Monitor*.

Fiscal vulnerabilities remain elevated, although some key short-term risks have fallen

Notwithstanding continued fiscal adjustment and institutional reform, underlying fiscal vulnerabilities remain elevated in many advanced economies, reflecting, to varying degrees, large and still-rising debt ratios and the inadequacy of clear medium-term consolidation plans, including to address challenges in age-related spending (Table 3). In emerging market economies, vulnerabilities are generally more moderate, although deficits persist in many, and age-related spending pressures remain to be addressed in most.

Short-term risks have declined almost across the board—particularly in Europe (Figure 6)—thanks to strong policy action and improved market conditions:

- *Downside risks to debt dynamics* have diminished in most advanced economies (Table 4) as fiscal tightening has proceeded and financial market conditions have improved. Sovereign spreads in the euro periphery have dropped noticeably, and long-term bond placements increased after the European Central Bank announced its Outright Monetary Transactions program (see the April 2013 *Global Financial Stability Report*). In emerging market economies, debt dynamics remain favorable because of low interest rate–growth differentials, although lower growth prospects have raised risks in a couple of cases (India, South Africa).

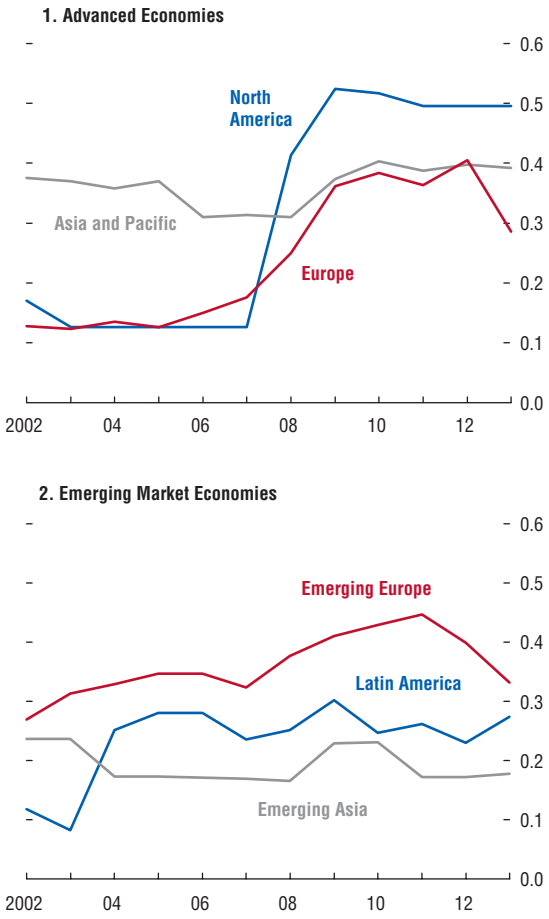
Table 3. Assessment of Underlying Fiscal Vulnerabilities over Time

Sources: Bloomberg L.P.; Consensus Economics; Thomson Reuters Datastream; and IMF staff estimates and projections.

Note: To allow for cross-country comparability, a uniform methodology is used to assess vulnerability. In-depth assessment of individual countries would require case-by-case analysis using a broader set of tools. Based on fiscal vulnerability indicators presented in Table 4, red (yellow, blue) implies high (medium, moderate) levels of fiscal vulnerability. The methodology used to estimate the composite fiscal vulnerability indicator has been modfied relative to the October 2012 *Fiscal Monitor*, with a reduction in the weight assigned to shocks and a matching increase in the weight assigned to underlying fiscal vulnerabilities.

- The risks associated with *contingent liabilities* from the banking sector have declined in many advanced and emerging market economies, but have risen in others. These developments highlight the sizable fiscal risks that persist as long as bank balance sheets remain impaired amid incomplete financial sector reform (see the April 2013 *Global Financial Stability Report*). Several European countries have been facing fiscal pressures as a result of bank recapitalization needs. In Spain, where financial sector reforms are well underway, four banks were recently restructured at a fiscal cost of 3 percent of GDP (Table 5); further fiscal outlays in 2013 are expected to be small (¼ percent of GDP). In the Netherlands, the fourth-largest bank is expected to receive a capital injection—with a cost to the state of 0.6 percent of GDP—in addition to public loans and guarantees amounting to 1 percent of GDP. In Slovenia, an asset management company has been set up and is authorized to issue up to €4 billion (11¼ percent of GDP) this year in bonds backed by government guarantees to finance nonperforming asset purchases. In some countries, concerns about the quality of financial sector assets and of banks' balance sheets

Figure 6. Underlying Fiscal Vulnerability Index by Region, 2002–13
(Scale, 0–1)



Sources: Baldacci and others (2011); and IMF staff calculations.
Note: 2009 GDP weights at purchasing power parity are used to calculate weighted averages. Larger values of the index suggest higher levels of fiscal vulnerability.

have grown, including in China, given the rapid expansion of borrowing channeled to finance investment.

- Although still large, *gross financing needs* in advanced economies have declined, mainly reflecting lower deficits (Table 6). Financing requirements have been reduced significantly in Greece with the debt buyback and increased concessionality from European partners (including through maturity extensions) and in Ireland thanks to a promissory note exchange. Financing needs are set to increase in many emerging market economies in 2013 because of higher levels of maturing debt. Gross financing needs are particularly high in Egypt, Pakistan, Jordan, and Hungary, reflecting short maturities and, in some cases, high deficits (Table 7).

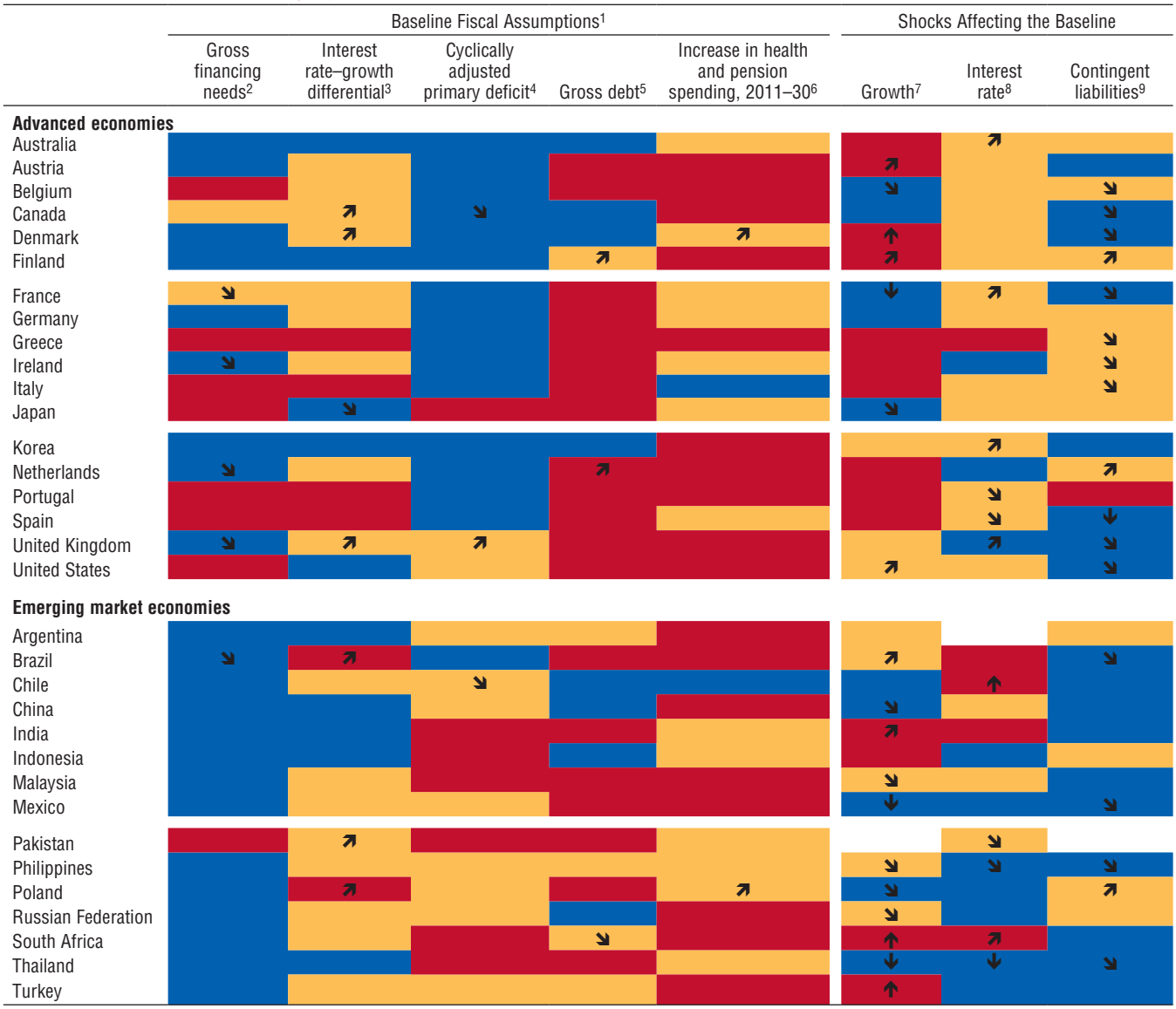
Over the past year, some progress has also been made in addressing longer-term challenges, although in many countries these remain formidable. *Age- and health-related spending* is expected to rise over the next 20 years by more than 4 percent of GDP in advanced economies and by 3 percent of GDP in emerging market economies. Recent reforms in the Czech Republic, Greece, Latvia, and Poland should enhance the sustainability of their public pension schemes. In Colombia and France, recently adopted measures could increase spending, although in France this would be offset by higher social security contributions. Containing the increasing costs of health care remains the greatest challenge, as illustrated by the case of the United States, where the expected savings from the Affordable Care Act are small because increased revenues will largely be spent on expanding coverage. This holds true even after a recent Supreme Court decision that allows states to opt out of extending coverage is accounted for.[5] Although the recent agreement on measures to avoid the fiscal cliff in the United States is welcome, there has been insufficient progress in defining the longer-term fiscal adjustment path, including necessary entitlement reforms and other measures to restore medium-term fiscal sustainability.

Remaining fragilities still call for further, appropriately paced fiscal consolidation in many countries.

- Short-term adjustment should be calibrated to the size of the fiscal imbalance, cyclical conditions, and financing constraints (Box 2). From that perspective, the pace of structural fiscal adjustment under baseline scenarios for 2013 in *advanced economies* is broadly appropriate, but with some caveats: in

[5] Significant uncertainty surrounds the estimates of savings, and health care cost growth has been surprisingly sluggish in recent years, yet there is no guarantee that this favorable trend will continue.

Table 4. Assessment of Underlying Fiscal Vulnerabilities, April 2013



Sources: Bloomberg L.P.; Consensus Economics; Thomson Reuters Datastream; and IMF staff estimates and projections.

Note: To allow for cross-country comparability, a uniform methodology is used for each vulnerability indicator. In-depth assessment of individual countries would require case-by-case analysis using a broader set of tools. Fiscal data correspond to IMF staff forecasts for 2013 for the general government. Market data used for the *Growth, Interest rate,* and *Contingent liabilities* indicators are as of March 2013. A blank cell indicates that data are not available. Directional arrows indicate that, compared to the previous *Fiscal Monitor*, vulnerability signaled by each indicator is higher (↑), moderately higher (↗), moderately lower (↘), or lower (↓). No arrow indicates no change compared to the previous *Fiscal Monitor*.

[1] Red (yellow, blue) implies that the indicator is above (less than one standard deviation below, more than one standard deviation below) the corresponding threshold. Thresholds are from Baldacci, McHugh, and Petrova (2011) for all indicators except the increase in health and pension spending, which is benchmarked against the corresponding country group average.

[2] For advanced economies, gross financing needs above 17.2 percent of GDP are shown in red, those between 12.9 and 17.2 percent of GDP are shown in yellow, and those below 12.9 percent of GDP are shown in blue. For emerging market economies, gross financing needs above 20.6 percent of GDP are shown in red, those between 16.3 and 20.6 percent of GDP are shown in yellow, and those below 16.3 percent of GDP are shown in blue.

[3] For advanced economies, an interest rate–growth differential above 3.6 percent is shown in red, one between 0.3 and 3.6 percent is shown in yellow, and one below 0.3 percent is shown in blue. For emerging market economies, an interest rate–growth differential above 1.1 percent of GDP is shown in red, one between –4.4 and 1.1 percent of GDP is shown in yellow, and one below –4.4 percent of GDP is shown in blue.

[4] For advanced economies, cyclically adjusted deficits above 4.2 percent of potential GDP are shown in red, those between 1.8 and 4.2 percent of potential GDP are shown in yellow, and those below 1.8 percent of potential GDP are shown in blue. For emerging market economies, cyclically adjusted deficits above 0.5 percent of potential GDP are shown in red, those between –1.3 and 0.5 percent of potential GDP are shown in yellow, and those below –1.3 percent of potential GDP are shown in blue.

[5] For advanced economies, gross debt above 72.2 percent of GDP is shown in red, that between 56.9 and 72.2 percent of GDP is shown in yellow, and that below 56.9 percent of GDP is shown in blue. For emerging market economies, gross debt above 42.8 percent of GDP is shown in red, that between 29.4 and 42.8 percent of GDP is shown in yellow, and that below 29.4 percent of GDP is shown in blue.

[6] For advanced economies, an increase in spending above 3 percent of GDP is shown in red, one between 0.6 and 3 percent of GDP is shown in yellow, and one below 0.6 percent of GDP is shown in blue. For emerging market economies, an increase in health and pension spending above 2 percent of GDP is shown in red, one between 0.3 and 2 percent of GDP is shown in yellow, and one below 0.3 percent of GDP is shown in blue.

[7] Risk to real GDP growth is measured as the ratio of the downside risk to the upside risk to growth, based on one-year-ahead real GDP growth forecasts by market analysts included in the Consensus Forecast. It is calculated as the standard deviation of market analysts' growth forecasts below the Consensus Forecast mean (downside risk, or DR), divided by the standard deviation of market analysts' growth forecasts above the Consensus Forecast mean (upside risk, or UR). This ratio is then averaged over the most recent three months. Cells are shown in red if downside risk is 25 percent or more higher than upside risk (DR/UR > 1.25), in yellow if downside risk is less than 25 percent higher than upside risk (1 < DR/UR <= 1.25), and in blue if downside risk is lower than or equal to upside risk (DR/UR <= 1).

[8] Risks to the financing cost underpinning the fiscal projection are measured as the difference between the current 10-year sovereign bond yield and the long-term bond yield (LTBY) assumption included in the *Fiscal Monitor* projections. Cells are shown in red if the current bond yield is above or equal to the LTBY, in yellow if the current bond yield is 100 basis points or less below the LTBY, and in blue if the current bond yield is more than 100 basis points below the LTBY.

[9] Fiscal contingent liabilities are proxied by banking sector uncertainty, measured as the conditional volatility of monthly bank stock returns, using an exponential generalized autoregressive conditional heteroskedastic (EGARCH) model which allows asymmetric volatility changes to positive versus negative shocks in stock returns. The rationale is as follows: bank stock returns capture market expectations of banks' future profitability and therefore—indirectly—banks' ability to maintain required capital. Higher volatility of bank returns can create uncertainty with respect to banks' ability to safeguard capital (see Sankaran, Saxena, and Erickson, 2011), increasing the probability that banks will need to be recapitalized, thereby resulting in contingent liabilities for the sovereign. Cells are shown in red if current volatility is more than two standard deviations above the historical average for January 2000–December 2007, in yellow if it is above the historical average by up to two standard deviations, and in blue if it is below or equal to the historical average.

Table 5. Selected Advanced Economies: Financial Sector Support
(Percent of 2012 GDP, except where otherwise indicated)

	Impact on gross public debt and other support	Recovery to date	Impact on gross public debt and other support after recovery
Belgium	7.4	1.5	5.9
Cyprus	10.0	0.0	10.0
Germany[1]	12.8	2.0	10.8
Greece	19.7	4.3	15.4
Ireland[2]	40.5	4.4	36.1
Netherlands	14.6	10.0	4.6
Spain[3]	7.3	2.9	4.4
United Kingdom	6.7	1.5	5.2
United States	4.8	4.2	0.5
Average	7.0	3.7	3.3
$US billions	1,729	914	815

Sources: National authorities; and IMF staff estimates.

Note: Table shows fiscal outlays of the central government, except in the cases of Germany and Belgium, for which financial sector support by subnational governments is also included. Data are cumulative since the beginning of the crisis—latest available data up to February 2013. Data do not include forthcoming support.

[1] Support includes here the estimated impact on public debt of liabilities transferred to newly created government sector entities (about 11 percent of GDP), taking into account operations from the central and subnational governments. As public debt is a gross concept, this neglects the simultaneous increase in government assets. With this effect taken into account, the net debt effect amounted to just 1.6 percent of GDP, which was recorded as deficit.

[2] The impact of the direct support measures is mainly on net debt, as significant recapitalization expenses were met from public assets. Direct support does not include asset purchases by the National Asset Management Agency (NAMA), as these are not financed directly through the general government but with government-guaranteed bonds.

[3] Direct support includes total capital injections by the Fondo de Reestructuración Ordenada Bancaria (FROB) and liquidity support.

Japan, where the stimulus being undertaken will support the short-term recovery but (even though it is temporary) further increase fiscal vulnerabilities, and in the United States, where the automatic spending cuts (sequester) that came into effect on March 1 will result in a consolidation that—at 2 percent of GDP in headline terms—is both excessive and inefficiently structured, owing to the across-the-board nature of the automatic cuts. In addition, in the United Kingdom, where the recovery is weak owing to lackluster demand, consideration should be given to greater near-term flexibility in the fiscal adjustment path.

- Although separating cyclical from structural factors remains a challenge, especially in the still-uncertain economic environment in many advanced economies, fiscal policy should focus on structural rather than nominal balances, since a single-minded focus on headline targets—where not mandated by hard financing constraints—could lead to procyclical policies that would accelerate any downturn. This risk is particularly high in the euro area, where the current nominal targets under the Excessive Deficit Procedure would imply excessive adjustments in the Netherlands and Spain. Direct recapitalization of banks through the European Stability Mechanism would be key to severing definitively the perverse feedback loops between banks and sovereigns in the euro area.
- In *higher-debt countries*, notably Japan and the United States, specific medium-term plans are urgently needed to put debt ratios on a firm downward trajectory. A mix of entitlement reforms and revenue-raising efforts (for example, through widening of bases and increases in energy taxation) could provide a basis for defining clear targets and explicit paths (ideally in cyclically adjusted or structural terms) for reaching them within a specific time frame. In the United States, there has been progress on fiscal consolidation through discretionary spending caps and modest tax increases, but more remains to be done. Other high-debt advanced economies could benefit from more specificity in their medium-term plans. Credible commitments to long-term fiscal consolidation, possibly supported by binding numerical fiscal rules, enhanced transparency, tighter budget procedures, and greater independent oversight of the budget, are critical to address the risks of eroding confidence and avoid a surge in interest

Table 6. Selected Advanced Economies: Gross Financing Needs, 2013–15
(Percent of GDP)

	2013			2014			2015		
	Maturing debt	Budget deficit	Total financing need	Maturing debt[1]	Budget deficit	Total financing need	Maturing debt[1]	Budget deficit	Total financing need
Japan	49.2	9.8	59.0	51.6	7.0	58.6	49.0	5.8	54.8
Italy	25.3	2.6	27.8	25.8	2.3	28.2	26.2	2.1	28.3
United States	18.6	6.5	25.2	20.3	5.4	25.8	19.9	4.1	24.0
Portugal[2]	17.5	5.5	23.0	17.8	4.0	21.8	17.8	2.5	20.3
Spain	14.1	6.6	20.7	15.3	6.9	22.2	16.3	6.6	22.9
Greece	14.9	4.6	19.5	19.2	3.4	22.5	13.5	2.2	15.7
Belgium	15.8	2.6	18.4	16.2	2.1	18.3	15.9	1.7	17.6
France	13.4	3.7	17.1	14.1	3.5	17.6	15.6	2.6	18.1
Canada	13.3	2.8	16.1	14.3	2.3	16.5	15.2	1.7	16.8
Ireland[3]	5.0	8.3	13.2	6.2	5.1	11.3	3.8	2.6	6.4
United Kingdom	6.1	7.0	13.0	6.6	6.4	12.9	8.5	5.6	14.1
Netherlands	8.6	3.4	12.0	9.1	3.7	12.8	12.2	3.3	15.6
Slovenia	5.0	6.9	11.8	5.7	4.3	10.0	9.1	4.1	13.3
Czech Republic	8.4	2.9	11.3	8.9	2.8	11.7	9.8	2.6	12.5
Slovak Republic	7.9	3.2	11.1	6.0	3.0	9.0	5.9	2.9	8.8
Denmark	7.3	2.8	10.1	7.8	2.3	10.0	9.0	1.9	10.9
New Zealand	7.9	1.9	9.7	8.3	0.5	8.7	7.9	–0.3	7.6
Austria	6.3	2.2	8.4	6.5	1.5	8.0	5.8	1.1	6.9
Germany	7.9	0.3	8.2	7.9	0.1	8.1	5.5	0.0	5.5
Finland	5.8	2.0	7.9	6.1	1.3	7.4	6.4	0.7	7.1
Iceland	6.6	1.3	7.8	6.7	0.6	7.3	1.3	–0.6	0.7
Sweden	3.4	0.8	4.3	3.6	0.5	4.0	6.2	–1.2	5.1
Australia	3.1	1.1	4.2	3.3	0.2	3.4	3.2	–0.3	2.9
Switzerland	3.5	–0.2	3.3	3.5	–0.5	3.1	3.0	–0.7	2.3
Korea	3.1	–2.4	0.7	3.1	–2.6	0.4	3.0	–2.7	0.3
Norway	4.3	–12.3	–8.0	4.3	–11.1	–6.8	4.0	–10.0	–6.0
Average	17.9	4.8	22.7	19.1	3.9	23.0	18.7	3.0	21.8

Sources: Bloomberg 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 (see Table SA.1).

[1]Assumes that short-term debt outstanding in 2013 and 2014 will be refinanced with new short-term debt that will mature in 2014 and 2015, respectively. Countries that are projected to have budget deficits in 2013 or 2014 are assumed to issue new debt based on the maturity structure of debt outstanding at the end of 2012.

[2]Maturing debt is expressed on a nonconsolidated basis.

[3]Ireland's cash deficit includes exchequer deficit and other government cash needs and may differ from official numbers because of a different treatment of short-term debt in the forecast.

rates with a negative impact on the economy and on debt dynamics.

- The stronger fiscal position of most *emerging market economies* has allowed them to pause fiscal adjustment in the context of slowing growth, but many of these economies should return to rebuilding policy space when the environment allows. Reform priorities vary across countries.
  - In some cases (including Egypt, India, and Jordan), high public debt ratios and high deficits call for more immediate fiscal action to safeguard against adverse debt dynamics should the interest rate–growth differential become less favorable, for example, because of a lower growth potential or the rising cost of private or official financing (the latter a sizable risk for low-income countries). Further structural reform, including subsidy reform, higher revenue from consumption taxes, and broader tax bases, would facilitate faster consolidation.

Table 7. Selected Emerging Market Economies: Gross Financing Needs, 2013–14
(Percent of GDP)

	2013			2014		
	Maturing debt	Budget deficit	Total financing need	Maturing debt	Budget deficit	Total financing need
Egypt	26.1	11.3	37.4	25.1	8.7	33.8
Pakistan	26.2	7.0	33.2	24.7	7.1	31.9
Jordan	27.0	4.8	31.8	25.8	5.3	31.1
Hungary	17.9	3.2	21.0	16.6	3.4	20.0
Brazil	15.9	1.2	17.1	15.4	1.7	17.2
Ukraine	12.2	4.5	16.6	9.6	5.4	15.0
Morocco	10.2	5.5	15.7	11.0	4.2	15.1
India	4.4	8.3	12.7	4.3	8.4	12.7
South Africa	7.3	4.8	12.0	7.3	4.2	11.5
Romania	9.5	2.1	11.6	9.2	1.7	10.9
Poland	8.2	3.4	11.6	7.1	2.9	10.0
Mexico	7.7	3.1	10.8	7.8	3.0	10.8
Malaysia	6.2	4.0	10.2	6.1	3.7	9.8
Turkey	7.2	2.2	9.4	8.7	2.3	11.0
Argentina[1]	6.0	2.7	8.7	6.5	2.4	9.0
Lithuania	6.0	2.6	8.6	4.5	2.3	6.8
Thailand	5.5	2.7	8.2	6.4	3.4	9.8
Philippines	6.7	0.8	7.5	6.9	0.9	7.8
China[1]	4.1	2.1	6.2	3.3	1.8	5.1
Bulgaria	2.5	1.4	3.9	1.2	0.6	1.8
Colombia	2.8	1.0	3.8	3.3	0.9	4.1
Indonesia	0.8	2.8	3.7	0.9	2.2	3.1
Latvia	1.9	1.3	3.1	6.6	0.8	7.4
Russian Federation	1.2	0.3	1.6	1.1	1.0	2.1
Chile	1.0	–0.1	0.9	1.1	0.1	1.2
Peru	2.2	–1.8	0.4	2.1	–1.6	0.5
Kazakhstan	2.0	–4.9	–2.9	1.9	–4.5	–2.5
Average	6.1	2.6	8.8	5.7	2.5	8.3

Source: IMF staff estimates and projections.
Note: Data in table refer to general government. For some countries, general government deficits are reported on an accrual basis (see Table SA.2).
[1] For details, see "Data and Conventions" in the Methodological and Statistical Appendix.

- Commodity exporters (e.g., Algeria, Iraq, Libya) must strengthen nonresource revenue and establish fiscal frameworks to limit short-term volatility and ensure long-term fiscal sustainability (IMF, 2012b).
- In most low-income countries, revenue mobilization should be stepped up to keep pace with expenditure growth, for example, by improving customs and tax administration, eliminating exemptions, and implementing broad-based value-added and corporate income taxes (IMF, 2011b).
- In many emerging market economies and low-income countries, reforms to energy subsidies are needed urgently, as subsidies aggravate fiscal imbalances; crowd out priority spending like investment, education, and health; distort resource allocation; reinforce inequality (as they are typically captured mostly by higher-income households); and exacerbate global warming and worsen local pollution by promoting overconsumption of fuel products. Although there is no single recipe for successful subsidy reform, country evidence suggests that a combination of phased price increases, targeted measures to protect the poor, and institutional reforms that depoliticize energy pricing can lead to successful outcomes (Appendix 1).

2. Medium-Term Fiscal Adjustment in an Uncertain World

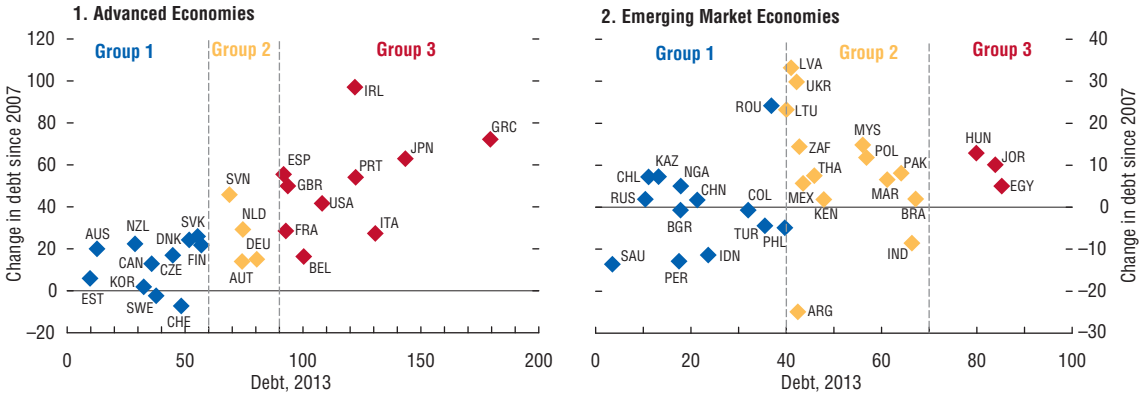
Almost all advanced economies have implemented significant fiscal adjustment since 2010. Nevertheless, their current fiscal positions differ significantly, primarily reflecting uneven starting conditions and differences in the impact of the crisis on their fiscal accounts, rather than variations in the extent of postcrisis adjustment.

Broadly speaking, advanced economies can be classified into three groups (Figure 7, left panel). The first group comprises countries that have relatively low debt-to GDP ratios; most of them have already stabilized or even lowered them compared to 2007. The second group includes those countries where the debt ratio has recently peaked or is still rising, but remains at a fairly contained level. These countries will require further adjustment, but should be able to generate positive debt dynamics with a fairly contained fiscal effort. The third group consists of 10 countries where the debt ratio is high (above 90 percent of GDP) and rising, reflecting still-large deficits (on average about 5½ percent of GDP). It is within this group that most fiscal vulnerabilities are concentrated, and these are therefore the countries where the focus of fiscal adjustment will be in the coming years. Although these countries are few in number, they account for more than 40 percent of global output, meaning the success or failure of their efforts will have profound implications for the world economy.

Emerging market economies have, as a group, come out of the crisis in better fiscal shape than many advanced economies. As a result, their future adjustment needs are typically smaller, even if one accepts that their historically more volatile financial environment suggests more prudent benchmark debt levels than those used for advanced economies (Figure 7, right panel). Although only three emerging market economies fall in the high-debt group (debt ratios in excess of 70 percent of GDP), those emerging market economies in the middle category (i.e., those with still-rising but fairly contained debt ratios) might still have relatively large adjustment needs because of their high deficits.

This section takes a fresh look at the medium-term fiscal adjustment needs in advanced and emerging market economies, underscoring the high current uncertainty, particularly in those advanced economies in which public debt has reached its highest level since the immediate post–World War II period, when the outlook was in many respects more supportive of fiscal adjustment than now:

Figure 7. Country Groups According to Debt Level and Trend
(Percent of GDP)



Source: IMF staff projections.
Note: Figure shows gross general government debt, except in the cases of Australia, Canada, Japan, and New Zealand, for which net debt ratios are used. For advanced economies, Group 1: Debt less than 60 percent of GDP; Group 2: Debt between 60 and 90 percent of GDP; Group 3: Debt greater than 90 percent of GDP. For emerging market economies, Group 1: Debt less than 40 percent of GDP; Group 2: Debt between 40 and 70 percent of GDP; Group 3: Debt greater than 70 percent of GDP.

cuts in military spending provided an easy way to consolidate, labor force and output growth prospects were strong (in contrast, the labor force is now projected to decline in many advanced economies), and interest rate caps and restrictions on bank assets kept sovereign borrowing costs relatively low. The current environment is much less friendly and carries potentially high, although uncertain, risks. There are three major sources of uncertainty:

- *The debt consolidation target*: Should debt ratios just be stabilized at their currently historically high levels or should they be brought down (and by how much)? Should strategies target a specific debt level, or would it be preferable to target a specific fiscal balance (for example, a balanced budget)?
- *The projected interest rate–growth differential*: For a given debt stock, higher interest rates mean that a larger share of public resources needs to go toward paying interest, leaving fewer resources to pay down the debt. In contrast, faster growth brings down debt ratios more quickly, by increasing the denominator in the debt-to-GDP ratio and by making it easier to run larger primary balances. But with the crisis, the dispersion of interest rate–growth differentials across countries has increased. Not all countries are recovering at the same speed, and while the interest rate has risen sharply in countries under market pressure, it has fallen in countries benefiting from safe-haven flows. Predicting the future path of the interest rate–growth differential is thus not easy. The incidence of cyclical versus structural factors in accounting for the decline in output after 2007 remains unknown, resulting in large revisions of potential growth projections in advanced economies while bond yields have fluctuated widely.
- *The feasibility of implementing large, sustained fiscal adjustment*: An increase in the primary balance can bring the debt ratio down and avert a painful debt restructuring or monetization of an otherwise unsustainable debt. But what constitutes a politically and socially acceptable pace of fiscal adjustment, and for how long can large primary surpluses be maintained before pressures to raise spending or reduce taxes become overwhelming?

Overall, the empirical evidence suggests that in some countries, either the size of the improvement in the primary fiscal balance needed to bring the debt ratio to a more sustainable level, or the period over which such an improvement would need to be maintained, would be unprecedented.[6] This does not mean that the task is impossible, but it does underscore the need to use many levers to facilitate the adjustment. Keeping interest rates low over an extended period and boosting potential growth will be key to successful debt reduction efforts. There is evidence that markets are forward looking, attaching importance not just to the level of the debt but also to the direction in which it is moving (see the October 2012 *World Economic Outlook*), suggesting that once investors are confident that the debt ratio is safely on a downward path, a virtuous cycle of lower interest rates and higher growth can be triggered. But for this to occur, the credibility of the fiscal adjustment path is critical.

The costs and risks of high debt

What should be the ultimate objective of fiscal adjustment? Stabilizing the public debt ratio has intuitive appeal, as it means the government will be able to finance its operations and remain solvent over time.[7] However, there are many reasons why merely stabilizing public debt at high levels would not be optimal. A large body of research, summarized in previous issues of the *Fiscal Monitor*, concludes that high public debt leads to higher interest rates and slower growth (Table 8).[8] Most studies find that high debt levels

[6] An updated guidance note on debt sustainability is under preparation. See IMF (2011a).

[7] When the interest rate–growth differential is positive, stabilizing the debt-to-GDP ratio ensures that the intertemporal budget constraint (or, equivalently, the non–Ponzi game condition) is met (see Escolano, 2010); this means that the net present value of future primary surpluses (the government's main asset) is equal to the debt stock. With assets fully covering liabilities, the government is technically solvent and the debt is sustainable as long as the corresponding primary balances can be sustained.

[8] See, for example, Baldacci and Kumar (2010), Poghosyan (2012), Kumar and Woo (2010, 2013), Caner, Grennes, and Koehler-Geib (2010), Cecchetti, Mohanty, and Zampolli (2011), Baum, Checherita-Westphal, and Rother (2012), and Ursua and Wilson (2012) on debt and interest rate and debt and growth and Reinhart, Reinhart, and Rogoff (2012) for a survey of the literature on public debt and growth. A notable exception, Panizza and Presbitero (2012), does not find a causal relationship between high debt and lower growth.

Table 8. Recent Empirical Evidence on the Impact of Debt on Interest Rates and Growth

Debt and Long-Term Interest Rates			Debt and Growth		
Study	Sample	Effect of a 1 percentage point increase in public debt–to–GDP ratio on long-term interest rates	Study	Sample	Effect of a 10 percentage point increase in public debt–to–GDP ratio (beyond threshold) on average annual growth
Engen and Hubbard (2004)	United States, 1976–2003	2–3 basis points (projected debt-to-GDP ratio on real rates)	Kumar and Woo (2010)	38 advanced and emerging market economies, 1970–2007	–0.17 percentage point (beyond 90 percent)
Kinoshita (2006)	19 OECD countries, 1971–2003	2–5 basis points (current debt-to-GDP ratio on real rates)	Caner, Grennes, and Koehler-Geib (2010)	79 advanced and developing economies, 1980–2008	–0.17 percentage point (beyond 77 percent)
Ardagna, Caselli, and Lane (2007)	16 OECD countries, 1960–2002	Up to 3.8 basis points (for nonlinear estimation, at maximum value of debt-to-GDP ratio in the sample)	Cecchetti, Mohanty, and Zampolli (2011)	18 OECD economies, 1980–2006	–0.13 percentage point (beyond 84 percent)
Laubach (2009)	United States, 1976–2006 (semiannual)	2–4 basis points (projected debt-to-GDP ratio on real rates)	Baum, Checherita-Westphal, and Rother (2012)	12 euro area economies, 1990–2010	–0.59 percentage point (beyond 96 percent)
Baldacci and Kumar (2010)	31 advanced and emerging market economies, 1980–2008	3–5 basis points (current debt-to-GDP ratio on nominal and on real rates)			
Alper and Forni (2011)	53 advanced and emerging market economies, 2002–10	1–7 basis points (expected debt-to-GDP ratio on real rates, nonlinear for emerging market economies)			
Poghosyan (2012)	22 advanced economies, 1980–2010	2 basis points (in the long run, current debt-to-GDP ratio on real rates)			
Jaramillo and Weber (2012)	15 emerging market economies, 2007–11 (monthly)	4 basis points (projected debt-to-GDP ratio on nominal rates) 6 basis points (if high global risk aversion)			

Note: OECD: Organisation for Economic Co-operation and Development.

(above 80–90 percent of GDP) have a negative effect on growth (some 0.15–0.20 percent per 10 percentage points of GDP). High debt also makes public finances more vulnerable to future shocks, because it constrains governments' ability to engage in countercyclical policies and because the larger the initial debt ratio, the bigger the increase in the primary surplus required to stabilize that ratio after an adverse shock to growth or interest rates. Indeed, when debt is high, there is a risk of falling into a bad equilibrium caused by self-fulfilling expectations (high debt is unsustainable because markets believe it is so and set interest rates accordingly).

The ease with which the surge in public debt ratios has been financed in most countries may suggest that the risks arising from high debt levels are overstated. As noted, the lower is the interest rate–growth differential, the higher is the amount of debt that can be sustained over time. After spiking in 2009, that differential has declined in most advanced economies and remains below the precrisis average in spite of higher debt. The failure of market interest rates to respond to rising sovereign indebtedness (except in some euro area countries) could be taken to suggest that many advanced economies have little to fear from high public debt. There are reasons to believe that this trend will not persist, however, and that high debt will expose countries to larger risks in the future.

The exceptionally low borrowing costs enjoyed by some high-debt countries reflect, in addition to still-weak economic activity, the influence of institutional investors—pension, mutual, and insurance funds—as well as national and foreign central banks (Box 3).[9] The importance of some of the factors that have helped insulate many countries from debt-related vulnerabilities may gradually diminish, and borrowing costs could increase or become more volatile as a result:

- First, the capacity of domestic investors to absorb public debt is likely to decline over time for some countries. For example, the aging of the population is expected to reduce savings in Japan, curbing the growth of nonbank financial institutions. Chinese central bank holdings of U.S. Treasury bonds may also decline owing to diversification away from U.S. dollars or as a consequence of smaller current account surpluses.
- Central bank purchases of government debt have continued in the largest advanced economies in 2012. But as market conditions in advanced economies normalize and demand for base money declines, domestic central banks, to avoid inflationary pressures, may choose to unwind their asset purchases undertaken for purposes of monetary policy. As a result, the share of public debt they hold would decline.
- In many emerging market economies, debt dynamics are benefiting from spillovers from accommodative monetary policies abroad, as well as from a combination of regulatory constraints and the relative shallowness of domestic financial markets. These factors are likely to decline in importance as monetary policies normalize in advanced economies and as domestic financial intermediation deepens, easing financial repression.
- The gap between market and concessional rates in emerging market economies is about 4½ percentage points. The share of official lending provided to these countries is already declining and is likely to continue doing so, pushing up their interest rate–growth differentials as official financing is replaced with more expensive market borrowing.

In addition, fiscal risks are affected not only by what is already in the government's balance sheet but also by what could potentially be there.[10] In other words, looking only at current debt ratios may result in understatement of the fiscal risks a country faces because it does not take account of contingent liabilities. Explicit government guarantees for a representa-

[9]Another factor contributing to low sovereign interest rates is the ongoing private sector deleveraging, which has resulted in higher net private savings—a natural source of demand for government paper. As this process will run its course at some point, interest rates will rise unless governments wind down their deficits.

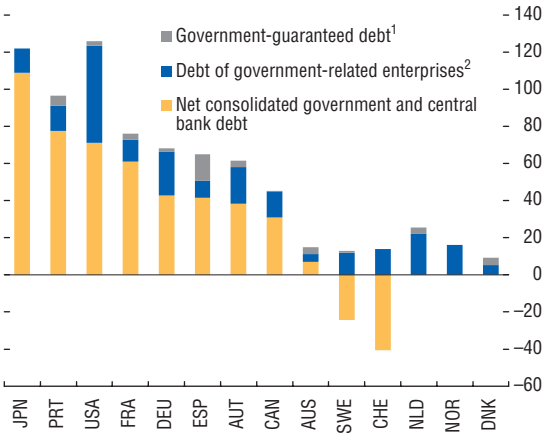
[10]An additional source of fiscal risks is the data shortcomings in some countries. As discussed in IMF (2012a), despite concerted efforts to develop a set of internationally accepted standards for fiscal transparency and to monitor and promote the implementation of those standards at the national level, understanding of governments' underlying fiscal position and the risks to that position remains inadequate in many cases.

tive sample of advanced economies are estimated at 2½ percent of GDP—with some variations across countries—mostly related to public enterprises. Implicit guarantees could be far larger, as preliminary IMF staff estimates put the outstanding debt of these enterprises at about 16½ percent of GDP on average (Figure 8).[11] Of course, contingent liabilities are not exclusive to advanced economies, as implicit and explicit guarantees—for example, related to subnational governments and the financial sector—can also be found in emerging market economies (Box 4).[12]

In practice, about one-fifth of the largest unexpected increases in general government gross debt during 2007–10 were due to government support to the financial sector and hidden or implicit obligations to public corporations and public-private partnerships outside the general government perimeter.[13] Experience suggests that countries with large or quickly expanding financial sectors or with sizable state-owned enterprises may find that current debt and deficit levels are an imperfect indicator of risks to their fiscal positions. For example, Iceland and Ireland saw their government debt ratios increase by 60–70 percent of GDP, despite seemingly safe precrisis budget positions, as a result of outsized financial sectors that eventually needed massive public support.

In sum, high debt significantly increases a country's fiscal vulnerabilities. These vulnerabilities may rise in the future as the result of changes in the investor base and other structural factors. And the risks in some countries may already be higher than they appear because of contingent liabilities that are not recorded in debt statistics. When the certainty of medium-term spending pressures associated with population aging (see Clements and others, 2013; IMF, 2010b; and Statistical Tables 12a and 12b) is added to this, it makes a compelling case for high-debt countries to continue the process of gradual but sustained deficit reduction that began in 2010, or to get onto that path without delay, aiming not just at stabilizing the debt ratio but at reducing it.

Figure 8. Net Consolidated Government and Central Bank Debt, Outstanding Government-Guaranteed Bonds, and Debt of Government-Related Enterprises
(Percent of GDP)



Sources: Dealogic; and IMF staff estimates.
Note: Amounts for some countries are likely to be underestimated given data constraints. See Statistical Table 15 for details on net consolidated government and central bank debt.
[1]Outstanding government-guaranteed bonds correspond to bonds that are issued by private and public banks and financial institutions and carry state guarantees. Short-term debt is not included.
[2]Bonds issued by government-owned or government-related institutions; includes both financial and nonfinancial institutions, subject to data availability. For the United States, includes mortgage-backed securities and other guarantees of government-sponsored enterprises.

The magnitude of the required adjustment

By how much should public debt be lowered, and over what time frame, and what would it take in terms of spending cuts or tax increases—that is, improvement in the primary balance—to lower it? As noted above, there is no straightforward answer to these questions.

First, although the economics literature can provide guidance about the costs associated with high debt, it is less helpful in identifying what an ideal debt ratio would be.[14] Empirical studies yield

[11]The actual debt may well be higher, as the estimate includes only bonds issued by government-owned or government-related institutions but excludes bank loans, which may be an important funding source.

[12]Data on guarantees and other contingent liabilities for emerging market economies are scant. Nevertheless, as discussed in Box 4, monitoring is warranted, highlighting the need to strengthen reporting requirements.

[13]The impact of the unexpected fall in output was even larger (about one-quarter). For more details, see the October 2012 *Fiscal Monitor*.

[14]The literature on public debt thresholds has attempted to pin down both the optimal and safe debt levels; the optimal-debt con-

a wide range of debt objectives depending on the approach used to identify them. In practice, many countries have adopted debt ceilings in their fiscal responsibility laws or in the context of supernational agreements (for example, the EU's Economic and Monetary Union and the Eastern Caribbean Currency Union) that are close to or below 60 percent of GDP (IMF, 2011a), although these levels are usually motivated as being prudent rather than optimal. The standard *Fiscal Monitor* long-term adjustment needs scenario has used benchmark debt ratios of 60 percent of GDP for advanced economies and 40 percent of GDP for emerging market economies, in both cases close to the precrisis median for these country groups.[15] But the appropriate debt target need not be the same for all countries. If the investor base is such as to allow countries to finance themselves at low rates, it will be easier for them to sustain a higher debt level. Volatility in the interest rate–growth differential is also important: because high public debt and high volatility in growth and interest rates may be a particularly toxic combination, countries subject to relatively large shocks to growth and interest rates may want to be conservative in choosing debt targets. In addition, contingent liabilities have proven very important for certain countries, although they are not typically embedded explicitly in debt benchmarks. The implication is that to the extent that policies can diminish the degree of uncertainty, they can also allow countries to target a higher level of debt.

Second, once a long-term debt target has been identified, the required pace of primary adjustment will still depend on the length of the adjustment period and on interest rate–growth differential assumptions. Countries with high debt and a high interest rate–growth differential may prefer more front-loaded adjustment over a shorter period. But here again, the credibility of the adjustment process is critical: as noted, markets are likely to be more tolerant of high debt levels if they are convinced that those levels are being put on a downward path, resulting in a lower interest rate–growth differential and allowing a longer adjustment duration, and in both cases lowering primary adjustment targets. Box 5 illustrates how different assumptions can result in a wide range of estimated adjustment needs in the case of the United States.

Given these uncertainties, this *Fiscal Monitor* presents not only a baseline medium-term fiscal adjustment scenario, but also alternative scenarios based on different debt targets and interest rate–growth differential assumptions. As in the past, the baseline scenario targets a reduction in the debt ratio to 60 percent by 2030 (40 percent for emerging market economies), with the primary balance rising to the required level by 2020 (the "primary surplus benchmark") and then remaining at that level for another decade. The projected interest rate–growth differential remains at relatively low levels until 2018, in line with the *World Economic Outlook* forecast of a slow recovery, and then follows a model-based simulation reflecting the assumed normalization of monetary policy, in which differences in interest rate–growth differentials across countries reflect variations in debt levels and their projected paths (see Statistical Tables 12a and 12b).[16] Alternative scenarios gauge the magnitude of the adjustment challenges in advanced economies under different hypotheses:[17] using a debt target of 80 percent rather than 60 percent, adopting a balanced-budget target rather than a debt target, and employing sensitivity analyses in which the

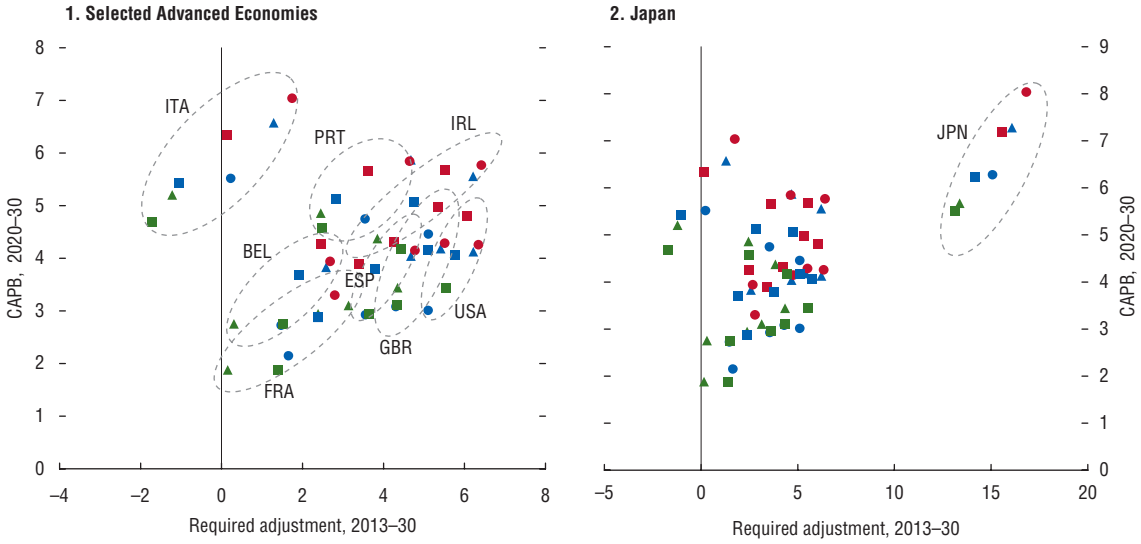
cept has remained at a fairly abstract level, whereas the safe-debt concept has focused largely on empirical applications. The literature on safe debt levels can be divided into three main strands (Jarmuzek and Miao, 2013). The initial focus was on the concept of the long-run debt that would be consistent with the solvency condition, abstracting from debt distress (Blanchard and others, 1990; Buiter, 1985). The two later strands have taken certain positions on the probability that debt distress occurs. The first has focused on identifying debt thresholds beyond which the risk of debt distress increases rapidly (Baldacci and others, 2011; Ghosh and others, 2011), whereas the second has focused on identifying debt thresholds encompassing safety margins that ensure resilience to various kinds of shocks with a high degree of probability (Mendoza and Oviedo, 2004; Cottarelli and others, 2013).

[15]The benchmark has been to stabilize debt at the end-2013 level if it is below the 60/40 percent benchmark.

[16]Previous medium-term scenarios assumed an earlier alignment of the interest rate–growth differential with model-based levels. The current approach incorporates a longer cyclical effect over the coming five years. Also, the analysis does not take into account the effect of fiscal multipliers on fiscal adjustment. However, in practice, the adjustment needs could be underestimated in the early years, particularly where multipliers are high.

[17]Sensitivity analyses were not conducted for Greece, as it is expected to remain off market for a large part of the adjustment horizon.

Figure 9. CAPB in 2020–30 and Required Adjustment Needs, 2013–30, across Different Scenarios
(Percent of GDP)



Source: IMF staff estimates and projections.

Note: For selected advanced economies (seven scenarios for each country), the figure plots the average 2020–30 cyclically adjusted primary balance (CAPB) against the residual adjustment need under various scenarios. Triangles illustrate scenarios with a benchmark level of debt of 60 percent by 2030, circles illustrate scenarios with a benchmark level of debt of 80 percent by 2030, and squares illustrate scenarios with no indicative debt benchmark by 2030, but in which countries reach at most overall budget balance. Baseline interest rate–growth differential assumptions are shown in blue; risk scenarios with interest rate–growth differentials 100 basis points above the baseline are shown in red; and favorable interest rate–growth differentials that are 100 basis points below the baseline are shown in green. Thus, the blue triangles correspond to the numbers reported in Statistical Table 13a.

interest rate–growth differential is 100 basis points higher or lower than under the baseline. For emerging market economies, the interest rate–growth differential is assumed to converge gradually from its current (in most cases negative) level to 1, the average estimate of the future interest rate–growth differential.[18]

Statistical Tables 13a and 13b update the baseline adjustment needs. Despite steady consolidation in advanced economies over 2011–13, the average additional adjustment required to meet primary surplus benchmarks by 2020 is still substantial, at 5 percent of GDP.[19] With many emerging market economies having paused adjustment efforts, and with their borrowing costs relatively low, their residual adjustment needs (i.e., the required improvement in the cyclically adjusted primary balance between 2013 and 2030) are broadly unchanged from October 2012 estimates, and quite small.

Figure 9 presents the results of the various scenarios for the group of advanced economies with the largest adjustment needs. In most of these countries, residual adjustment needs differ significantly under alternative scenarios (for most, the range of residual adjustment needs equals 2–3 percentage points of GDP across scenarios), but some clear differences across the countries also emerge.

- Three countries (Belgium, France, and Italy) have already undertaken a large share of the adjustment needed to bring their debt ratios down to safer levels over time and, assuming the 2013 projections materialize, would need to increase their cyclically adjusted primary balances only by relatively small amounts (between 1 and 3 percentage points of GDP). For Italy, the scenarios

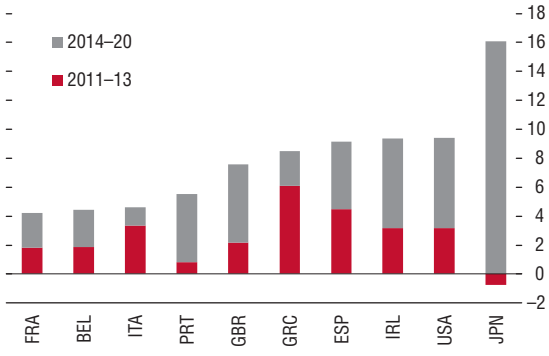
[18]See Abiad and Ostry (2005). The caveat that appropriate country-specific estimates vary applies here too, for example, because of differences in potential growth which could also feed back into investor confidence and risk premiums.

[19]By comparison, the required improvement in the cyclically adjusted primary balance simply to stabilize the debt at its current level would be about 2½ percent of GDP.

suggest that little or no further adjustment is required. However, owing to its higher debt level, Italy would need to maintain much larger primary surpluses than France or Belgium over the next 10 years.

- A second group—comprising Ireland, Portugal, Spain, the United Kingdom, and the United States—still has some way to go in terms of the residual adjustment (close to 5½ percent of GDP, unweighted average). Once this consolidation is achieved, all these countries would need to maintain large primary surpluses over the medium term. In the absence of entitlement reforms, projected increases in age-related spending mean that additional measures will still be needed over time, however, to keep the primary surplus constant, particularly in the United States.
- The largest consolidation requirement is in Japan (close to 16 percentage points of GDP, in order to reach a primary surplus of about 7 percent of GDP). Japan's large residual adjustment need reflects both its very high public debt ratio and the fact that its cyclically adjusted primary deficit is still very large (in part because of the impact of natural disasters) (Figure 10). Clearly, this implies that a longer time horizon will be required to bring public debt down to the scenario levels.

Figure 10. Advanced Economies with Largest Adjustment Needs: Required Changes in the Cyclically Adjusted Primary Balance
(Percent of GDP)



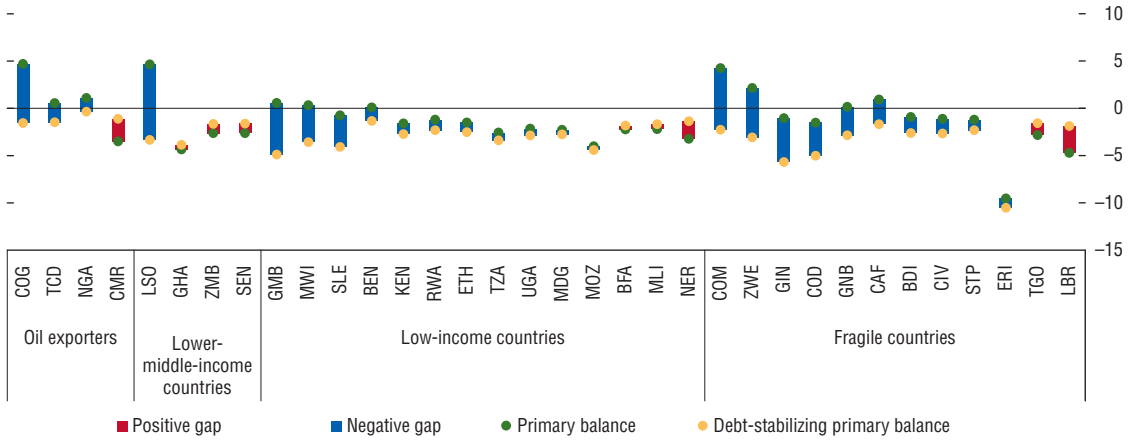
Source: IMF staff estimates and projections.
Note: Figure shows the advanced economies with the 10 largest illustrative adjustment needs between 2011 and 2030, based on the *Fiscal Monitor* baseline scenario. The red bars show the adjustment expected to take place between 2011 and 2013. For details, see "Data and Conventions" in the Methodological and Statistical Appendix.

Daunting as these adjustment needs are, in many cases they are little different from those that would be required to balance countries' budgets in cyclically adjusted terms, something many observers endorse as an appropriate medium-term policy objective. Indeed, balancing the budget would put half of the high-debt cases (Belgium, France, Spain, the United Kingdom, and the United States) within close distance of the benchmark debt ratio by 2030. Although merely balancing the budget would leave debt ratios above 60 percent of GDP by 2030 in other high-debt countries, it is reasonable to expect that markets would easily tolerate the higher—but still steadily declining—debt ratio that would follow from such a policy. A commitment to maintain balanced budgets might also be more palatable politically than one that involves larger and larger headline budget surpluses over time, as would emerge if primary balances were constant and interest payments declined in line with debt.

In most emerging market economies, the benchmark primary surpluses under the baseline illustrative scenario are significantly lower than among advanced economies. However, in Egypt, Hungary, and Jordan, the target exceeds 3 percent of GDP, reflecting high debt (80 percent of GDP or more), compounded by the projected gradual increase in interest rates in the context of a normalization of the economic environment. In Egypt and Jordan, more than 5 percent of GDP in adjustment will be needed to achieve the benchmark primary surpluses. India has large adjustment needs too (6¾ percent of GDP), but it does not have to maintain as high a target cyclically adjusted primary balance, partly thanks to a very favorable interest rate–growth differential.

The adjustment needed to achieve debt-stabilizing primary balances is relatively small in low-income countries, given a negative interest rate–growth differential and low levels of debt (see Box 6). In many sub-Saharan African countries, the primary balance gap, or the difference between the projected primary balance and the primary balance that would stabilize debt at its current level, is relatively small, the major exception being in some fragile states (Figure 11). In countries with small primary gaps but high debt ratios, an additional consolidation effort aimed at

Figure 11. Sub-Saharan Africa: Average Primary Balance Gap, 2012–17
(Percent of GDP)



Source: IMF staff estimates and projections.
Note: The interest rate–growth differential used to calculate the debt-stabilizing primary balance is based on medium-term projections (2013–17 average) for the nominal interest rate on public debt (from each country's debt sustainability analysis) and nominal GDP growth rate. A positive primary balance gap indicates a tendency of the debt-to-GDP ratio to increase over time unless fiscal policies are tightened. The actual need for tightening will be country specific and will depend on, among other factors, the initial debt level.

reducing rather than just stabilizing debt should be considered. Countries with primary surpluses that are currently higher than those required to stabilize debt may want to lock in surpluses by rebuilding their liquid-asset buffers.

Historical evidence on fiscal adjustments

The fiscal effort required to lower debt ratios to more prudent levels remains substantial by any metric for the 10 advanced economies in which debt is high and still rising. It is thus natural to wonder about possible historical precedents. History is not destiny: several countries among the 10 may not have run large primary surpluses in the past because they did not need to, as their debt was much lower. This does not mean that they will not be able to run large primary surpluses in the future. Nevertheless, a look at historical precedents can illustrate the scale of the present challenge. The following analysis is based on a new fiscal balances historical database covering 55 advanced and emerging market economies and developing countries dating back to 1800 in some cases.[20]

Historical evidence suggests that high primary surpluses may be easier to achieve than to maintain. Large sustained postwar debt reductions have typically involved a combination of high primary surpluses and other policies.[21] Since the 1950s, the distribution of the maximum annual primary surplus shows a median of about 6½ percent of GDP for advanced economies and 6¼ percent for emerging market economies, albeit with a greater dispersion for the latter group.[22] Using 5-year moving averages, the median falls to 3½–4 percent of GDP; it declines steadily as the length of the moving average window increases, to only 2¾–3¼ percent of GDP over a

[20]For a detailed description, see Mauro and others (2013). See also the Public Finances in Modern History Database (http://www.imf.org/external/np/fad/histdb/index.htm). For the purpose of this analysis, the sample has been restricted to 43 countries (24 advanced and 19 emerging market economies). For related work based on more limited databases, see Tsibouris and others (2006), Abbas and others (2010), Zeng (2013), and the October 2012 *Fiscal Monitor*.

[21]These include, for example, financial repression and inflation. However, as noted in the October 2012 *World Economic Outlook*, it is unclear whether financial repression is still a viable policy option given current levels of financial integration.

[22]For each country, a maximum primary surplus is identified over the period 1950–2011. Unless otherwise indicated, the median of the distribution of maximum primary surpluses is reported for the whole sample of countries (24 advanced and 19 emerging market economies) throughout.

Table 9. Summary Statistics for Three Largest Consolidation Episodes

(Percent of GDP)

	First					Second					Third				
	Year	Primary Balance	Δ	Debt	Δ	Year	Primary Balance	Δ	Debt	Δ	Year	Primary Balance	Δ	Debt	Δ
Advanced economies	1952	2.8	10.4	58.8	5.3	1984	3.1	5.7	42.5	0.1	1989	2.9	4.4	58.4	0.2
Emerging market economies	1991	3.1	6.7	44.6	7.8	1996	2.2	3.7	39.4	1.0	1988	0.7	2.4	31.8	0.0

Source: Mauro and others (2013).

Notes: Table provides information on the three largest changes in the two-year moving-average primary balance over a six-year period, with at least five years elapsing between consolidations. Median of the first- , second-, or third-largest consolidation episode, respectively, for each country grouping is shown in each panel.

10-year period.[23] One possible explanation is that, as credibility of adjustment efforts is established, interest rates fall and there is no longer a need to maintain as high a primary surplus in the medium to long term.

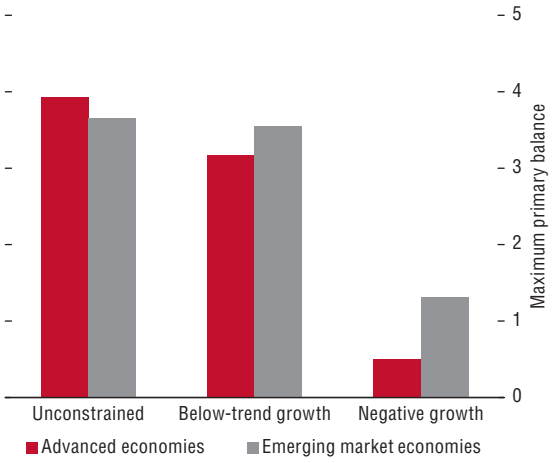
The largest improvement in the primary balance achieved by an advanced economy, equaling more than 10 percent of GDP, took place shortly after World War II (Table 9).[24] In contrast, among emerging market economies, the three largest episodes (2–6 percentage points of GDP) occurred in the 1990s. For both groups, these consolidation episodes took place against the backdrop of large initial deficit positions. In all but one case, the resulting end-level primary surpluses were still below the maximum sustained primary surplus of 3½–4 percent of GDP identified above.

Growth appears to have been an important element for achieving high headline primary surpluses.[25] In particular, maximum primary surpluses are lower for advanced economies once the sample is restricted to those episodes in which growth was below trend, and lower still for those in which growth was negative (Figure 12). In the latter circumstances, the maximum sustained primary balance was just ½ percent of GDP for advanced economies and 1¼ percent of GDP for emerging market economies. The susceptibility of fiscal outturns to growth shocks may therefore also help explain why it is difficult for countries to maintain large primary surpluses for long periods. Although the data do not allow measurement of the impact of business cycles, the results are in line with evidence from Mauro and others (2013) that points to a lower response of the headline primary balance to debt in the face of negative growth surprises, even after the output gap is controlled for.

An event study undertaken in connection with the database research looks in more detail into the circumstances characterizing large and sustained improvements in primary balances. Some 22 episodes (12 among advanced economies and 10

Figure 12. Maximum Primary Balance and Growth, 1950–2011

(Percent of GDP)



Sources: Mauro and others (2013); and IMF staff estimates.

Note: For each country grouping in each of the three conditions characterizing growth, the figure shows the median of the maximum five-year moving average of the primary balances. "Unconstrained" takes into account all the years in the sample. "Below-trend growth" refers to years in which the five-year moving average of the real GDP growth rate fell below the trend growth rate. "Negative growth" refers to years in which real GDP growth was negative.

[23] Henceforth "large fiscal adjustments" refer to maximum five-year moving-average primary balances.

[24] A consolidation episode here is defined as the change in the two-year average of the primary balance over a six-year period (IMF projection period, current year plus five years), with at least five years elapsing between one identified consolidation period and another.

[25] The October 2012 *World Economic Outlook* discusses the experiences of countries reducing debt and concludes that fiscal consolidation efforts need to be complemented by measures that support growth.

among emerging market economies) were identified as falling above the median of the distribution of maximum five-year rolling-average primary balances. The sample can be further divided into those cases that fall between the 50th and 75th percentiles (large improvements) and those at the 75th percentile or above (extraordinary improvements).

The adjustment strategy and magnitude of debt reduction varied across advanced and emerging market economies, but there were some common elements too:

- In advanced economies, more than 75 percent of the improvement in primary balances was driven by a reduction in primary expenditure as a share of GDP; the situation was more diverse among emerging market economies.
- Debt reduction was much larger for some emerging market economies, above 60 percent of GDP, compared to about 15 percent for advanced economies, but this was in some cases associated with debt restructuring (for example, in Argentina and Bulgaria).[26]
- Across advanced and emerging market economies, extraordinary improvers typically did better not because of one exceptional year, but rather because of an extended period of larger annual increases in their primary balances (Figure 13). Whereas large improvers gave back gains in their balances relatively quickly, possibly because cyclical effects played an important role in their good performance, extraordinary improvers managed to preserve some of their gains, sustaining a net increase in their primary balances of about 2–3 percentage points 10 years after beginning their adjustment efforts.
- Both country groups benefited from high growth rates (up to 6 percent during the event study periods).

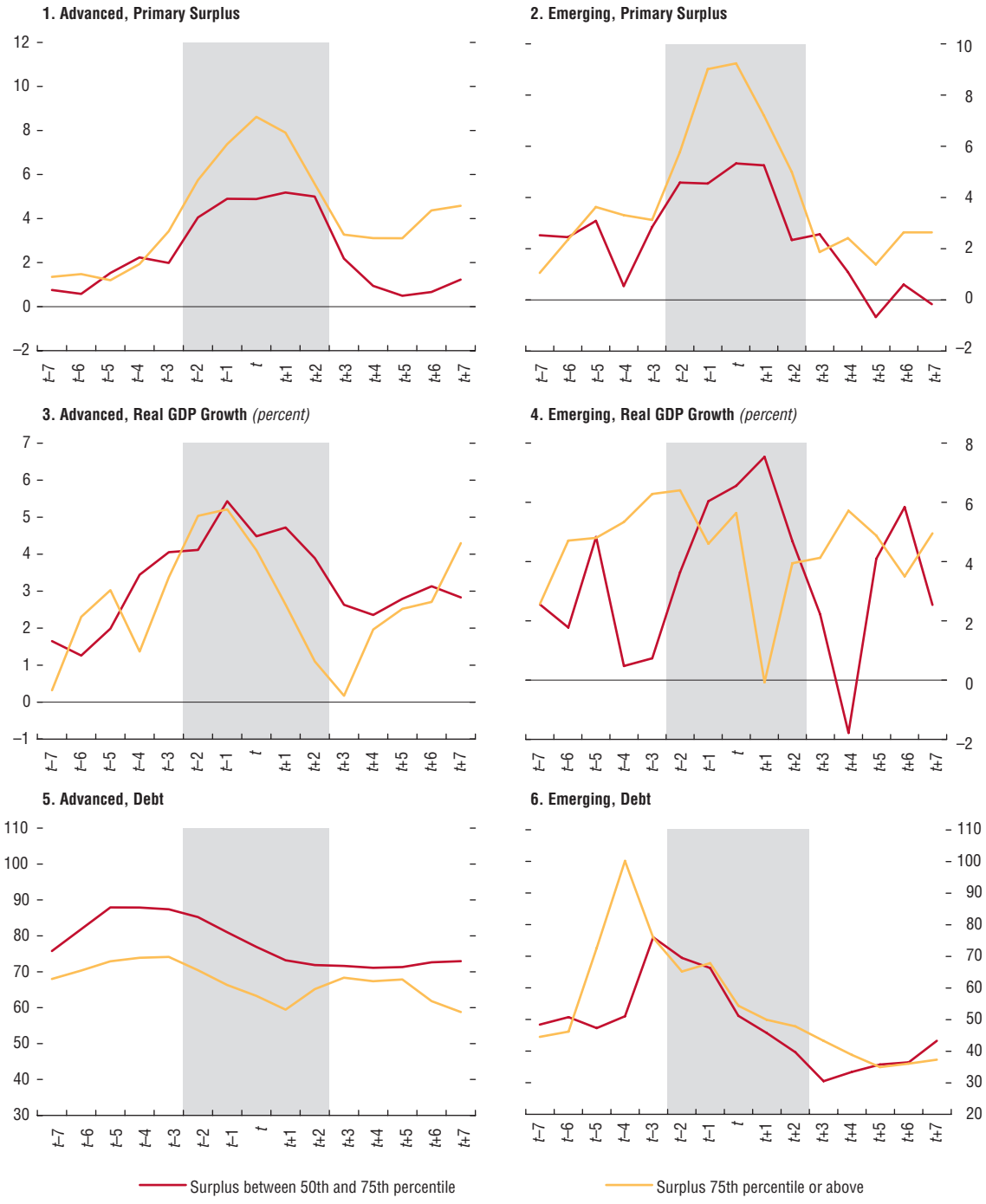
The event study also suggests that large adjustments were based on improvements in the primary balances that took place over six to eight years. A natural question to ask is to what extent current adjustment needs in high-debt advanced economies would be consistent with what is observed in the historical evidence. To address this question, illustrative scenarios are presented for a sample of six representative countries. The historical database is used to generate medians of the maximum historical primary balances over windows varying in length from 10 to 30 years. These medians are then juxtaposed against the average cyclically adjusted primary balance that each country would have to maintain in order to bring its debt ratio down to 60 percent of GDP over the corresponding time frame. Other things being equal, the longer the period over which the debt ratio is to decline to the target, the smaller the primary surplus that would need to be maintained over this period. Three alternative scenarios are considered, each corresponding to different assumptions about the interest rate–growth differential.[27] Figure 14 shows that with an interest rate–growth differential of 1, most of the high-debt advanced economies could achieve the benchmark target while maintaining primary surpluses consistent with previous historical maximums, but only if they choose a very long horizon (of the order of about 30 years) over which to achieve the debt target. Shorter horizons would demand primary surpluses that are larger than those that have been maintained by any advanced economy in the past over the relevant period. To the extent that policies can contribute to lower interest rate–growth differentials—for example, by boosting credibility and growth—the required adjustment would become more consistent with past experience, thereby allowing debt ratios to converge to prudent levels earlier on. If, on the other hand, plans are not credible, and as a result the interest rate–growth differential increases above 1, most countries would not be able to achieve the 60 percent debt ratio even in 30 years without fiscal efforts that would be without historical precedent.

[26] In the case of Argentina, the event study covers the period 1998–2011. The large debt reduction from a peak of over 160 percent of GDP in 2002 reflects, in addition to debt restructuring, continued primary surpluses coupled with high real GDP growth rates and persistently negative real interest rates.

[27] For ease of exposition, a fixed interest rate–growth differential is assumed for all countries regardless of the debt level. The reference level of the interest rate–growth differential is 1. Two sensitivity analyses consider shocks of +/–100 basis points to the reference interest rate–growth differential. The numbers are therefore not strictly comparable to those presented in the text and Statistical Table 13a but, as will become apparent from Figure 14, yield qualitatively similar conclusions.

Figure 13. Event Study of the Maximum Sustained Primary Surplus, 1950–2011

(Percent of GDP, except where otherwise indicated)

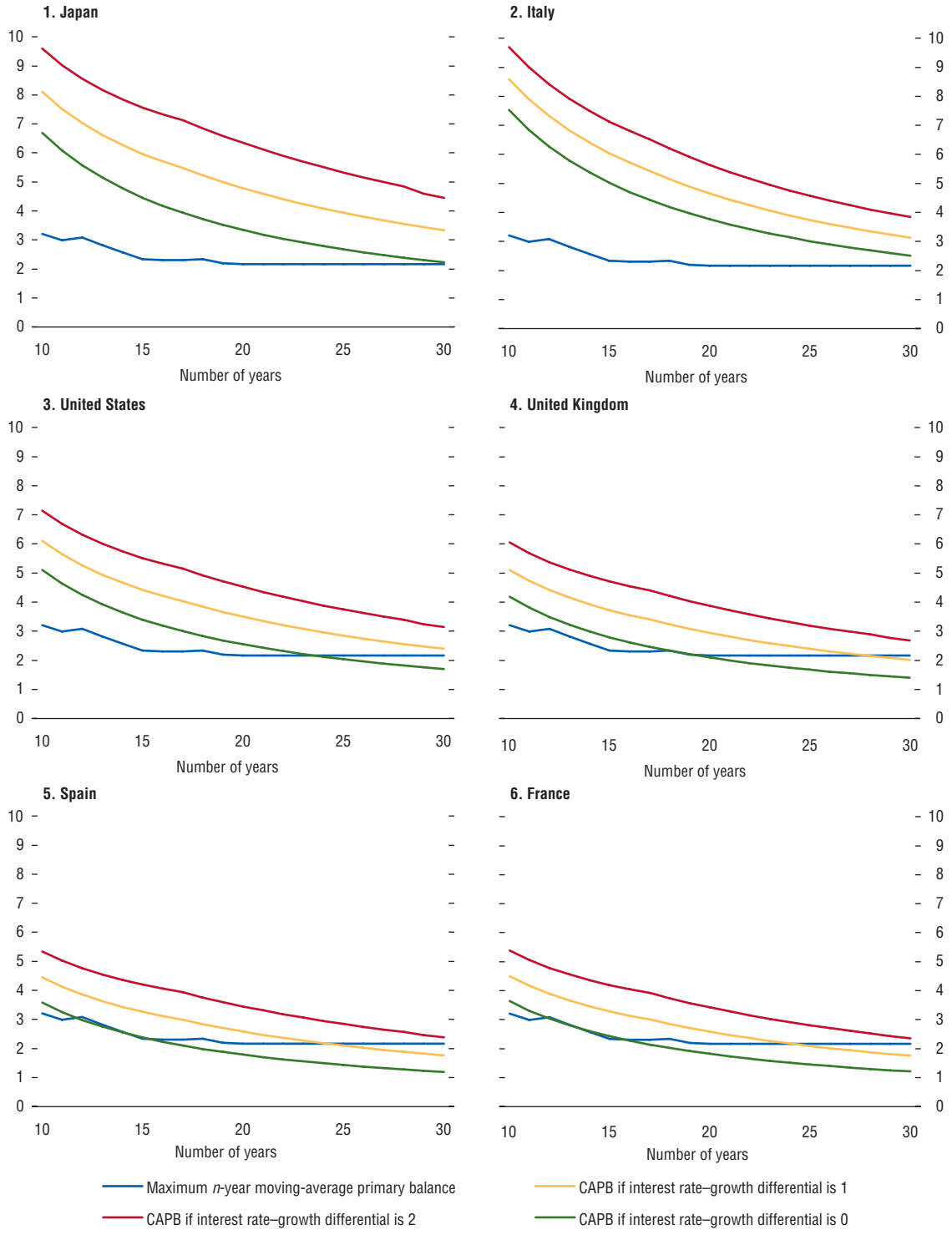


Sources: Mauro and others (2013); and IMF staff estimates.

Note: An event is defined as the five-year window in which a country achieves its maximum sustained primary surplus, based on five-year moving averages. Year *t* is the center of the event window, which includes years *t* – 2 to *t* + 2. The red line corresponds to countries for which the maximum sustained surplus is between the 50th and 75th percentiles of the distribution and the yellow line to countries with maximum sustained surpluses that equal at least the 75th percentile of the distribution.

Figure 14. Feasible Adjustment Paths over 20 Years

(Percent of GDP)



Source: IMF staff estimates.

Note: The blue line in each panel denotes the maximum moving average of the primary balances over different time horizons (*n* years), calculated using the Mauro and others (2013) data set. The yellow (green, red) line in each panel denotes the average cyclically adjusted primary balance needed for the country to achieve its debt target—80 percent of GDP for Japan, 60 percent of GDP for all other countries—within each time horizon, given an interest rate–growth differential of 1 (0, 2). CAPB: cyclically adjusted primary balance.

Can other policies ease the fiscal adjustment process?

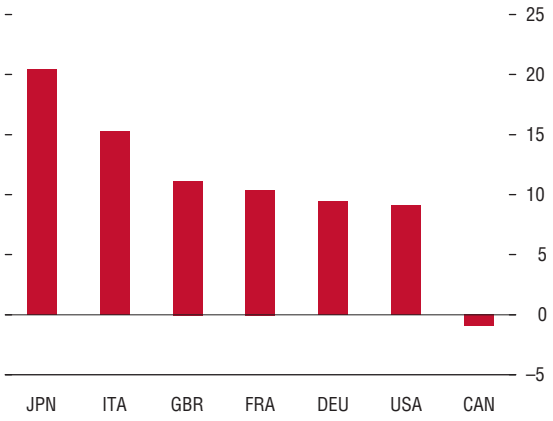
Given the size of the challenge facing fiscal policymakers, can other policies (alternative to improving the primary balance) facilitate their task?

Inflating the debt away

Higher inflation could help reduce public debt through three main channels. First, governments can capture real resources by base money creation (seigniorage). Second, inflation can erode the real value of the debt. The impact of this channel will depend on the maturity structure and currency denomination of the debt, as well as on the interest rate response to higher inflation, with inflation having the largest impact on long-term, fixed-rate, and local-currency-denominated debt: short-term debt and maturing long-term debt will need to be refinanced at higher interest rates, floating-rate debt will adjust automatically to higher rates, and the local-currency value of foreign-currency-denominated debt will rise as a result of the currency depreciation that will accompany higher inflation. Third, inflation can affect the primary balance, including if brackets are not indexed under a progressive income tax. Akitoby, Komatsuzaki, and Binder (2013) simulate the effect of the first two channels for Group of Seven (G-7) countries. Given the relatively low levels of base money in most advanced economies, seigniorage from higher inflation would play only a limited role in bringing down debt ratios: raising inflation from *World Economic Outlook* baseline projections to 6 percent for five years would generate cumulative seigniorage revenue of about 2½ percentage points of GDP. The debt erosion channel could have a stronger impact.

The same increase in inflation, under assumptions of a constant debt maturity structure, no impact of inflation on economic growth, and a one-for-one adjustment to inflation of nominal interest rates on newly issued debt (full Fisher effect), would reduce the average net debt–to–GDP ratio by less than 10 percentage points by the end of the period for most countries (other than Japan and Italy, where the effect would be larger) (Figure 15).[28] The erosion

Figure 15. Impact of Inflation on Net Debt Reduction, 2017
(Percent of GDP)



Sources: Organisation for Economic Co-operation and Development; and IMF staff estimates.
Note: The scenario depicted in the figure implies an increase in inflation by 4.4 percentage points over the projected average inflation of 1.6 percent.

effect would drop rapidly after five years, because an increasingly large share of securities would have been issued at higher interest rates, including to replace maturing debt that had been issued at lower rates.

Thus, although higher inflation could have some effect on debt stocks, it could hardly solve the debt problem on its own and would raise significant challenges and risks. As a practical matter, it might be difficult to lift inflation to a meaningful level in the current economic environment, as evidenced by Japan's experience in the last decades, and in any case, countries in a monetary union would not be able to use this tool on their own. More importantly, reliance on inflation to erode debt could lead to fiscal dominance,[29] with inflation rates drifting even higher as confidence in the future value of money is lost. As a result, inflation expectations could be unanchored, and the costs of bringing inflation down later could become even more onerous. This would undermine the credibility of the framework built over the past three decades to control inflation. Real interest rates could also rise as the result of unanchoring of inflation expectations, which would

[28] If maturity were to shorten in response to the inflation shock, the impact of inflation on the reduction would be somewhat smaller.

[29] Fiscal dominance can be defined as a situation in which monetary policy is driven by the need to ensure fiscal sustainability when fiscal policy cannot adjust.

exacerbate the debt trajectory. Introducing some form of financial repression could keep interest rates low, but such policies may be difficult to enforce in a complex financial environment and could cause additional collateral damage to the economy. Altogether, the output costs of restoring inflation to more moderate levels would be substantial, based on the experience in the advanced economies in the 1980s (see the October 2012 *World Economic Outlook*). And inflation would have a highly regressive impact on incomes: although higher inflation would be a tax on bondholders, it would also disproportionately affect lower-income households, which tend to have more limited access to indexed assets.

Restructuring debt

Another option to reduce debt is to restructure it or, in the extreme, to default on it.[30] Debt restructuring has been almost unknown in advanced economies in the postwar period. There have been episodes among emerging market economies, but these experiences may not be entirely relevant for the typical advanced economy case. Domestic residents hold a large share of government debt in most advanced economies (see Statistical Tables 12a and 12b), whereas in many instances of debt restructuring among emerging markets, foreign holdings were prevalent. This matters because restructuring is essentially a one-time tax on bondholders. If the tax is imposed on foreign residents, it leads to an increase in the country's net wealth, whereas if it is imposed on domestic agents, it is equivalent to a large and sudden fiscal tightening. Even when the tax falls on foreign residents, its feedback effect can be large when foreign residents are highly integrated with the defaulting country, as suggested by the recent experience in the euro area following the Greek debt restructuring.

Restructuring is a costly and risky option. In addition to the adverse effects related to fiscal tightening and spillover, it mars a country's reputation as a reliable borrower, which would be particularly damaging for first-time defaulters. Past debt restructuring may weigh on a country's borrowing costs and access to international financial markets.[31] Sovereign default can result in substantial short-term output losses as well as negative spillovers to other countries (Das and others, 2012). Finally, sovereign debt restructuring can affect the financial sector via two channels: on the asset side, banks will take a hit from the loss of restructured assets, and on the liability side, they may experience deposit withdrawals and the disruption of credit lines (see, for example, Borensztein and Panizza, 2009, and Das, Papaioannou, and Trebesch, 2012).

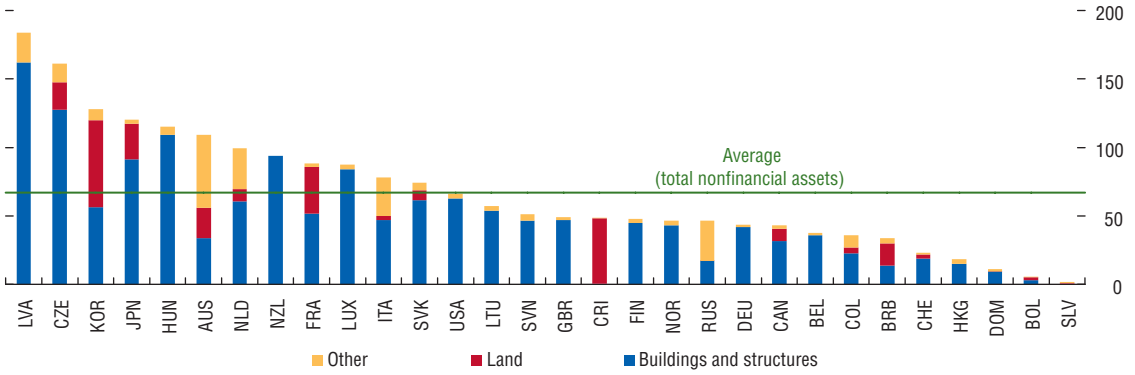
This said, there may be circumstances in which debt restructuring is unavoidable. If the primary surplus needed to make the fiscal path sustainable is too large (in terms either of adjustment or of the level that would have to be maintained over time) to be sustained by an economy without unbearable economic costs, debt restructuring would become inevitable. A debt restructuring could deal with the issue of high public debt quickly and may thus be appealing to those who do not believe that gradual fiscal adjustment is possible from a political economy perspective (and may be forced by markets if they regard orthodox adjustment impossible or unpalatable). Nevertheless, further work is needed to assess whether, and under what circumstances, debt restructuring can lead to more sustainable debt ratios.[32] Moreover, the way public debt is lowered—through orthodox fiscal adjustment or by not paying creditors—could lead to reputational effects that might have a negative impact on investment and growth. Altogether, although debt

[30] Default is the failure of a government to make a principal or interest payment on time. In most cases, restructuring occurs after default, through a debt rescheduling (lengthening maturities, possibly lowering interest rates) and/or reduction (in the face of the nominal value of old instruments).

[31] The empirical literature finds that market access after debt restructuring depends on the specifics of the individual cases. For example, a one-standard-deviation increase in haircuts is associated with a 50 percent lower likelihood of reaccessing international capital markets in any year after the restructuring (Cruces and Trebesch, 2011). In more recent cases the exclusion from capital markets has been shorter compared to those in the 1980s (Gelos, Sandleris, and Sahay, 2011) but the postrestructuring access comes with a higher borrowing cost.

[32] For example, Das and others (2012) look at 18 restructuring episodes during the period 1998–2010 and find that the public debt–to–GDP ratios declined from a median of over 50 percent of GDP to about 35 percent of GDP. On the other hand, Benjamin and Wright (2009) look at 90 default episodes during the period 1989–2006 and find that the creditor losses averaged roughly 40 percent but the debt-to-GDP ratio of the average country was 25 percent higher than before the debt restructuring.

Figure 16. Key Components of Nonfinancial Assets, 2011
(Percent of GDP)



Sources: Organisation for Economic Co-operation and Development; IMF, *Government Finance Statistics*; and national authorities.
Note: Based on latest available data. Not all countries report all components. For New Zealand, breakdown for total nonfinancial assets is not available. For Italy and Korea, data are from national sources. For Italy, data refer to 2004.

restructuring is sometimes inevitable, it is never an easy way out for countries looking for a solution to their fiscal problems.

Managing government assets

Selling government assets is a more benign option to lower gross debt ratios, although the revenue loss arising from the sale of those assets would also have to be considered to assess the longer-term impact on public finances. Public financial assets are quite large in advanced economies (more than 40 percentage points of GDP on average, half of that in the form of shares and equities) and some could potentially be disposed of. Privatization has yielded substantial proceeds in the past (see the September 2011 *Fiscal Monitor*) and may also help boost overall productivity if assets are managed more efficiently in private than in public hands. In many advanced economies, however, core public corporations have been privatized over the past two decades and remaining equity holdings are often in the hands of subnational governments. In Germany, for example, the general government owns about 11 percent of GDP in shares and equity and about one-tenth of this is in the hands of the federal government. Similarly, shares and equities of the Italian general government amount to about 8 percent of GDP, and it is estimated that the sale of the central government's shares quoted on the stock market could yield about 1 percent of GDP (IntesaSanPaolo, 2012). The dispersed ownership could complicate further the use of assets for debt management purposes, including because subnational governments with limited debt may have little motivation to privatize their assets to reduce debt owed by the central government. That said, with regional and local public debt being sizable in some countries, privatization of their assets may be helpful.

Public holdings of nonfinancial assets are larger than those of financial assets, but drawing resources from them may be more difficult. In 32 advanced and emerging market economies, average nonfinancial assets amount to 67 percent of GDP (with a median of 50 percent) although with very wide cross-country dispersion (Figure 16): from more than 120 percent of GDP for the Czech Republic, Japan, Korea, and Latvia to less than 20 percent of GDP for Bolivia, Hong Kong Special Administrative Region, and Switzerland. These sharp differences reflect a range of factors, such as economic structure, but also coverage of the data and evaluation methods. A large portion of nonfinancial assets (on average more than half) is owned by lower-level governments. The share of regional and local governments is particularly high in federal states where subnational government assets exceed central government holdings by a ratio of at least four to one.

Receipts and savings from sales and management of nonfinancial assetts have been rather small so far.[33] For example, disposal of federal nonfinancial assets in the United States (mainly through sale of electromagnetic spectrum rights and leasing of offshore drilling rights) is reported to have yielded only about ½ percent of GDP over the past two decades. In France, a 2006 initiative to dispose of public buildings (*parc immobilier*) yielded only 0.2 percent of GDP. In the current environment, asset liquidation may be difficult and market values may be low, reducing the immediate cash potential. In addition, only a very small share of nonfinancial assets are considered by the authorities to be "salable" (for example, 4 percent of GDP in Italy and up to 7 percent of GDP in Japan).[34] The collection of user charges where they are not yet imposed (such as road tolls), including through public-private partnerships, could be a more promising source of revenues, since a large share of nonfinancial assets consist of public infrastructure. For example, in Germany, the toll for trucks on federal highways has created annual revenues of about 0.2 percent. In most cases, however, more effective asset management must start with better and more comprehensive reporting.

The spoonful of sugar: Faster growth

The historical evidence reviewed earlier suggests that growth is key for sustained fiscal consolidation. Empirical studies have found that a 1 percentage point increase in growth has led on average to an improvement in the headline primary balance of about ½ percent of GDP (see, for example, Woo, 2003, and Zeng, 2013). In an economy with revenues equivalent to 40 percent of GDP, a 1 percentage point increase in potential economic growth would result in an improvement of 0.4 percent of GDP in the structural fiscal balance if the resulting higher revenue were entirely saved. In addition, the denominator of the debt-to-GDP ratio would also rise. Through these two channels, a country with a debt ratio of 100 percent of GDP could reduce its debt by 30 percent of GDP in 10 years with one additional percentage point of potential growth. This could eventually give rise to a virtuous circle in which lower debt levels would raise potential growth, further facilitating debt reduction.

One critical assumption in this scenario is that the higher revenues associated with faster growth are saved. In practice rising revenue may lead to strong spending pressures that would have to be resisted. Moreover, raising potential growth may not be an easy task, as some advanced economies are already at the production possibility frontier. Boosting growth in these countries will require the introduction of extensive structural reforms that, in any event, may take time to have an effect.

How it can be done

The foregoing analysis shows that the scale of the challenge involved in bringing debt ratios to prudent levels varies significantly across countries. Many have already put their debt ratios on a downward path or need only modest additional adjustment to do so. But for the most highly indebted advanced economies, the adjustment required remains substantial and largely unprecedented. This does not mean, however, that fiscal sustainability is out of reach. One critical factor for success is that these countries maintain low interest rates over an extended period of time and in a noninflationary way. Credibility in fiscal adjustment is essential to achieving this aim. Faster growth will also help. This will require a combination of structural policies to improve productivity and continued monetary accommodation in advanced economies—provided that fiscal adjustment continues to avoid the risk of fiscal dominance and that appropriate safeguards for financial stability are in place. And in some countries, proceeds from the sale of government assets can be used to bring debt ratios down. But most important, policies should be geared toward replacing uncertainty about the future with confidence. From that vantage point, there are two priorities on the fiscal front. First, those advanced economies with medium-term fiscal adjustment plans should ensure that uncertainties

[33] See Bova and others (2013) for a review the experience of nine advanced economies in managing nonfinancial assets.

[34] For Japan, nonfinancial assets that the IMF staff considers could potentially be disposed of in the long term are those that are under the direct control of the Ministry of Finance. Data are from the Japan Cabinet Office of the Ministry of Finance. Data for Italy are from IntesaSanPaolo (2012). The Italian government has announced plans to sell real estate assets of about €15–20 billion per year for the next five years.

about implementation measures are minimized and that adjustment tools are conducive to growth.[35] Those without such plans, in particular Japan and the United States, should rapidly introduce them (the Japanese authorities plan to announce a medium-term fiscal consolidation plan this summer). Second, fiscal institutions should be strengthened to enhance the prospects for long-lasting fiscal discipline. In this respect, recent reforms to establish stronger fiscal institutions in advanced economies are welcome steps that should be promptly complemented by effective enforcement and accountability mechanisms.

[35]For a discussion of expenditure and revenue consolidation measures that also support economic growth, see IMF (2010a).

Box 1. How Can Fiscal Councils Strengthen Fiscal Performance?

There is a growing interest in the role that fiscal councils can play in promoting sound fiscal policies. Although a handful of such councils have been in place for some time in advanced economies, their number has risen in recent years and is expected to continue to do so in the short to medium term (Figure 1.1). In the European Union, the Fiscal Compact explicitly refers to the monitoring of compliance with national fiscal policy rules by an independent body in each euro area member state, and a draft regulation (part of the so-called two-pack) mandates that each euro area country establish an "independent fiscal body" tasked with producing "independent macroeconomic forecasts" to be used for budget preparation. Beyond Europe, the creation of parliamentary budget offices in Australia, Canada, and Kenya suggests a broader interest in these institutions.

Fiscal councils are typically established to promote fiscal responsibility, notably by raising the reputational costs of unsound policies and broken commitments. Their tasks usually follow the budget process, from the provision of unbiased budgetary forecasts to the scoring of specific policy initiatives, the preparation of long-term sustainability analyses, the monitoring of compliance with fiscal policy rules, and nonpartisan assessments of fiscal outcomes. By providing unbiased technical inputs to the budget process, fiscal councils increase fiscal transparency and improve the quality of the public debate on fiscal policy.

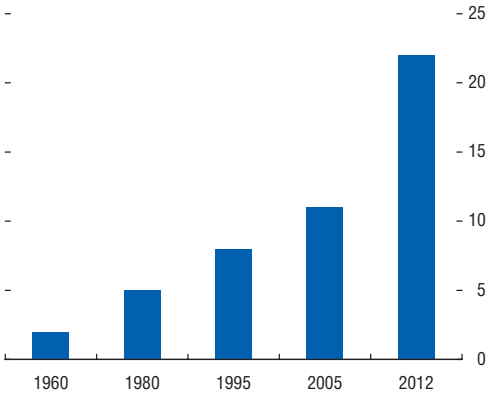
Two main features distinguish fiscal councils from other institutions that perform similar tasks, such as central banks, research institutes, or international organizations: the specific mandate they receive from the government to perform such tasks independently and the corresponding accountability, and the need to benchmark their assessments against the government's stated objectives (to avoid being drawn into partisan considerations and guarantee their legitimacy).

IMF (2013b) explores empirically the effectiveness of fiscal councils. Bearing in mind the methodological challenges inherent in the small and highly heterogeneous population of councils, the study finds that the establishment of a fiscal council is on average associated with stronger budget balances and less procyclical policies. Fiscal councils also appear to limit certain sources of policy bias that can occur early in the budget process, such as the tendency to base budgets on optimistic macroeconomic and revenue forecasts and to abuse the uncertainty inherent in the implementation of fiscal rules contingent on the business cycle, such as structural balance rules. Several aspects of fiscal council design and modes of operation seem to enhance their effectiveness, including strict operational independence, strong and effective media presence, and a proper sequencing of the council's activity with the budget process.

Establishing a fiscal council is not, however, a magic bullet against fiscal biases. Two specific considerations are worth emphasizing:

- A fiscal council can be effective only if policymakers have internalized the merits of fiscal discipline to start with. If that has taken place, establishing a council—and the enhanced transparency that comes with it—is a signal to the public and to markets that fiscal policy is consistent with long-term sustainability and aligned with policymakers' preferences. In addition, as even the best intentions can often dissipate in the face of short-term pressures, the watchdog role of a fiscal council helps raise the reputational costs of unjustified policy slippages, enhancing the credibility of commitments to discipline.

Figure 1.1. Number of Active Fiscal Councils



Source: National data.

Box 1 *(concluded)*

Regardless of whether the fiscal council is a signaling tool, a commitment device, or both, likely benefits include lower risk premiums and reduced uncertainty.

- A critical mass of expertise and resources is needed for the council to deliver credible inputs to the budget process (forecasts, costing) and public analyses that are perceived as nonpartisan.

Box 2. The Appropriate Pace of Short-Term Fiscal Adjustment

Whereas there was broad agreement among economists at the height of the financial crisis about the need for expansionary fiscal policies to help support demand, there has been no consensus about how rapidly—if at all—fiscal stimulus should now be unwound. Some point to still-high unemployment rates and other indicators of weak demand to argue against deficit reduction, which would hurt output in the short run, or even in support of additional fiscal stimulus. Others see the rapid buildup of debt and still-high deficits in some of the largest advanced economies as harbingers of a future fiscal crisis, especially in the context of projected trend increases in pension and health care spending. Do policymakers really face a choice between inflicting high social costs on their populations through fiscal austerity to bring down deficits and debt and playing with fire by delaying adjustment to support growth and employment?

There is now considerable evidence that fiscal multipliers—which measure the impact on output of discretionary changes in the fiscal balance—could be large in the current environment. There are two main reasons for this. First, during a recession, when there is already significant unused productive capacity in the economy, cuts in demand caused by fiscal tightening will have a large impact on real activity. This is in contrast to periods of very strong demand and high capacity utilization, when some of the impact of fiscal tightening will show up in reduced pressure on prices, rather than lower output. Second, with nominal interest rates already close to zero and credit channels impaired in many advanced economies, there is limited scope for monetary policy to offset the contractionary impact of fiscal tightening. But this situation is unlikely to persist indefinitely. As private sector balance sheets are mended and banks recover their lending capacity, private demand and capacity utilization should pick up, helping fiscal multipliers decline to more moderate levels.

This suggests that for many countries, deficit reduction would ideally be deferred to the future, when its output costs would likely be lower. Of course, countries under market pressure may find that limited access to financing leaves them with no option but to front-load their adjustment. Even countries with relatively unimpeded market access operate under some constraints, however. A mere promise to reduce deficits at some point in the future is unlikely to be seen by markets as credible, especially if debt ratios continue to spiral in the meantime. Concerns about credibility may be especially acute in countries where political gridlock may stand in the way of any consensus on fiscal policy. The fact that many advanced economies are still able to borrow at historically low interest rates means that market confidence in these sovereigns remains intact for now. However, this should not be interpreted as evidence of permanent immunity from costly rises in the risk premium. After all, many of the advanced economies now facing market pressures were recently seen as risk-free bets, too.

For countries with adequate financing space, then, the safest course of action is to undertake a path of gradual but sustained adjustment that aims at steady progress over the medium term toward a clearly defined objective. In this context, the adjustment undertaken in the advanced economies over the last three years, averaging about 1 percent of GDP annually in cyclically adjusted terms, seems about right. Where needed, measures to address rising entitlement costs could also contribute to building confidence.

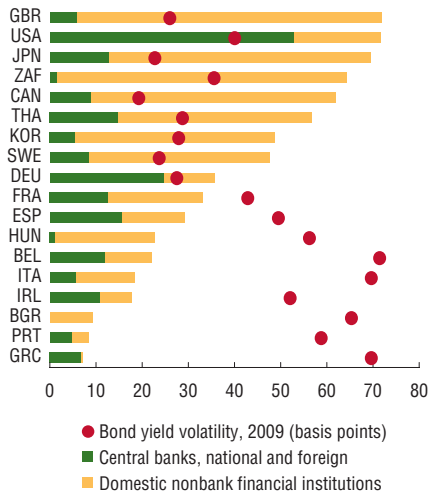
Of course, even modest up-front adjustment will involve output and employment costs, and it will therefore be essential to ensure that other policies remain as supportive as possible. In particular, monetary policy should remain accommodative for the foreseeable future, and structural policies to promote growth should also be pursued. The composition of fiscal adjustment could also be tilted to mitigate its adverse impact on the most vulnerable.

Box 3. Bond Yields and Stability of the Investor Base

Since the start of the global crisis, the sharp contrast in the level and volatility of bond yields among countries with similar deteriorations of their fiscal accounts suggests that one must look beyond just fiscal fundamentals for an explanation. The composition of countries' investor bases sheds light on the structural factors that drive these developments. Indeed, "real-money investors"—comprising domestic nonbank financial institutions as well as national and foreign central banks—are unleveraged and typically are "buy and hold" investors and are thus able to provide a more stable source of demand for government debt.[1]

Figure 3.1 illustrates that countries with the highest share of real-money investors at the end of 2007 were also among those that saw the lowest volatility during the crisis. Empirical analysis confirms this relationship over a longer period: while the level and volatility of bond yields rise with the debt ratio, they fall with the share of the debt that is in the hands of real-money investors.[2] Interestingly, while large holdings by domestic nonbank institutions depress yields and volatility in both advanced and emerging market economies, the impact of higher central bank holdings differs, putting downward pressure on yields and volatility in the former but increasing them in the latter. This may reflect concerns that central bank holdings of government debt in emerging market economies could be the result of inflationary budget financing.

Figure 3.1. Real Money Investors before the Crisis, 2007
(Percent of total debt, except as otherwise indicated)



Sources: Jaramillo, Zhang, and Gomez (2013); and IMF staff estimates.
Note: Bond yield volatility is measured as the annual standard deviation in basis points of sovereign bond yields, based on daily data.

In recent years, the mitigating role of central bank holdings in advanced economies most likely reflects quantitative-easing strategies undertaken for monetary policy purposes by the Bank of England, the Bank of Japan, and the U.S. Federal Reserve (and to a lesser extent the European Central Bank).[3] As documented in the April 2012 *Fiscal Monitor*, with large central bank purchases of government debt and other assets, consolidated general government and central bank debt is, on average, 30 percent of GDP lower than gross general government debt (Statistical Table 15). Central bank claims on the general government continued to increase in 2012, particularly in the United Kingdom.

In emerging market economies, a substantial share of gross debt comes from foreign official (non-market-determined) creditors, lowering borrowing costs and

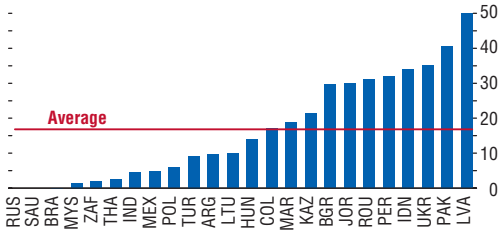
[1]This definition of institutional investor base is chosen to ensure comparability across a wide set of advanced and emerging market economies. Lack of data for this broad set of economies does not allow for the distinction of other buy-and-hold investors such as households and unleveraged nonresident funds, which could be important sources of financing in some countries.

[2]Analysis of the determinants of bond yield level and volatility is based on an annual panel data set of 30 advanced and 13 emerging market economies between 2000 and 2012. A Hausman-Taylor model is used to control for endogeneity occurring through the unobserved individual effects and allows for the inclusion of time-invariant variables. Explanatory variables, all lagged one period, include real-money investor holdings, expectations of macroeconomic and fiscal variables, global interest rates, volatility of bank returns, and dummy variables for euro area countries, reserve currency countries, and large emerging market economies. See Jaramillo, Zhang, and Gomez (2013).

[3]The Eurosystem of central banks' holding of sovereign debt due to monetary policy operations under the Securities Market Programme is much smaller (2 percent of total euro area gross government debt) but could potentially be expanded significantly under the Outright Monetary Transactions.

Box 3 *(concluded)*

Figure 3.2. Emerging Market Economies: Share of Official Lending in Total Debt Stock, 2012
(Percent)



Source: IMF staff estimates.

their volatility. In 2012, official loans accounted for 17 percent of the public debt of emerging market economies, with one-third of countries relying on non-market-determined creditors for more than 30 percent of their debt (Figure 3.2).[4] Effective interest rates for countries where official lending accounts for at least 17 percent of their government debt are, on average, 60 basis points lower than those for countries below this threshold, contributing to a generally lower interest rate–growth differential.

[4]In 2010 (latest data available), the share of official lending in low-income countries' external loans was 95 percent; the share of concessional loans was about 75 percent.

Box 4. Potential Sources of Contingent Liabilities in Emerging Market Economies

In emerging market economies as well as in advanced economies, contingent liabilities can arise from multiple sources. This box discusses specific examples in China and India.

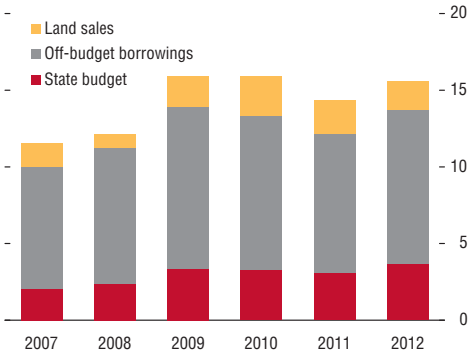
China

The financing of local infrastructure projects is a potential source of fiscal risk in China. Subnational governments in China are generally prohibited from borrowing directly, but on-budget revenue has not been adequate to finance their current spending (subnational governments account for the majority of social spending) and infrastructure. Therefore, subnational governments have financed infrastructure spending off budget, through the creation of local-government financing vehicles (LGFVs) that borrow directly from banks and capital markets, possibly collateralized by state-owned assets or land. Many existing LGFVs also rely on proceeds from land sales to repay their debt (Figure 4.1).

LGFV borrowing accelerated as subnational governments were assigned the responsibility to spend three-fourths of the Y4 trillion stimulus package (about 12 percent of GDP) in response to the global economic crisis, but lacked the financial resources to do so. The resulting infrastructure spending provided significant countercyclical support to the economy, but has raised concerns about the size of the public debt, the sustainability of subnational government finances, and the risk of deterioration in bank asset quality. A nationwide survey undertaken by the National Audit Office estimated subnational government debt at 27 percent of GDP[1] at the end of 2010, of which nearly half (47 percent) was channeled through LGFVs. Subnational government debt has almost doubled since 2008, driven largely by the booming LGFV-originated debt. Bank loans account for the majority of subnational governments debt (close to 80 percent), whereas direct government bond issuance amounts to only 7 percent.[2] Infrastructure spending accelerated again in 2012, to more than 15 percent of GDP, with subnational governments expected to finance about one-third. LGFVs are reportedly making more recourse to corporate bonds and trust products than before, but no updated data on the level of subnational government debt are yet available.

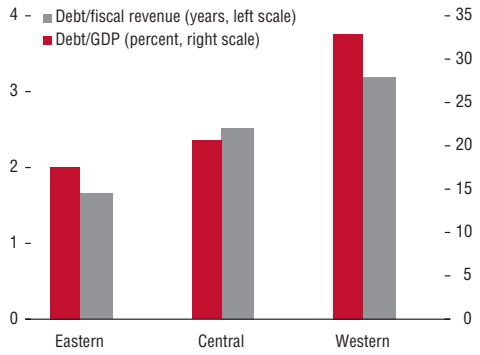
Available data suggest that the broadly balanced cyclically adjusted fiscal position and the favorable interest rate–growth differential currently mitigate LGFV-related near-term fiscal risks. Some local governments may be in a more vulnerable position than others, however, particularly those in the less-developed western provinces (Figure 4.2). Governments below the provincial level, which according to 2010 data together account for 70 percent of total subnational govern-

Figure 4.1. China: Financing Sources of Infrastructure Investment
(Percent of GDP)



Sources: CEIC; National Audit Office; Soufun.
Note: 2012 data are estimates.

Figure 4.2. China: Debt Repayment Capacities by Regions, 2010



Sources: CEIC; National Audit Office.

[1]Of which 17 percent pertains to direct repayment obligations, 6 percent is explicit guarantees, and another 4 percent refers to implicit liability for certain debt relief.

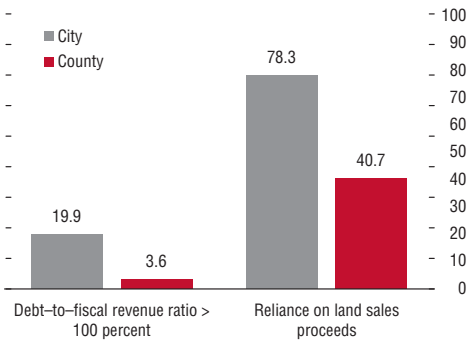
[2]This includes bonds issued by the central government on behalf of local governments since 2009.

Box 4 *(concluded)*

ment debt, are also exposed to higher debt-servicing risks (Figure 4.3). More broadly, the debt-servicing capacity of local governments is vulnerable to large shifts in the housing market, given their reliance on land sales—about 80 percent of surveyed cities and 40 percent of surveyed counties promised to repay their debt using proceeds from land sales (Figure 4.3).

Because of the large number of LGFVs and the unclear boundary between an LGFV and a commercially oriented, locally owned state enterprise, it is difficult to estimate the extent of LGFV borrowing that is fiscal in nature and the potential implications of this borrowing for government liabilities. The data reported in Tables 1 and 2 may not fully reflect the true extent of government deficits and debt. International experience suggests that subnational government could be an important source of fiscal risks over the medium term, especially in the context of rapid urbanization and related rising expenditure needs. Authorities have taken initial steps to address the fiscal risks, including conducting local government debt surveys, cleaning up LGFVs that run large deficits, forbidding government guarantees and public-property-based collateral for bank loans, encouraging market-based financing channels such as corporate bond markets and municipal bonds in pilot provinces, and promoting private engagement in public infrastructure investment. Establishment of the appropriate legal framework, reporting requirements, and accounting standards can support effective implementation of these initiatives and help further contain fiscal risks.

Figure 4.3. China: Repayment Capacities at Lower-Government Level
(Percentage of cities and counties surveyed)



Source: National Audit Office.

India

Credit growth was rapid in India in the years before the crisis, with lending to the private sector expanding by 20 percentage points of GDP during 2001–08. It remained strong in the aftermath of the crisis, with a growing concentration on infrastructure projects, in response to the government's ambitious investment targets. India's banks remain well capitalized, and the likelihood of financial sector stress is low (as noted in the October 2012 *World Economic Outlook*). But credit quality has tended to deteriorate recently, particularly among the state-owned banks, which account for 73 percent of banking assets. Gross nonperforming assets in public banks reached 3.3 percent of advances in 2012. However, the long-run risk may be underestimated, as historically about 15 percent of assets reported as "restructured" (a category that likely accounted for 7.3 percent of the public banks' assets as of September 2012) are eventually classified as nonperforming.

The Reserve Bank of India has recently taken important steps to tighten bank reporting requirements to get a more accurate picture of asset quality. But state-owned bank portfolios remain vulnerable to losses from delayed infrastructure projects and, most importantly, to the recent growth slowdown that has dented the profits of the large companies that account for the bulk of Indian banks' loan portfolios. The economy now appears to have bottomed out, but this may not yet be fully reflected in banks' credit quality. The new and higher capital standards under Basel III will also demand an increase in bank capital if credit growth is to continue. Although precise estimates of state-owned banks' future capital needs are difficult to compute, these needs are expected to be about 1 percent of GDP cumulatively between 2013 and 2019, depending on the growth trajectory. Further asset quality deterioration could raise needs substantially, but reducing government ownership (which would require legislative action) could bring them down. Beyond bank capitalization, potential losses among India's state-owned enterprises and the large program of public-private partnerships also represent contingent liabilities.

Box 5. Fiscal Adjustment in the United States: Making Sense of the Numbers

There is hardly any disagreement that fiscal consolidation is essential for many advanced economies over the medium term. However, views often diverge about exactly how much adjustment is required, reflecting important differences in assumptions. This box illustrates this issue by looking at the case of the United States.

In the United States, several agencies make projections of the federal budget balance and debt level, including the Office of Management and Budget (OMB), which is responsible for the formulation and execution of the budget, and the Congressional Budget Office (CBO), an independent agency that provides analysis to support the congressional budget process. The CBO provides 10-year projections on the basis of legislated policies, whereas the OMB also incorporates the estimated budgetary effects of new measures proposed by the administration. While the OMB's latest estimates[1] show that the federal debt held by the public[2] will stabilize by 2022 as a share of GDP, the CBO's estimates show debt still increasing at that date. The implied improvements in the headline primary balance are 7½ percentage points for the OMB during 2012–22 and 3½ percentage points for the CBO during 2013–23. In contrast, the illustrative baseline adjustment scenario in the current issue of the *Fiscal Monitor* shows a required improvement in the headline primary balance of about 10 percent of GDP by 2022.[3] What explains these sharp differences?

- *Comparing apples with oranges.* Whereas the CBO and OMB focus on the federal government debt held by the public, the *Fiscal Monitor* looks at gross debt of the general government, which also includes state and local governments. The difference between the two concepts was about 33 percent of GDP in 2012.
- *Different policies, different outcomes.* The policy assumptions underlying the CBO and OMB projections, on the one hand, and the *Fiscal Monitor* projections, on the other, differ completely. CBO and OMB project the fiscal path under legislated and/or proposed policies, with no explicit assumptions about debt targets. Both offices find that the federal debt would be in the neighborhood of 75 percent of GDP by 2022. By contrast, the *Fiscal Monitor* calculates the adjustment required to achieve a general government debt target of 60 percent of GDP by 2030, an entirely different exercise than that undertaken by the CBO or OMB. The implicit federal government debt under the illustrative *Fiscal Monitor* scenario would decline to about 54 percent of GDP by 2022. That scenario involves a larger improvement in the primary balance than the CBO or OMB forecasts, primarily because it targets a debt ratio that is much more ambitious than what comes out of the CBO/OMB projections.
- *Different macroeconomic outlook, different adjustment path.* Both the OMB and CBO assume a relatively benign interest rate environment over the next 10 years, with interest rate–growth differentials (for the federal government) still close to zero by 2022.[4] The *Fiscal Monitor* baseline assumes that interest rate–growth differentials (for the general government) will also remain relatively low for the next 5 years but will increase gradually thereafter as monetary policy is normalized and fundamentals, including pressure on the available saving pool and the risks implied by high debt levels, begin to have more weight. This implies an interest rate–growth differential of 1¼ percent by 2022 (Figure 5.1), above the pre-2007 long-term average (¾ percent) and

[1]The latest OMB analysis is contained in the Mid-Session Review of July 2012; the CBO released "The Budget and Economic Outlook for Years 2013–2023" in February 2013. Both institutions also produce 75-year fiscal forecasts annually.

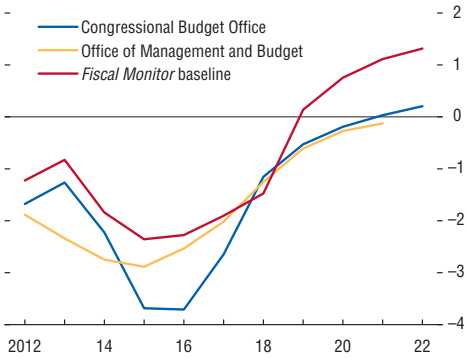
[2]This includes debt held by the Federal Reserve but excludes federal trust funds and other government accounts. The concept of general government debt used in the *Fiscal Monitor* adds other liabilities of the federal government and the gross liabilities of state and local governments to the "debt held by the public" and subtracts the cross-holdings.

[3]This number is consistent with that reported in Statistical Table 13a, which shows the adjustment in the *cyclically adjusted primary balance* between 2013 and 2020. For comparison with the CBO/OMB numbers, the change in the headline primary balance between 2012 and 2022 is reported here.

[4]Owing to data availability, the interest rate–growth differential reported here for the CBO and OMB is based on net, rather than gross, interest payments. The *Fiscal Monitor* uses the latter concept. The implied interest rate–growth differential could differ by an average of about 0.5 percent because of this.

Box 5 *(concluded)*

Figure 5.1. United States: Assumptions on Interest Rate–Growth Differential, 2012–22
(Percent)



Sources: U.S. Office of Management and Budget (2012); U.S. Congressional Budget Office (2013); and IMF staff estimates.
Note: The implied interest rate–growth differentials from the Office of Management and Budget and Congressional Budget Office are based on calculations using net interest and are converted to a calendar-year basis.

reflecting much higher debt levels.[5] Using instead the interest rate–growth differential projected by the CBO and OMB, the required adjustment to achieve the 60 percent general government debt target by 2030 would be reduced by about 1 percent of GDP relative to the *Fiscal Monitor* baseline (Table 5.1).

[5]The average interest rate–growth differential in the United States over 1991–2008 was 0.7 (Escolano, 2010).

Table 5.1. United States: Key Results under the CBO, OMB, and *Fiscal Monitor* Adjustment Scenarios
(Percent of GDP)

	OMB	CBO	*Fiscal Monitor*
Federal debt ratio in 2022[1]	75	76	54
Headline primary balance adjustment, 2012–22[2]	7.5	3.5	10.2
Headline primary balance adjustment, 2012–22: Scenario with OMB/CBO interest rate–growth differential assumptions			9.0

Sources: U.S. Office of Management and Budget (OMB) (2012); U.S. Congressional Budget Office (CBO) (2013); and IMF staff estimates.

[1] OMB and CBO debt ratios refer to federal government. *Fiscal Monitor* baseline scenario shows a general government debt of about 87 percent of GDP by 2022. Assuming state, local, and federal trust funds amount to 33 percent of GDP, the implied federal debt is 54 percent of GDP.

[2] For the CBO, the change in the primary balance refers to the period 2012–23.

Box 6. Public Debt Dynamics and Fiscal Adjustment in Low-Income Countries in Sub-Saharan Africa

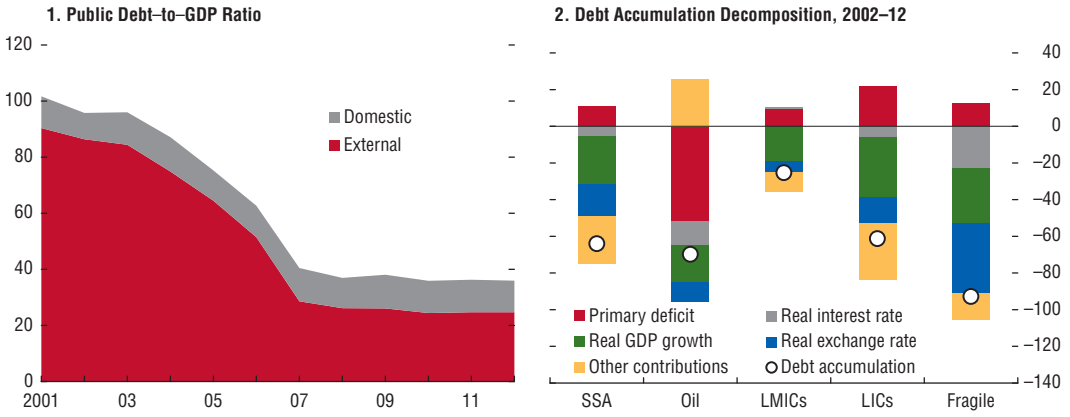
In most low-income countries in sub-Saharan Africa,[1] public debt–to–GDP ratios—particularly those involving external debt—declined significantly throughout the early 2000s (Figure 6.1, left panel). Although external debt relief under the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative played a key role in the reduction, additional factors (such as, in particular, faster output growth and exchange rate appreciation) also helped (Figure 6.1, right panel). For oil exporters, the favorable terms-of-trade shock in 2005–06 improved fiscal balances and boosted growth, significantly alleviating the debt burden. For low-income countries, apart from debt relief (reported as part of "Other contributions" in Figure 6.1, right panel), the most crucial factor was GDP growth, with no significant impact from real exchange rate appreciation. Among fragile states, a few still exhibit high debt-to-GDP ratios, but most have experienced sharp declines (e.g., Burundi, the Central African Republic, the Democratic Republic of the Congo, and Liberia).

Since debt relief, improved macroeconomic policies and generally strong growth have kept debt ratios stable on average. However, a few countries (like Ghana and Senegal) have registered sizable increases, largely on account of rapid growth in spending, including for infrastructure. In addition, fiscal deficits widened in most countries in the aftermath of the Great Recession, and have narrowed little since then.

[1]This box focuses on sub-Saharan African countries currently eligible for concessional financing from the IMF under the Poverty Reduction and Growth Trust. A number of these countries are lower middle income.

Figure 6.1. Sub-Saharan Africa: Public Debt–to–GDP Ratio and Debt Accumulation Decomposition

(Percent of GDP; median)



Sources: IMF staff estimates and projections.
Note: Fragile: fragile countries; LICs: low-income countries; LMICs: lower-middle-income countries; Oil: oil exporters; SSA: sub-Saharan Africa.

Appendix 1. Reforming Energy Subsidies

Energy subsidies are high in many emerging market economies and low-income countries because of limited pass-through of recent increases in international energy prices to domestic consumers. But inadequate pricing of energy products is also common in advanced economies, in which energy taxes are often below levels needed to fully capture the negative externalities of energy consumption in regard to the environment, public health, and traffic congestion. These developments have led to renewed calls to phase out energy subsidies. For instance, the Group of Twenty (G-20) Pittsburgh Communiqué of September 2009 called for a phase-out of inefficient fossil fuel subsidies in all countries, and this commitment was reaffirmed at the 2012 Los Cabos G-20 meeting. This appendix summarizes the findings of IMF (2013a), which presents estimates of energy subsidies for 176 countries. It also discusses how to undertake energy subsidy reform, drawing on insights from 22 country case studies.

Pretax and posttax subsidies

A pretax consumer subsidy arises for a certain good when the price paid by consumers (households and enterprises) is below its supply cost (including transportation and distribution costs). For internationally traded goods, such as petroleum products, the supply cost is the international price adjusted for distribution and transportation costs. In the case of nontraded goods—such as electricity, in most countries—the relevant price is the cost recovery price for the domestic producer, including a normal return to capital and distribution costs.

A posttax subsidy arises when the price paid by the consumer does not cover the supply cost plus an efficient level of consumption taxation to meet revenue requirements and correct for negative environmental and other externalities. Therefore, when there is a pretax subsidy, the posttax subsidy is equal to the efficient tax plus the pretax subsidy. When there is no pretax subsidy, the posttax subsidy is equal to the difference between efficient and actual taxation.

A producer subsidy arises when a domestic producer suffers losses at pretax supply prices.

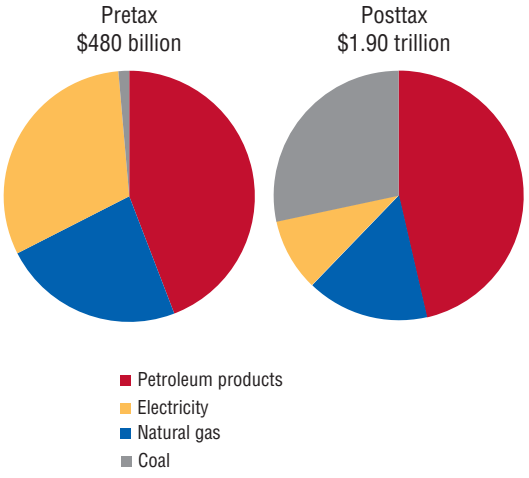
Implications of energy subsidies

Energy subsidies have wide-ranging economic consequences. Though aimed at protecting consumers, subsidies aggravate fiscal imbalances (or alternatively crowd out priority public spending) and depress private investment. International evidence further shows that energy subsidies exacerbate macroeconomic imbalances. By diluting incentives to reduce domestic energy consumption, incomplete pass-through of increasing international energy prices to domestic consumers worsens the adverse balance of payments impact in oil-importing economies and reduces the beneficial balance of payments impact in oil-exporting countries. In the latter, the failure to fully adjust domestic prices during periods of rising international prices can make demand management more difficult when higher oil prices boost incomes in the oil sector and lead to higher domestic demand. Subsidies also distort resource allocation and lead to negative externalities by encouraging excessive energy consumption and pollution, artificially promoting capital-intensive industries, reducing incentives for investment in renewable energy, and accelerating the depletion of natural resources. Subsidies are typically highly inequitable, as they are largely captured by higher-income households and divert public resources away from spending that is more pro-poor. On average, the richest 20 percent of households in low- and middle-income countries capture about six times more in energy subsidies than the poorest 20 percent of households.

Magnitude of energy subsidies

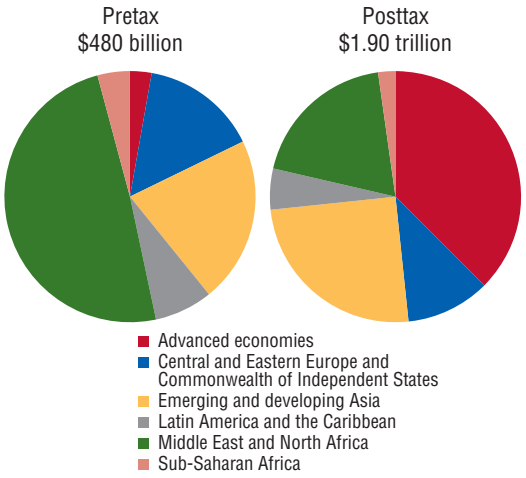
Energy subsidies are pervasive and impose substantial fiscal costs in most regions (Figures A1.1, A1.2, and A1.3). Pretax subsidies for petroleum products, electricity, natural gas, and coal reached US$480 billion in 2011 (0.7 percent of global GDP or 2 percent of total government revenues). Petroleum product subsidies and electricity account for about three-quarters of total pretax

Figure A.1.1. Composition of Subsidy Costs by Product
(Percent)



Source: IMF (2013a).

Figure A.1.2. Composition of Subsidy Costs by Region
(Percent)

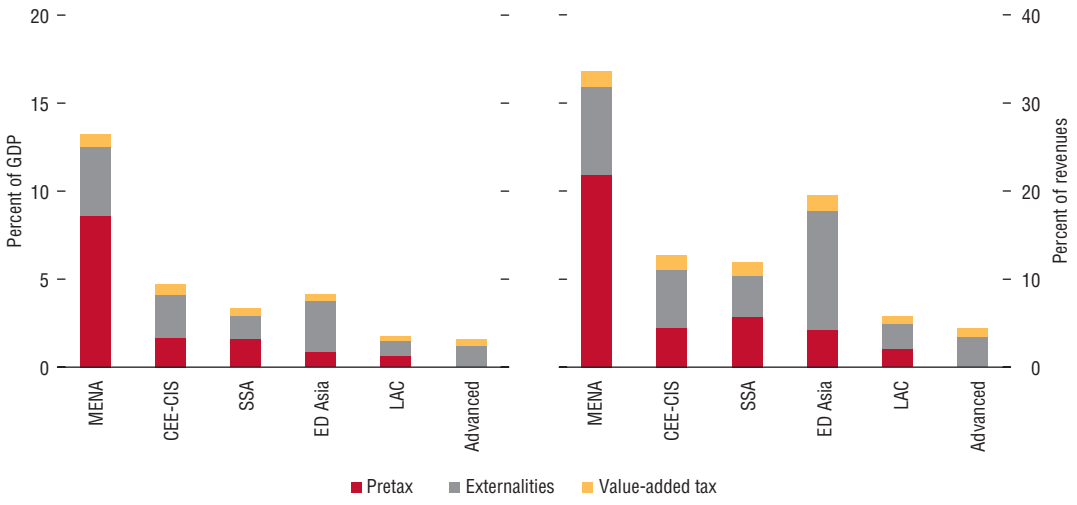


Source: IMF (2013a).

subsidies. These subsidies are concentrated in the Middle East and North Africa region, which accounts for about 50 percent of global subsidies (more than 8½ percent of regional GDP or 22 percent of total government revenues). Oil exporters, most of which are developing and emerging market economies, account for about two-thirds of total subsidies.

Posttax subsidies amount to US$1.9 trillion (2½ percent of global GDP or 8 percent of total government revenues). Subsidies to petroleum products and coal account for about three-quarters of global

Figure A.1.3. Magnitude of Energy Subsidies by Region



Source: IMF (2013a).
Note: Advanced: advanced economies; CEE-CIS: Central and Eastern Europe and Commonwealth of Independent States; ED Asia: emerging and developing Asia; LAC: Latin America and the Caribbean; MENA: Middle East and North Africa; SSA: sub-Saharan Africa.

posttax subsidies. Advanced economies account for about 40 percent of these subsidies, and oil exporters account for about one-third. However, as a percentage of GDP and government revenues, these subsidies are highest in the Middle East and North Africa, at about 13 and 33 percent, respectively.

Implementing subsidy reform

Despite the potential gains, many countries have found energy subsidy reform difficult. Price adjustments have often led to widespread public protests, with a subsequent complete or partial reversal of price increases. The absence of public support for subsidy reform partly reflects a lack of confidence in governments' ability to reallocate the resulting budgetary savings to benefit the broader population, as well as concerns that vulnerable groups will not be protected. This problem is particularly challenging in oil-exporting countries, where subsidies are seen as a mechanism to distribute the benefits of natural resource endowments to their populations and where the capacity to administer targeted social programs is typically limited. Governments are also often concerned about the inflationary effects of higher energy prices and their adverse impact on competitiveness. Furthermore, subsidy reform can be complex when it involves efforts to reduce inefficiencies and production costs, as is often the case for the electricity sector.

Although there is no single recipe for successful subsidy reform, country experiences suggest that the following ingredients can facilitate success and help avoid policy reversals:

- a comprehensive energy sector reform plan with clear long-term objectives, a detailed analysis of the impact of reforms, and consultation with stakeholders;
- an extensive communication strategy, supported by improvements in transparency, such as the dissemination of information on the magnitude of subsidies and the recording of subsidies in the budget;
- appropriately phased price increases, which can be sequenced differently across energy products and take into account the capacity to implement mitigating measures;
- improvements in the efficiency of state-owned enterprises to reduce producer subsidies;
- measures to protect the poor through targeted cash or near-cash transfers or, if this option is not feasible, a focus on existing targeted programs that can be expanded quickly; and
- institutional reforms that depoliticize energy pricing, such as the introduction of automatic pricing mechanisms.

METHODOLOGICAL AND STATISTICAL APPENDIX

This appendix comprises five sections: "Data and Conventions" provides a general description of the data and of the conventions used for calculating economy group composites. "Fiscal Policy Assumptions" summarizes the country-specific assumptions underlying the estimates and projections for 2013–18. "Definition and Coverage of Fiscal Data" provides details on the coverage and accounting practices underlying each country's *Fiscal Monitor* data. "Economy Groupings" summarizes the classification of countries in the various groups presented in the *Fiscal Monitor*. "Statistical Tables" on key fiscal variables complete the appendix. Data in these tables have been compiled on the basis of information available through the beginning of April 2013.

Data and conventions

Country-specific data and projections for key fiscal variables are based on the April 2013 *World Economic Outlook* database, unless indicated otherwise, and compiled by IMF staff. Historical data and projections are based on the 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 other sources having official data, including the IMF's *International Financial Statistics*.

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

All fiscal data refer to the general government where available and to calendar years, except in the cases of Côte d'Ivoire, Egypt, Hong Kong Special Administrative Region, Lao P.D.R., Pakistan, Singapore, and Thailand (fiscal year).

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

For the purpose of data reporting in the *Fiscal Monitor*, the G-20 member aggregate refers to the 19 country members and does not include the European Union.

For most countries, fiscal data follow the IMF's *Government Finance Statistics Manual* (*GFSM*) *2001*. The overall fiscal balance refers to net lending (+)/borrowing (–) of the general government. In some cases, however, the overall balance refers to total revenue and grants minus total expenditure and net lending.

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

Argentina. Total expenditure and the overall balance account for cash interest and the IMF staff's estimate of accrued interest payments. The GDP and CPI (the Consumer Price Index for Greater Buenos Aires, or CPI-GBA) are officially reported data. The IMF has, however, issued a declaration of censure and called on Argentina to adopt remedial measures to address the quality of the official GDP and CPI-GBA data. Alternative data sources have shown significantly lower real growth and considerably higher inflation rates than the official data since 2008 and 2007, respectively. In this context, the IMF is also using alternative estimates of GDP growth and of CPI inflation for the surveillance of macroeconomic developments in Argentina.

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

China. Fiscal data exclude allocation to the rainy-day fund. Up to 2009, public debt data include only

central government debt as reported by the Ministry of Finance. For 2010, debt data include subnational debt identified in the 2011 *National Audit Report*. Information on new debt issuance by the local governments and some government agencies in 2011 and 2012 is not yet available, hence debt data reflect only amortization plans as specified in the 2011 *National Audit Report*. Public debt projections beyond 2012 assume that about 60 percent of subnational debt will be amortized by 2013, 16 percent over 2014–15, and 24 percent beyond 2016, with no issuance of new debt or rollover of existing debt. Deficit numbers do not include some expenditure items, largely infrastructure investment financed off the budget through land sales and local-government financing vehicles.

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

Côte d'Ivoire. Data are on a fiscal year basis.

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

Hong Kong SAR. Data are on a fiscal year basis. Cyclically adjusted balances include adjustments for land revenue and investment income.

Hungary. The cyclically adjusted and cyclically adjusted primary balances for 2011 exclude one-time revenues from asset transfers to the general government due to changes to the pension system.

Ireland. The general government balances between 2009 and 2015 reflect the impact of banking support. The fiscal balance estimates excluding these measures are –11.5 percent of GDP for 2009, –10.7 percent of GDP for 2010, –9.1 percent of GDP for 2011, –7.6 percent of GDP for 2012, –6.8 percent of GDP for 2013, –4.4 percent of GDP for 2014, and –2.4 percent of GDP for 2015. Cyclically adjusted balances exclude financial sector support.

Jordan. The general government balances and general government revenues include grants.

Lao P.D.R. Data are on a fiscal year basis.

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

Mexico. General government refers to 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. Ratios for 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.

Portugal. The substantial upward revision in the 2012 fiscal outturn by the National Institute of Statistics, owing to reclassification of several large transactions, is not yet reflected in the data.

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 at 0.5 percent of GDP for 2011 and 3.3 percent of GDP for 2012.

Sudan. Data for 2011 exclude South Sudan after July 9. Data for 2012 and onward pertain to the current Sudan.

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 differ from those 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 0.8 percent of GDP in 2008, 2.2 percent of GDP in 2009, 0.2 percent of GDP in 2010, and 0.1 percent of GDP in 2011.

Fiscal policy assumptions

Historical data and projections of key fiscal aggregates are in line with those of the April 2013 *World*

Economic Outlook, unless highlighted. For underlying assumptions, other than on fiscal policy, see the April 2013 *World Economic Outlook*.

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. The 2012 estimates are based on actual data on outturns and IMF staff estimates. For the outer years, the assumed improvement in the fiscal balance is predicated on an assumed growth of revenues in the context of a pickup in economic activity combined with a decline in the growth of expenditures.

Australia. Fiscal projections are based on the 2012/13 Mid-Year Economic and Fiscal Outlook, Australian Bureau of Statistics, and IMF staff projections.

Austria. Projections take into account the federal financial framework for 2013–16 as well as associated further implementation needs and risks.

Belgium. IMF staff projections for 2013 and beyond are based on unchanged policies.

Brazil. 2012 estimates are based on actual data on outturns for the central government and financing needs of subnational governments and public enterprises. 2013 projections are based on the budget as approved in March 2013. In outer years, the IMF staff assumes adherence to the announced primary target.

Burkina Faso. Estimates are based on discussions with the authorities, past trends, and the impact of ongoing structural reforms.

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

Canada. Projections use the baseline forecasts in "Jobs Growth and Long-Term Prosperity" (March 21, 2013; the fiscal year 2013/14 budget). The IMF staff makes adjustments to this forecast for differences in macroeconomic projections. IMF staff forecasts also incorporate the most recent data releases from Statistics Canada's Canadian System of National Economic Accounts, including federal, provincial, and territorial budgetary outturns through the end of the fourth quarter of 2012.

China. In 2013, the fiscal impulse is assumed to be neutral.

Czech Republic. Projections are based on the authorities' budget forecast for 2012–13 with adjustments for macroeconomic projections of the IMF staff. Projections for 2014 onward are based on unchanged policies.

Denmark. Projections for 2012–14 are aligned with the latest official budget estimates and the underlying economic projections, adjusted where appropriate for the IMF staff's macroeconomic assumptions. For 2015–18, the projections incorporate key features of the medium-term fiscal plan as embodied in the authorities' 2012 Convergence Programme submitted to the European Union.

Egypt. Fiscal projections are based mainly on budget sector operations and discussions with the authorities.

Estonia. The forecast is cash based and incorporates the authorities' 2012 budget, adjusted for newly available information and for the IMF staff's macroeconomic scenario.

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

France. Projections for 2012 and beyond reflect the authorities' 2012–17 multiyear budget, adjusted for fiscal packages, differences in assumptions on macro and financial variables, and revenue projections. The 2012 fiscal deficit was revised from 4.6 percent of GDP to 4.5 percent on the basis of preliminary data provided by the authorities. The difference in the 2013 fiscal deficit between the IMF staff (3.7 percent of GDP) and the authorities (3.0 percent of GDP) is due to the different growth projection (0.8 percent for the government and –0.1 percent for the IMF staff).

Germany. The estimates for 2012 are preliminary estimates from the Federal Statistical Office. The IMF staff's projections for 2013 and beyond reflect

the authorities' adopted core federal government budget plan adjusted for the differences in the IMF staff's macroeconomic framework and staff assumptions about fiscal developments in state and local governments, the social insurance system, and special funds. 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 for 2012 and the medium term are consistent with the policies discussed with the authorities in the context of the Extended Fund Facility. Public debt projections assume an additional haircut (official sector involvement) to bring the debt ratio to 124 percent of GDP in 2020.

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

Hungary. Fiscal projections include IMF staff projections of the macroeconomic framework and of the impact of existing legislated measures, as well as fiscal policy plans as announced at the end of January 2013.

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. The 2011 central government deficit was lower than expected (1.1 percent of GDP), reflecting underspending, particularly on public investment. The central government 2012 deficit is estimated at 1.8 percent of GDP, slightly lower than the revised budget estimate of 2.2 percent of GDP. Budget execution still remains a problem that is reflected in a low budget deficit. Fiscal projections for 2013–18 are built around key policy reforms needed to support economic growth, namely, enhancing budget implementation to ensure fiscal policy effectiveness, reducing energy subsidies through gradual administrative price increases, and continuous revenue mobilization efforts to increase space for infrastructure development.

Ireland. Fiscal projections are based on the 2013 budget and the "Medium-Term Fiscal Statement" (published in November 2012), which commits to an €8.6 billion consolidation over 2013–15. It also includes the estimated fiscal impact of the February 2013 promissory note transaction. The fiscal projections are adjusted for differences between the IMF staff's macroeconomic projections and those of the Irish authorities.

Israel. Historical data are based on government finance statistics submitted by the Ministry of Finance. The historical data, together with the announced fiscal consolidation plan by the authorities, form the basis for the IMF staff's medium-term fiscal projections.

Italy. Fiscal projections incorporate the impact of the government's announced fiscal adjustment package, as outlined in the September 2012 update to the "Documento di Economia e Finanza" and the 2013 budget. Estimates for the 2012 outturn are preliminary. IMF staff projections are based on the authorities' estimates of the policy scenario, adjusted mainly for differences in macroeconomic assumptions—they do not include the impact of the government's proposal to clear payment arrears. After 2015, projections are made on the basis of unchanged policies assuming a constant structural primary balance.

Japan. Projections are based on fiscal measures already announced by the government, including consumption tax increases, earthquake reconstruction spending, and the stimulus package. Medium-term projections assume that expenditure and revenue of the general government develop in line with current underlying demographic and economic trends and recent fiscal stimulus.

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

Korea. Fiscal projections assume that fiscal policies will be implemented in 2013 as announced by the government. Expenditure forecasts for 2013 are in line with the budget. Revenue projections reflect the IMF staff's macroeconomic assumptions, adjusted for discretionary revenue-raising measures already

announced by the government. Medium-term projections assume that the government will continue with its consolidation plans and balance the budget (excluding social security funds) by 2014, consistent with the government's medium-term goal.

Lithuania. Fiscal projections for 2012 are based on the authorities' 2012 budget after differences in macroeconomic assumptions and performance so far are adjusted for.

Malaysia. Fiscal year 2012 projections are based on preliminary outturn for the first through third quarters and IMF staff projections taking into account original and supplemental budget numbers. For the remainder of the projection period, the IMF staff assumes that the authorities undertake subsidy reform and introduce the goods and services tax in 2015.

Mali. Estimates reflect approved budget and agreed-upon program budget for the current year, authorities' medium-term fiscal framework, and IMF staff estimates for outer years.

Mexico. Fiscal projections for 2012 are broadly in line with the approved budget; projections for 2013 onward assume compliance with the balanced-budget rule.

Moldova. Fiscal projections are based on the IMF staff's forecast for GDP, consumption, imports, wages, energy prices, and demographic changes.

Mozambique. Fiscal projections assume a moderate increase in revenue in percent of GDP and a commensurate increase in domestic primary spending. They account for a lower aid flow, with grants contribution declining. The projections were discussed with the authorities during the Policy Support Instrument review missions in October 2012.

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

Netherlands. Fiscal projections for 2012–18 are based on the authorities' Bureau for Economic Policy Analysis budget projections, after adjustments for differences in macroeconomic assumptions.

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

Nigeria. Estimates reflect historical data series, the annual budget, and the medium-term expenditure framework at the general government level and additional data from the authorities.

Norway. Fiscal projections are based on the authorities' 2013 budget announced in October 2012, supplemented by information from the 2012 budget.

Philippines. Fiscal projections assume that the authorities' fiscal deficit target will be achieved in 2013 and beyond. Revenue projections reflect the IMF staff's macroeconomic assumptions and incorporate anticipated improvements in tax administration. Expenditure projections are based on budgeted figures, institutional arrangements, and fiscal space in each year.

Poland. Data are on a European System of Accounts 1995 (ESA-95) (accrual) basis. Projections are based on the 2013 budget and its execution up to the third quarter of 2012. The projections take into account the diversion of contributions from the pillar II to the pillar I pension system.

Portugal. Projections reflect the authorities' commitments under the EU/IMF-supported program for 2013–14 and the IMF staff's projections thereafter.

Romania. Fiscal projections are based on discussions with the authorities and the 2013 budget passed by Parliament.

Russian Federation. 2013–18 projections are based on the oil-price-based fiscal rule introduced in December 2012, with adjustments for the IMF staff's revenue forecast, and for public spending already budgeted for 2013–15.

Saudi Arabia. The authorities base their budget on a conservative assumption for oil prices with adjustments to expenditure allocations considered in the event that revenues exceed budgeted amounts. IMF staff projections of oil revenues are based on *World Economic Outlook* baseline oil prices. On the expenditure side, wage bill estimates incorporate 13th-month pay awards every three years in accordance with the lunar calendar, and capital spending over the medium term is in line with the authorities' priorities established in National Development Plans.

Senegal. Estimates are based on program targets for 2012–13 and mostly debt sustainability analysis considerations thereafter. Fiscal accounts are shown in accordance with the *GFSM 2001* methodology.

Singapore. Projections are based on budget numbers for fiscal year 2012/13 and unchanged policies thereafter.

Slovak Republic. Estimates are based on the IMF staff's revenue projections and on expenditures in the 2012–15 budget, including unbudgeted expenditure in 2012. Projections for 2013 are based on the authorities' plans to reduce the overall deficit to 2.9 percent of GDP.

South Africa. Fiscal projections are based on the authorities' 2013 Budget Review released on February 27, 2013.

Spain. For 2013 and beyond, fiscal projections are based on the measures specified in the Stability Programme Update 2012–15, the revised fiscal policy recommendations by the European Council in July 2012, the subsequent fiscal package, the biannual budget plan for 2013–14 announced in August 2012, and the 2013 budget approved in December 2012.

Sweden. Fiscal projections for 2012 are broadly in line with the authorities' projections. The impact of cyclical developments on the fiscal accounts is calculated using the Organisation for Economic Cooperation and Development's latest semielasticity.

Switzerland. Projections for 2012–18 are based on IMF staff calculations, which incorporate measures to restore balance in the federal accounts and strengthen social security finances.

Thailand. Fiscal projections are based on IMF staff estimates from the latest Article IV consultation, adjusted for changes in macroeconomic assumptions as well as in the classification method.

Turkey. Fiscal projections assume that current expenditures will be in line with the authorities' 2012–14 Medium-Term Programme, but that capital expenditures will be exceeded given that projects initiate in 2011.

Ukraine. Projections are based on IMF staff estimates.

United Kingdom. Fiscal projections are based on the Treasury's 2013 budget, published in March 2013. The authorities' revenue projections are adjusted for differences in forecasts of macroeconomic variables (such as GDP growth). The IMF staff's projections also exclude the temporary effects of financial sector interventions and the effect on public sector net investment in 2012–13 of transferring assets from the Royal Mail Pension Plan to the public sector. Real government consumption and investment are part of the real GDP path and may or may not be the same as those projected by the Office for Budget Responsibility. Subsequent to the finalization of these projections, previously unpublished data were provided on the timing of transfers of profits from the Bank of England's Asset Purchases Facility. Such transfers affect general government net interest payments. Consequently, the overall balance is unchanged, but calendar year primary balances are affected. The new information on timing arithmetically reduces primary deficits in calendar year 2012 and increases them in calendar year 2013. The numbers do not change fiscal year projections.

United States. Fiscal projections are based on the February 2013 Congressional Budget Office baseline adjusted for the IMF staff's policy and macroeconomic assumptions. This baseline incorporates the provisions of the American Taxpayer Relief Act signed into law on January 2, 2013. Key near-term policy assumptions include replacement of automatic spending cuts (sequester) with back-loaded consolidation measures from fiscal year 2014 onward (the sequester is assumed to be in full effect from March 1, 2013, to September 30, 2013). Over the medium term, the IMF staff assumes that Congress will continue to make regular adjustments to Medicare payments (DocFix) and will extend certain traditional programs (such as the research and development tax credit). Fiscal projections are adjusted to reflect the IMF staff's forecasts of key macroeconomic and financial variables and different accounting treatment of financial sector support and are converted to a general government basis.

Vietnam. Revenues and financing projections reflect the information and measures in the approved budget and the IMF staff's macro framework assumptions.

Definition and coverage of fiscal data

Table SA.1. 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		Accounting practice
Country	Aggregate	Subsectors		Aggregate	Subsectors		Aggregate	Subsectors	
Australia	GG	CG, LG, SG	C	GG	CG, LG, SG	C	GG	CG, LG, SG	A
Austria	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A
Belgium	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A
Canada	GG	CG, SG, LG, SS, NFC	A	GG	CG, SG, LG, SS, NFC	A	GG	CG, SG, LG, SS, NFC	A
Czech Republic	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Denmark	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Estonia	GG	CG, LG, SS	C	—	—	—	GG	CG, LG, SS	C
Finland	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
France	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Germany	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A
Greece	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Hong Kong SAR	CG	CG	C	CG	CG	C	CG	CG	C
Iceland	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Ireland	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Israel	GG	CG, SS	A	GG	CG, SS	A	GG	CG, SS	A
Italy	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Japan	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Korea	CG	CG	C	CG	CG	C	GG	CG, LG	C
Netherlands	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
New Zealand	CG	CG	A	CG	CG	A	CG	CG	A
Norway	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A
Portugal	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A
Singapore	CG	CG	C	CG	CG	C	CG	CG	C
Slovak Republic	GG	CG, LG, SS	A	GG	CG, LG, SS	A	GG	CG, LG, SS	A
Slovenia	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Spain	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A
Sweden	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Switzerland	GG	CG, SS	A	GG	CG, SS	A	GG	CG, SS	A
United Kingdom	GG	CG, LG	A	GG	CG, LG	A	GG	CG, LG	A
United States	GG	CG, LG, SG	A	GG	CG, LG, SG	A	GG	CG, LG, SG	A

Note: Coverage: BA = budgetary central government, CG = central government, EA = extrabudgetary units, FC = financial public corporations, GG = general government, LG = local governments, NFC = nonfinancial public corporations, NFPS = nonfinancial public sector, PS = public sector, SG = state governments, SS = social security funds. Accounting standard: A = accrual, C = cash.

[1] For most countries, fiscal data follow the IMF's *Government Finance Statistics Manual* (GFSM) 2001. The concept of overall fiscal balance refers to net lending (+) / borrowing (–) of the general government. In some cases, however, the overall balance refers to total revenue and grants minus total expenditure and net lending.

Table SA.2. Emerging Market Economies: Definition and Coverage of *Fiscal Monitor* Data

Country	Overall Fiscal Balance[1]			Cyclically Adjusted Balance			Gross Debt		
	Coverage		Accounting practice	Coverage		Accounting practice	Coverage		Accounting practice
	Aggregate	Subsectors		Aggregate	Subsectors		Aggregate	Subsectors	
Argentina[2]	GG	CG, SG, LG, SS	C	CG	CG	C	GG	CG, SG, LG, SS	C
Brazil	NFPS	CG, SG, LG, SS, NFC	C	NFPS	CG, SG, LG, SS, NFC	C	NFPS	CG, SG, LG, SS, NFC	C
Bulgaria	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Chile	GG	CG, SG, LG, SS	A	CG	CG	A	GG	CG, SG, LG, SS	A
China	GG	CG, SG, LG	C	GG	CG, SG, LG	C	GG	CG, SG, LG	C
Colombia[3]	NFPS	CG, SG, LG, NFC	C/A	NFPS	CG, SG, LG, NFC	C/A	NFPS	CG, SG, LG, NFC	C/A
Egypt	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Hungary	NFPS	CG, LG, SS, NFC	A	NFPS	CG, LG, SS, NFC	A	NFPS	CG, LG, SS, NFC	A
India	GG	CG, SG	A	GG	CG, SG	A	GG	CG, SG	A
Indonesia	GG	CG, LG	C	GG	CG, LG	C	GG	CG, LG	C
Jordan	CG	CG	C	CG	CG	C	PS	CG, LG, NFC	C
Kazakhstan	GG	CG, LG	A	—	—	—	GG	CG, LG	A
Kenya	CG	CG	A	—	—	—	CG	CG	A
Latvia	GG	CG, LG, SS, NFC	C	GG	CG, LG, SS, NFC	C	GG	CG, LG, SS, NFC	C
Lithuania	GG	SG, EA, SS, LG	A	GG	SG, EA, SS, LG	A	GG	SG, EA, SS, LG	A
Malaysia	GG	CG, SG, LG	C	CG	CG	C	GG	CG, SG, LG	C
Mexico	PS	CG, SS, NFC, FC	C	CG	CG	C	PS	CG, SS, NFC, FC	C
Morocco	CG	CG	A	—	—	—	CG	CG	A
Nigeria	GG	GG	C	—	—	—	GG	GG	C
Pakistan	GG	CG,LG,SG	C	—	—	—	GG	CG, LG, SG	C
Peru	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Philippines	GG	CG,LG,SS	C	CG	CG	C	GG	CG, LG, SS	C
Poland	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A	GG	CG, SG, LG, SS	A
Romania	NFPS	CG, SS, NFC	C	NFPS	CG, SS, NFC	C	NFPS	CG, SS, NFC	C
Russian Federation	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Saudi Arabia	GG	CG, Other	C	—	—	—	GG	CG, Other	C
South Africa	GG	CG, SG, SS	C	GG	CG, SG, SS	C	GG	CG, SG, SS	C
Thailand	GG	CG, LG	A	GG	CG, LG	A	GG	CG, LG	A
Turkey	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C
Ukraine	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C	GG	CG, SG, LG, SS	C

Note: Coverage: BA = budgetary central government, CG = central government, EA = extrabudgetary units, FC = financial public corporations, GG = general government, LG = local governments, NFC = nonfinancial public corporations, NFPS = nonfinancial public sector, PS = public sector, SG = state governments, SS = social security funds. Accounting standard: A = accrual, C = cash.

[1] For most countries, fiscal data follow the IMF's *Government Finance Statistics Manual* (GFSM) 2001. The concept of overall fiscal balance refers to net lending (+) / 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] Total expenditure and the overall balance account for cash interest and the IMF staff's estimate of accrued interest payments.

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

Table SA.3. Low-Income Countries: Definition and Coverage of Fiscal Monitor Data

Country	Overall Fiscal Balance[1]			Cyclically Adjusted Balance			Gross Debt		
	Coverage		Accounting practice	Coverage		Accounting practice	Coverage		Accounting practice
	Aggregate	Subsectors		Aggregate	Subsectors		Aggregate	Subsectors	
Armenia	CG	CG	C	CG	CG	C	CG	CG	C
Bolivia	NFPS	CG, LG, SS, NFC	C	NFPS	CG, LG, SS, NFC	C	NFPS	CG, LG, SS, NFC	C
Burkina Faso	CG	CG	C	—	—	—	CG	CG	C
Cambodia	GG	CG, LG	C	GG	CG, LG	C	GG	CG, LG	C
Cameroon	NFPS	CG, NFC	C	—	—	—	NFPS	CG, NFC	C
Chad	NFPS	CG, NFC	C	—	—	—	NFPS	CG, NFC	C
Congo, Dem. Rep. of the	CG	CG	C	—	—	—	CG	CG	C
Congo, Rep. of	CG	CG	C	—	—	—	CG	CG	C
Côte d'Ivoire	CG	CG	A	—	—	—	CG	CG	A
Ethiopia	CG	CG	C	—	—	—	CG	CG	C
Georgia	GG	CG, LG	C	GG	CG, LG	C	GG	CG, LG	C
Ghana	CG	CG	C	—	—	—	CG	CG	C
Haiti	CG	CG	C	CG	CG	C	CG	CG	C
Honduras	NFPS	CG, LG, SS, NFC	A	NFPS	CG, LG, SS, NFC	A	NFPS	CG, LG, SS, NFC	A
Lao P.D.R.[2]	CG	CG	C	CG	CG	C	CG	CG	C
Madagascar	CG	CG	C	—	—	—	CG	CG	C
Mali	CG	CG	C/A	—	—	—	CG	CG	C/A
Moldova	GG	CG, LG	C	GG	CG, LG	C	GG	CG, LG	C
Mozambique	CG	CG	C	CG	CG	C	CG	CG	C
Myanmar	NFPS	NFPS	C	—	—	—	NFPS	NFPS	C
Nepal	CG	CG	C	CG	CG	C	CG	CG	C
Nicaragua	NFPS	CG, SG, LG, SS, NFC	C	NFPS	CG, SG, LG, SS, NFC	C	NFPS	CG, SG, LG, SS, NFC	C
Senegal	CG	CG	C	—	—	—	CG	CG	C
Sudan	CG	CG	A	—	—	—	CG	CG	A
Tanzania	CG	CG	C	—	—	—	CG	CG	C
Uganda	CG	CG	C	—	—	—	CG	CG	C
Uzbekistan[3]	GG	CG, SG, LG, SS, FC	C	GG	CG, SG, LG, SS, FC	C	GG	CG, SG, LG, SS, FC	C
Vietnam	GG	CG, SG, LG, FC	C	GG	CG, SG, LG, FC	C	GG	CG, SG, LG, FC	C
Yemen	GG	CG, LG	C	GG	CG, LG	C	GG	CG, LG	C
Zambia	CG	CG	C	—	—	—	CG	CG	C

Note: Coverage: BA = budgetary central government, CG = central government, EA = extrabudgetary units, FC = financial public corporations, GG = general government, LG = local governments, NFC = nonfinancial public corporations, NFPS = nonfinancial public sector, PS = public sector, SG = state governments, SS = social security funds. Accounting standard: A = accrual, C = cash.

[1] For most countries, fiscal data follow the IMF's Government Finance Statistics Manual (GFSM) 2001. The concept of overall fiscal balance refers to net lending (+) / 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] Lao P.D.R.'s fiscal spending includes capital spending by local government financed by loans provided by the central bank.

[3] Includes the Fund for Reconstruction and Development.

Economy groupings

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

Advanced economies	Emerging market economies	Low-income countries	G-7	G-20[1]	Advanced G-20[1]	Emerging G-20
Australia	Argentina	Armenia	Canada	Argentina	Australia	Argentina
Austria	Brazil	Bolivia	France	Australia	Canada	Brazil
Belgium	Bulgaria	Burkina Faso	Germany	Brazil	France	China
Canada	Chile	Cambodia	Italy	Canada	Germany	India
Czech Republic	China	Cameroon	Japan	China	Italy	Indonesia
Denmark	Colombia	Chad	United Kingdom	France	Japan	Mexico
Estonia	Egypt	Congo, Dem. Rep. of the	United States	Germany	Korea	Russian Federation
Finland	Hungary	Congo, Rep. of		India	United Kingdom	Saudi Arabia
France	India	Côte d'Ivoire		Indonesia	United States	South Africa
Germany	Indonesia	Ethiopia		Italy		Turkey
Greece	Jordan	Georgia		Japan		
Hong Kong SAR	Kazakhstan	Ghana		Korea		
Iceland	Kenya	Haiti		Mexico		
Ireland	Latvia	Honduras		Russian Federation		
Israel	Lithuania	Lao P.D.R.		Saudi Arabia		
Italy	Malaysia	Madagascar		South Africa		
Japan	Mexico	Mali		Turkey		
Korea	Morocco	Moldova		United Kingdom		
Netherlands	Nigeria	Mozambique		United States		
New Zealand	Pakistan	Myanmar				
Norway	Peru	Nepal				
Portugal	Philippines	Nicaragua				
Singapore	Poland	Senegal				
Slovak Republic	Romania	Sudan				
Slovenia	Russian Federation	Tanzania				
Spain	Saudi Arabia	Uganda				
Sweden	South Africa	Uzbekistan				
Switzerland	Thailand	Vietnam				
United Kingdom	Turkey	Yemen				
United States	Ukraine	Zambia				

[1]Does not include European Union aggregate.

Economy groupings *(continued)*

Euro area	Emerging Asia	Emerging Europe	Emerging Latin America	Emerging Middle East and North Africa	Low-income Asia	Low-income Latin America
Austria	China	Bulgaria	Argentina	Egypt	Cambodia	Bolivia
Belgium	India	Hungary	Brazil	Jordan	Lao P.D.R.	Haiti
Cyprus	Indonesia	Kazakhstan	Chile	Morocco	Myanmar	Honduras
Estonia	Malaysia	Latvia	Colombia		Nepal	Nicaragua
Finland	Pakistan	Lithuania	Mexico		Vietnam	
France	Philippines	Poland	Peru			
Germany	Thailand	Romania				
Greece		Russian Federation				
Ireland		Turkey				
Italy		Ukraine				
Luxembourg						
Malta						
Netherlands						
Portugal						
Slovak Republic						
Slovenia						
Spain						

Low-income sub-Saharan Africa	Low-income others	Low-income oil producers	Oil producers
Burkina Faso	Armenia	Cameroon	Algeria
Cameroon	Georgia	Chad	Angola
Chad	Moldova	Congo, Rep. of	Azerbaijan
Congo, Dem. Rep. of the	Sudan	Sudan	Bahrain
Congo, Rep. of	Uzbekistan	Vietnam	Brunei Darussalam
Côte d'Ivoire	Yemen	Yemen	Cameroon
Ethiopia			Chad
Ghana			Congo, Rep. of
Madagascar			Ecuador
Mali			Equatorial Guinea
Mozambique			Gabon
Senegal			Indonesia
Tanzania			Iran
Uganda			Kazakhstan
Zambia			Kuwait
			Libya
			Mexico
			Nigeria
			Norway
			Oman
			Qatar
			Saudi Arabia
			Syria
			Timor-Leste
			Trinidad and Tobago
			United Arab Emirates
			Venezuela
			Vietnam
			Yemen

Statistical Table 1. Advanced Economies: General Government Overall Balance and Primary Balance

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Overall Balance													
Australia	1.8	1.3	–0.8	–4.1	–4.7	–4.2	–2.9	–1.1	–0.2	0.3	0.5	0.7	0.8
Austria	–1.7	–1.0	–1.0	–4.1	–4.5	–2.5	–2.5	–2.2	–1.5	–1.1	–1.0	–1.0	–1.0
Belgium	0.3	–0.1	–1.1	–5.6	–3.9	–3.9	–4.0	–2.6	–2.1	–1.7	–1.0	–0.4	0.0
Canada	1.8	1.5	–0.3	–4.8	–5.2	–4.0	–3.2	–2.8	–2.3	–1.7	–1.2	–0.9	–0.8
Czech Republic	–2.4	–0.7	–2.2	–5.8	–4.8	–3.2	–5.0	–2.9	–2.8	–2.6	–2.6	–2.8	–2.8
Denmark	5.0	4.8	3.3	–2.8	–2.7	–2.0	–4.4	–2.8	–2.3	–1.9	–0.8	–0.6	–0.2
Estonia	3.2	2.8	–2.3	–2.1	0.4	1.7	–0.2	0.4	0.4	0.3	0.3	0.3	0.3
Finland	4.1	5.3	4.3	–2.7	–2.8	–0.9	–1.7	–2.0	–1.3	–0.7	–0.4	–0.1	0.1
France	–2.4	–2.8	–3.3	–7.6	–7.1	–5.2	–4.6	–3.7	–3.5	–2.6	–1.8	–1.1	–0.6
Germany	–1.7	0.2	–0.1	–3.1	–4.1	–0.8	0.2	–0.3	–0.1	0.0	0.0	0.0	0.1
Greece	–6.0	–6.8	–9.9	–15.6	–10.7	–9.4	–6.4	–4.6	–3.4	–2.2	–0.6	–0.7	–0.6
Hong Kong SAR	4.3	8.1	0.1	1.5	4.4	4.0	0.2	1.7	2.6	1.2	4.2	4.4	4.7
Iceland	6.3	5.4	–0.5	–8.6	–6.4	–5.0	–3.0	–1.3	–0.6	0.6	0.6	1.0	1.7
Ireland[1]	2.9	0.1	–7.4	–13.9	–30.9	–13.4	–7.7	–7.5	–4.5	–2.4	–1.7	–1.1	–0.7
Israel	–2.4	–1.3	–3.4	–6.0	–4.6	–4.7	–4.7	–3.6	–3.1	–2.7	–2.5	–2.6	–2.6
Italy	–3.4	–1.6	–2.7	–5.4	–4.3	–3.7	–3.0	–2.6	–2.3	–2.1	–1.8	–1.4	–1.1
Japan	–3.7	–2.1	–4.1	–10.4	–9.3	–9.9	–10.2	–9.8	–7.0	–5.8	–5.0	–5.1	–5.4
Korea	1.1	2.3	1.6	0.0	1.7	1.8	1.9	2.4	2.6	2.7	2.7	2.7	2.7
Netherlands	0.5	0.2	0.5	–5.6	–5.1	–4.5	–4.1	–3.4	–3.7	–3.3	–3.1	–2.4	–1.8
New Zealand	4.1	3.2	1.5	–1.5	–5.1	–4.9	–2.6	–1.9	–0.5	0.3	0.6	0.7	0.7
Norway	18.3	17.3	18.8	10.5	11.1	13.4	13.8	12.3	11.1	10.0	9.0	8.2	7.5
Portugal[2]	–3.8	–3.2	–3.7	–10.2	–9.8	–4.4	–4.9	–5.5	–4.0	–2.5	–1.9	–1.6	–1.2
Singapore	7.1	12.0	6.5	–0.7	7.2	7.4	5.6	5.0	4.9	4.7	4.6	4.7	4.7
Slovak Republic	–2.6	–1.6	–2.0	–8.0	–7.7	–4.9	–4.9	–3.2	–3.0	–2.9	–2.9	–2.9	–2.9
Slovenia	–0.8	0.3	–0.3	–5.5	–5.3	–5.6	–3.2	–6.9	–4.3	–4.1	–3.8	–3.3	–2.9
Spain[1]	2.4	1.9	–4.5	–11.2	–9.7	–9.4	–10.3	–6.6	–6.9	–6.6	–6.2	–5.9	–5.6
Sweden	2.2	3.6	2.2	–1.0	–0.1	0.1	–0.4	–0.8	–0.5	1.2	1.8	1.8	1.8
Switzerland	0.9	1.3	1.8	0.5	0.2	0.3	0.3	0.2	0.5	0.7	0.9	0.9	0.9
United Kingdom	–2.7	–2.9	–5.1	–11.4	–10.1	–7.9	–8.3	–7.0	–6.4	–5.6	–4.2	–3.0	–2.6
United States	–2.0	–2.7	–6.7	–13.3	–11.1	–10.0	–8.5	–6.5	–5.4	–4.1	–4.1	–4.2	–4.2
Average	–1.4	–1.1	–3.5	–9.0	–7.8	–6.6	–5.9	–4.7	–3.8	–2.9	–2.6	–2.5	–2.4
Euro area	–1.3	–0.7	–2.1	–6.4	–6.2	–4.1	–3.6	–2.9	–2.6	–2.2	–1.8	–1.4	–1.2
G-7	–2.2	–2.1	–4.5	–10.2	–9.0	–7.7	–7.0	–5.7	–4.7	–3.7	–3.3	–3.3	–3.2
G-20 advanced	–2.0	–1.8	–4.2	–9.7	–8.5	–7.3	–6.6	–5.3	–4.2	–3.3	–3.0	–2.9	–2.9
Primary Balance													
Australia	1.5	1.0	–0.9	–4.1	–4.5	–3.9	–2.5	–0.7	0.3	0.7	0.9	1.1	1.1
Austria	0.5	1.0	1.1	–1.9	–2.3	–0.3	–0.5	–0.2	0.5	0.8	1.0	0.9	0.9
Belgium	4.1	3.6	2.5	–2.2	–0.6	–0.6	–0.7	0.6	1.3	1.7	2.3	2.8	3.1
Canada	2.4	2.0	–0.2	–3.9	–4.6	–3.6	–2.7	–2.4	–1.9	–1.3	–0.8	–0.5	–0.3
Czech Republic	–1.7	0.0	–1.5	–4.8	–3.6	–2.0	–3.7	–1.6	–1.4	–1.2	–1.0	–1.2	–1.2
Denmark	5.8	5.3	3.4	–2.4	–2.2	–1.5	–3.9	–2.5	–2.1	–1.4	–0.4	–0.4	0.0
Estonia	3.3	2.9	–2.4	–2.3	0.3	1.6	–0.2	0.4	0.5	0.4	0.4	0.4	0.4
Finland	3.7	4.7	3.4	–3.3	–3.0	–1.2	–1.9	–2.2	–1.6	–1.5	–1.3	–0.9	–0.7
France	0.0	–0.3	–0.7	–5.4	–4.8	–2.7	–2.2	–1.4	–1.1	–0.2	0.7	1.4	1.9
Germany	0.8	2.7	2.3	–0.8	–2.0	1.2	2.4	1.8	1.8	1.7	1.6	1.6	1.5
Greece	–1.3	–2.0	–4.8	–10.4	–4.8	–2.3	–1.2	0.0	1.5	3.0	4.5	4.5	4.3
Hong Kong SAR	3.9	7.9	–0.3	1.4	4.2	3.8	0.1	1.5	2.4	1.1	4.1	4.3	4.5
Iceland	6.7	5.7	–0.5	–6.5	–2.7	–0.8	1.5	2.5	3.3	4.5	4.5	4.7	5.2
Ireland[1]	3.7	0.7	–6.6	–12.5	–28.2	–10.6	–4.6	–3.2	–0.1	2.0	2.6	3.2	3.5
Israel	3.0	3.7	1.1	–1.8	–0.4	–0.5	–1.6	0.0	0.5	0.9	1.0	0.8	0.7
Italy	1.0	3.1	2.2	–1.0	0.0	1.0	2.3	2.7	2.9	3.2	3.8	4.3	4.6
Japan	–3.7	–2.1	–3.8	–9.9	–8.6	–9.1	–9.3	–9.0	–6.2	–4.9	–3.8	–3.5	–3.2
Korea	2.5	1.5	1.2	–0.7	0.9	1.0	1.2	1.4	1.8	1.8	1.8	1.9	1.8
Netherlands	2.1	1.8	2.1	–4.1	–3.8	–3.2	–2.9	–2.2	–2.5	–1.9	–1.5	–0.9	–0.2
New Zealand	3.7	3.0	1.2	–2.0	–5.5	–4.8	–2.4	–1.8	–0.5	0.3	0.6	0.7	0.7
Norway	16.1	14.4	15.8	8.1	9.0	11.3	11.7	10.1	8.9	7.7	6.7	5.8	5.1
Portugal[2]	–1.3	–0.6	–1.0	–7.5	–7.1	–0.6	–0.8	–1.4	–0.1	1.5	2.2	2.6	2.9
Singapore	5.7	10.5	5.0	–2.2	5.7	5.9	4.2	3.5	3.4	3.3	3.2	3.2	3.3
Slovak Republic	–1.8	–0.8	–1.2	–6.9	–6.5	–3.5	–3.4	–1.4	–1.2	–1.0	–0.9	–0.7	–0.8
Slovenia	0.3	1.2	0.5	–4.6	–4.1	–4.3	–1.5	–4.7	–1.4	–0.9	–0.3	0.3	0.9
Spain[1]	3.7	3.0	–3.4	–9.9	–8.3	–7.5	–7.9	–3.5	–3.6	–3.1	–2.5	–2.0	–1.5
Sweden	1.9	3.0	1.4	–1.9	–0.8	–0.8	–1.3	–1.8	–1.5	–0.1	0.5	0.6	0.6
Switzerland	1.9	2.1	2.4	1.1	0.8	0.8	0.7	0.7	1.0	1.2	1.5	1.6	1.6
United Kingdom	–1.2	–1.3	–3.5	–9.9	–7.6	–5.1	–6.1	–5.0	–4.4	–3.3	–1.6	0.0	0.0
United States	–0.2	–0.8	–4.8	–11.6	–9.3	–7.9	–6.4	–4.6	–3.4	–2.1	–1.9	–1.7	–1.4
Average	0.3	0.5	–1.9	–7.4	–6.2	–4.8	–4.2	–3.0	–2.0	–1.2	–0.7	–0.4	–0.2
Euro area	1.2	1.9	0.5	–3.9	–3.7	–1.5	–0.8	0.0	0.2	0.7	1.1	1.4	1.7
G-7	–0.5	–0.2	–2.6	–8.4	–7.1	–5.7	–5.0	–3.8	–2.7	–1.7	–1.2	–0.9	–0.6
G-20 advanced	–0.3	–0.1	–2.5	–8.1	–6.8	–5.4	–4.7	–3.5	–2.4	–1.5	–1.0	–0.7	–0.5

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 SA.1.

[1] Including financial sector support, estimated for Spain at 0.5 percent of GDP in 2011 and 3.3 percent of GDP in 2012.

[2] The substantial upward revision in the 2012 fiscal outturn by the National Institute of Statistics, owing to reclassification of several large transactions, is not yet reflected in the data.

Statistical Table 2. Advanced Economies: General Government Cyclically Adjusted Balance and Cyclically Adjusted Primary Balance

(Percent of potential GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cyclically Adjusted Balance													
Australia	1.8	1.0	–1.0	–4.0	–4.6	–4.1	–2.9	–1.1	–0.2	0.3	0.5	0.7	0.8
Austria	–2.3	–2.6	–2.6	–3.1	–3.7	–2.5	–2.2	–1.6	–1.1	–0.9	–0.9	–1.0	–1.0
Belgium	0.1	–1.0	–1.9	–4.7	–3.7	–4.1	–3.8	–2.1	–1.7	–1.4	–0.8	–0.2	0.1
Canada	1.1	0.8	–0.6	–3.3	–4.4	–3.6	–2.8	–2.1	–1.7	–1.2	–0.9	–0.7	–0.7
Czech Republic	–3.8	–3.2	–4.9	–6.1	–5.2	–3.8	–4.5	–2.0	–1.8	–1.9	–2.1	–2.6	0.0
Denmark	3.5	3.3	2.0	–1.1	–1.7	–1.3	–3.2	–1.9	–1.7	–1.5	–0.6	–0.5	–0.2
Estonia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Finland	2.5	2.3	2.0	0.2	–1.4	–0.5	–0.6	–0.5	0.1	0.3	0.2	0.1	0.1
France	–2.4	–3.1	–3.1	–5.1	–5.1	–3.9	–3.1	–1.9	–1.8	–1.3	–0.9	–0.6	–0.4
Germany	–2.2	–1.2	–1.3	–1.2	–3.5	–1.0	0.1	0.0	0.1	0.2	0.2	0.2	0.2
Greece	–8.7	–10.9	–14.2	–19.1	–12.2	–8.2	–2.7	0.2	0.8	0.8	1.2	0.5	–0.2
Hong Kong SAR[1]	0.2	1.4	–0.5	–2.6	–1.8	–2.8	–3.4	–2.2	–1.7	–3.4	–0.3	0.3	0.7
Iceland	4.9	3.2	–17.9	–9.7	–7.5	–4.9	–3.4	–1.1	–0.8	0.4	0.5	0.9	1.6
Ireland[1]	–4.0	–8.6	–11.9	–10.3	–8.7	–7.0	–6.0	–5.5	–3.7	–2.2	–2.0	–1.8	–1.7
Israel	–1.4	–2.2	–4.4	–6.0	–4.8	–4.9	–4.7	–3.6	–3.3	–3.0	–2.8	–2.8	–2.8
Italy	–4.7	–3.3	–3.6	–3.4	–3.4	–2.8	–1.2	–0.2	–0.2	–0.5	–0.7	–0.8	–1.0
Japan	–3.6	–2.2	–3.5	–7.5	–7.9	–8.5	–9.3	–9.5	–6.9	–5.7	–5.0	–5.2	–5.4
Korea	1.1	2.3	1.8	0.7	1.7	1.8	2.3	2.7	2.6	2.7	2.7	2.7	2.7
Netherlands	–0.1	–1.4	–1.1	–4.8	–4.4	–4.0	–2.7	–1.2	–1.6	–1.5	–1.6	–1.3	–1.0
New Zealand	3.1	2.4	1.3	–1.0	–4.4	–4.3	–2.5	–1.8	–0.5	0.2	0.6	0.7	0.9
Norway[1]	–3.5	–3.3	–3.7	–5.7	–5.5	–4.8	–5.7	–5.7	–5.8	–5.8	–5.8	–5.7	–5.6
Portugal[1]	–3.8	–4.0	–4.3	–9.4	–9.7	–3.6	–3.0	–3.0	–2.0	–1.1	–1.1	–1.2	–1.2
Singapore	7.1	11.6	6.5	0.7	6.6	6.8	5.7	5.0	4.8	4.6	4.5	4.6	4.6
Slovak Republic	–2.5	–2.6	–3.0	–6.6	–7.3	–4.7	–4.4	–2.4	–2.4	–2.5	–2.7	–2.8	–2.9
Slovenia	–2.2	–2.6	–3.4	–4.4	–4.6	–3.7	–1.3	–1.4	–2.1	–2.6	–2.8	–2.9	–3.0
Spain[1]	1.1	0.3	–5.6	–10.2	–8.3	–7.6	–5.1	–4.2	–5.1	–5.3	–5.4	–5.6	–5.7
Sweden[1]	1.7	1.9	1.0	–0.7	1.0	0.2	–0.4	–0.9	–0.6	0.7	1.8	2.3	2.4
Switzerland[1]	0.9	0.7	1.1	0.8	0.1	0.1	0.3	0.4	0.6	0.8	0.9	0.9	0.9
United Kingdom	–4.7	–5.2	–7.3	–9.7	–8.6	–6.5	–5.4	–4.3	–3.4	–2.7	–1.5	–0.6	–0.7
United States[1]	–2.3	–2.8	–5.1	–8.1	–8.5	–7.7	–6.4	–4.6	–3.9	–3.1	–3.5	–4.0	–4.2
Average	–2.1	–2.1	–3.7	–6.2	–6.3	–5.5	–4.7	–3.6	–2.9	–2.3	–2.2	–2.4	–2.5
Euro area	–2.1	–2.1	–3.1	–4.6	–4.8	–3.4	–2.4	–1.3	–1.3	–1.1	–1.1	–1.0	–1.0
G-7	–2.7	–2.7	–4.1	–6.6	–7.1	–6.2	–5.4	–4.2	–3.4	–2.7	–2.7	–2.9	–3.1
G-20 advanced	–2.5	–2.4	–3.9	–6.3	–6.7	–5.9	–5.1	–3.9	–3.0	–2.4	–2.4	–2.6	–2.7
Cyclically Adjusted Primary Balance													
Australia	1.5	0.8	–1.1	–4.0	–4.4	–3.8	–2.4	–0.6	0.2	0.7	0.9	1.1	1.1
Austria	–0.1	–0.5	–0.4	–0.9	–1.6	–0.3	–0.3	0.3	0.8	1.0	1.0	1.0	0.9
Belgium	3.9	2.7	1.7	–1.3	–0.4	–0.8	–0.5	1.0	1.7	2.0	2.5	3.0	3.2
Canada	1.7	1.4	–0.6	–2.5	–3.8	–3.1	–2.2	–1.7	–1.3	–0.9	–0.6	–0.4	–0.3
Czech Republic	–3.1	–2.4	–4.1	–5.0	–4.1	–2.6	–3.2	–0.7	–0.4	–0.5	–0.6	–1.0	1.6
Denmark	4.3	3.8	2.1	–0.8	–1.2	–0.9	–2.7	–1.6	–1.5	–1.0	–0.2	–0.3	0.0
Estonia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Finland	2.1	1.6	1.1	–0.4	–1.5	–0.8	–0.8	–0.7	–0.2	–0.6	–0.6	–0.7	–0.7
France	0.0	–0.6	–0.4	–3.0	–2.9	–1.4	–0.7	0.3	0.5	1.0	1.5	1.8	2.1
Germany	0.3	1.4	1.1	1.1	–1.4	0.9	2.3	2.1	2.0	1.9	1.8	1.7	1.6
Greece	–3.7	–5.6	–8.6	–13.6	–6.1	–1.2	2.1	4.3	5.2	5.6	6.1	5.5	4.6
Hong Kong SAR[1]	–0.2	1.1	–0.9	–2.7	–2.0	–3.0	–3.6	–2.3	–1.9	–3.5	–0.4	0.1	0.6
Iceland	5.3	3.6	–17.9	–7.7	–4.0	–0.7	1.0	2.6	3.2	4.3	4.4	4.6	5.1
Ireland[1]	–3.2	–7.9	–11.1	–8.9	–6.2	–4.3	–2.9	–1.3	0.7	2.2	2.3	2.5	2.5
Israel	4.1	2.9	0.1	–1.9	–0.6	–0.7	–1.6	0.0	0.3	0.6	0.7	0.6	0.5
Italy	–0.2	1.6	1.4	0.8	0.8	1.7	4.0	4.9	4.8	4.7	4.8	4.8	4.8
Japan	–3.7	–2.2	–3.3	–7.0	–7.3	–7.7	–8.4	–8.7	–6.1	–4.8	–3.8	–3.5	–3.2
Korea	2.5	1.5	1.4	0.0	1.0	1.0	1.6	1.7	1.8	1.8	1.8	1.9	1.8
Netherlands	1.5	0.3	0.6	–3.3	–3.1	–2.6	–1.5	–0.1	–0.4	–0.1	–0.1	0.2	0.5
New Zealand	2.7	2.1	1.0	–1.4	–4.8	–4.2	–2.2	–1.7	–0.5	0.3	0.6	0.7	0.9
Norway[1]	–6.5	–7.2	–8.0	–8.8	–8.2	–7.6	–8.6	–8.6	–8.7	–8.7	–8.7	–8.6	–8.6
Portugal[1]	–1.3	–1.4	–1.6	–6.8	–6.9	0.1	1.0	0.9	1.8	2.8	2.9	2.9	2.9
Singapore	5.6	10.1	5.1	–0.7	5.0	5.2	4.2	3.5	3.3	3.1	3.0	3.1	3.2
Slovak Republic	–1.8	–1.7	–2.1	–5.5	–6.2	–3.4	–2.9	–0.7	–0.7	–0.6	–0.6	–0.6	–0.8
Slovenia	–1.1	–1.6	–2.6	–3.6	–3.4	–2.4	0.3	0.6	0.6	0.5	0.6	0.7	0.8
Spain[1]	2.5	1.4	–4.5	–8.9	–6.9	–5.7	–2.6	–1.2	–1.8	–1.7	–1.7	–1.7	–1.6
Sweden[1]	1.4	1.4	0.3	–1.5	0.2	–0.8	–1.4	–1.9	–1.7	–0.8	0.3	0.7	0.8
Switzerland[1]	1.8	1.4	1.7	1.5	0.7	0.6	0.8	0.8	1.2	1.3	1.5	1.6	1.5
United Kingdom	–3.1	–3.6	–5.6	–8.2	–6.0	–3.7	–3.3	–2.4	–1.5	–0.5	1.0	2.3	1.9
United States[1]	–0.4	–0.8	–3.2	–6.5	–6.7	–5.7	–4.4	–2.7	–1.9	–1.1	–1.3	–1.5	–1.4
Average	–0.5	–0.5	–2.1	–4.7	–4.8	–3.8	–3.0	–1.9	–1.2	–0.6	–0.4	–0.3	–0.2
Euro area	0.5	0.6	–0.4	–2.2	–2.4	–0.8	0.3	1.4	1.5	1.6	1.7	1.8	1.9
G-7	–0.9	–0.8	–2.2	–4.9	–5.3	–4.2	–3.5	–2.3	–1.5	–0.8	–0.6	–0.6	–0.5
G-20 Advanced	–0.8	–0.6	–2.1	–4.8	–5.0	–4.0	–3.3	–2.1	–1.3	–0.6	–0.5	–0.4	–0.3

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 excluding net interest payments.

[1] Including adjustments beyond the output cycle. For country-specific details, see "Data and Conventions" in text and Table SA.1.

Statistical Table 3. Advanced Economies: General Government Revenue and Expenditure

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue													
Australia	36.5	35.5	33.7	33.4	31.8	32.0	33.6	34.5	34.6	34.7	34.9	35.2	35.4
Austria	47.5	47.6	48.3	48.5	48.1	48.0	48.6	49.0	48.6	48.6	48.6	48.6	48.6
Belgium	48.8	48.1	48.7	48.1	48.7	49.5	50.8	51.0	51.2	51.3	51.5	51.7	51.7
Canada	40.6	40.1	38.7	38.7	37.8	37.6	37.7	38.0	38.1	38.4	38.7	39.0	39.0
Czech Republic	39.6	40.3	38.9	38.9	39.0	39.8	40.0	40.6	40.5	40.1	40.0	39.8	39.8
Denmark	56.8	55.7	54.9	55.2	54.8	55.5	54.0	54.8	54.5	54.7	55.1	54.7	54.7
Estonia	37.8	37.7	38.9	45.9	45.1	44.2	44.9	44.6	43.5	43.3	43.1	42.5	41.9
Finland	53.3	52.7	53.6	53.4	53.0	53.8	53.3	54.2	54.6	54.7	55.0	55.2	55.3
France	50.6	49.9	49.9	49.2	49.5	50.8	52.0	52.9	52.8	52.6	52.4	52.4	52.4
Germany	43.7	43.7	44.0	45.1	43.6	44.5	45.2	44.4	44.8	44.7	44.6	44.7	44.9
Greece	39.2	40.7	40.6	38.3	40.6	42.2	43.9	43.0	42.8	41.7	41.3	41.3	41.3
Hong Kong SAR	20.1	23.6	18.5	18.7	22.0	23.9	21.1	20.3	20.9	21.6	21.9	22.2	22.4
Iceland	48.0	47.7	44.1	41.0	41.5	41.7	43.1	43.8	43.1	43.2	42.5	42.3	42.5
Ireland	36.9	36.5	35.2	33.8	34.0	34.4	33.9	34.0	34.4	34.3	34.2	34.0	34.1
Israel	45.2	45.0	42.1	39.1	40.1	39.8	38.9	39.4	39.8	40.1	40.3	40.3	40.3
Italy	45.0	46.0	45.9	46.5	46.1	46.1	47.7	48.2	48.2	48.2	48.3	48.4	48.5
Japan	30.8	31.2	31.6	29.6	29.6	30.8	31.1	31.6	33.2	33.8	34.8	34.9	35.0
Korea	22.7	24.2	24.0	23.0	22.7	23.2	23.3	23.3	23.4	23.4	23.4	23.4	23.4
Netherlands	46.1	45.4	46.7	45.2	45.6	45.1	45.9	46.8	46.4	46.3	46.2	46.1	46.1
New Zealand	38.7	37.3	36.8	35.8	35.0	35.1	34.6	34.6	35.0	35.1	35.1	35.0	34.9
Norway	58.2	57.5	58.4	56.5	56.0	57.1	57.2	56.4	55.9	55.4	55.0	54.6	54.4
Portugal	40.6	41.1	41.1	39.6	41.4	44.9	40.7	42.6	42.2	41.8	41.3	41.0	40.7
Singapore	20.1	24.0	24.2	17.7	21.6	24.5	23.3	22.8	22.8	22.8	22.8	22.8	22.8
Slovak Republic	27.0	28.9	31.6	33.5	32.3	33.2	32.2	34.0	32.9	32.8	32.8	32.8	32.7
Slovenia	41.7	40.5	41.2	40.5	41.5	41.4	42.3	42.9	42.7	42.7	42.8	42.9	42.9
Spain	40.7	41.1	37.0	35.1	36.6	35.7	36.3	37.1	36.7	36.7	36.7	36.6	36.6
Sweden	52.9	52.4	51.8	51.8	50.5	49.6	49.7	49.9	49.8	50.0	49.9	49.7	49.4
Switzerland	35.4	34.7	33.1	33.7	32.8	33.4	33.0	33.2	33.2	33.3	33.3	33.3	33.3
United Kingdom	37.7	37.3	37.9	35.8	36.6	37.3	35.2	38.6	37.9	37.7	37.9	37.8	37.5
United States	33.8	33.9	32.5	30.8	31.2	31.4	31.8	32.9	34.0	35.0	35.2	34.7	34.9
Average	37.7	38.1	37.6	36.2	36.0	36.6	36.6	37.5	38.0	38.4	38.5	38.3	38.3
Euro area	45.3	45.3	45.0	44.9	44.8	45.4	46.2	46.5	46.5	46.5	46.4	46.4	46.5
G-7	37.1	37.4	36.9	35.5	35.4	36.0	36.0	37.1	37.8	38.3	38.5	38.3	38.3
G-20 advanced	36.6	36.9	36.5	35.2	34.9	35.5	35.5	36.6	37.2	37.6	37.8	37.6	37.6
Expenditure													
Australia	34.6	34.2	34.5	37.5	36.6	36.2	36.6	35.6	34.8	34.4	34.4	34.5	34.6
Austria	49.1	48.6	49.3	52.6	52.6	50.5	51.1	51.2	50.1	49.7	49.6	49.6	49.6
Belgium	48.5	48.2	49.8	53.7	52.6	53.4	54.8	53.6	53.4	53.0	52.5	52.1	51.7
Canada	38.8	38.6	39.0	43.5	43.0	41.6	41.0	40.8	40.4	40.1	39.9	39.9	39.8
Czech Republic	42.0	41.0	41.1	44.7	43.7	43.0	45.1	43.5	43.3	42.7	42.6	42.5	42.6
Denmark	51.7	50.9	51.6	58.0	57.5	57.4	58.4	57.6	56.7	56.6	55.9	55.3	54.9
Estonia	34.6	34.9	41.2	47.9	44.7	42.5	45.1	44.2	43.1	43.0	42.8	42.2	41.6
Finland	49.2	47.4	49.2	56.1	55.8	54.8	55.0	56.2	55.9	55.4	55.4	55.3	55.3
France	53.0	52.6	53.3	56.8	56.6	56.0	56.6	56.6	56.2	55.2	54.2	53.5	53.0
Germany	45.3	43.5	44.1	48.2	47.7	45.3	45.0	44.7	44.9	44.7	44.6	44.6	44.8
Greece	45.3	47.5	50.5	53.9	51.4	51.7	50.3	47.5	46.2	43.9	41.9	41.9	41.9
Hong Kong SAR	15.9	15.5	18.4	17.2	17.6	19.8	20.8	18.6	18.4	20.4	17.7	17.7	17.8
Iceland	41.6	42.3	44.7	49.6	47.9	46.7	46.0	45.0	43.7	42.6	41.9	41.3	40.7
Ireland	34.0	36.4	42.6	47.7	64.9	47.7	41.6	41.6	38.9	36.8	35.9	35.1	34.8
Israel	47.6	46.2	45.5	45.1	44.7	44.4	43.6	43.0	42.9	42.8	42.8	42.9	42.9
Italy	48.5	47.6	48.6	51.9	50.4	49.8	50.7	50.8	50.5	50.4	50.1	49.8	49.6
Japan	34.5	33.3	35.7	40.0	38.9	40.7	41.3	41.4	40.2	39.6	39.8	40.1	40.4
Korea	21.5	21.9	22.4	23.0	21.0	21.4	21.4	20.9	20.7	20.7	20.7	20.7	20.7
Netherlands	45.5	45.3	46.2	50.8	50.7	49.6	50.1	50.3	50.2	49.7	49.2	48.5	47.9
New Zealand	34.6	34.1	35.3	37.3	40.1	39.9	37.3	36.5	35.5	34.9	34.4	34.3	34.2
Norway	39.9	40.2	39.6	45.9	44.9	43.7	43.4	44.1	44.8	45.4	45.9	46.4	46.9
Portugal	44.3	44.4	44.8	49.8	51.2	49.3	45.6	48.1	46.3	44.3	43.2	42.6	41.9
Singapore	12.9	12.1	17.7	18.4	14.4	17.1	17.6	17.8	17.9	18.0	18.2	18.1	18.1
Slovak Republic	29.5	30.5	33.6	41.5	40.0	38.2	37.1	37.2	35.9	35.7	35.7	35.7	35.6
Slovenia	42.5	40.2	41.5	46.0	46.9	47.0	45.5	49.8	47.1	46.9	46.6	46.2	45.9
Spain	38.4	39.2	41.5	46.3	46.3	45.1	46.7	43.7	43.6	43.2	42.8	42.5	42.2
Sweden	50.7	48.9	49.6	52.8	50.6	49.5	50.1	50.7	50.3	48.8	48.2	47.9	47.6
Switzerland	34.4	33.4	31.3	33.2	32.7	33.1	32.7	33.0	32.7	32.6	32.4	32.4	32.4
United Kingdom	40.5	40.2	43.0	47.2	46.7	45.3	43.5	45.6	44.2	43.3	42.1	40.9	40.1
United States	35.9	36.7	39.2	44.2	42.4	41.4	40.2	39.5	39.5	39.1	39.2	38.9	39.1
Average	39.1	39.2	41.1	45.2	43.8	43.1	42.5	42.2	41.8	41.3	41.1	40.8	40.7
Euro area	46.6	46.0	47.2	51.2	51.0	49.5	49.8	49.4	49.2	48.6	48.1	47.8	47.6
G-7	39.3	39.5	41.5	45.7	44.3	43.8	43.1	42.9	42.5	42.0	41.8	41.5	41.5
G-20 advanced	38.6	38.7	40.7	44.9	43.4	42.8	42.1	41.8	41.4	40.9	40.8	40.5	40.5

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 SA.1.

Statistical Table 4. Advanced Economies: General Government Gross Debt and Net Debt

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross Debt													
Australia	10.0	9.7	11.8	16.8	20.5	24.1	27.2	27.6	26.7	25.1	23.6	21.9	17.1
Austria	62.3	60.2	63.8	69.2	72.0	72.4	73.7	74.2	73.7	72.7	71.8	70.6	69.4
Belgium	88.0	84.0	89.2	95.7	95.5	97.8	99.6	100.3	99.8	99.0	97.5	95.3	92.7
Canada	70.3	66.5	71.3	81.4	83.0	83.4	85.6	87.0	84.6	83.0	81.6	79.9	78.2
Czech Republic	28.3	27.9	28.7	34.2	37.8	40.8	43.1	44.8	46.1	46.6	47.0	47.4	48.1
Denmark	32.1	27.5	33.4	40.7	42.7	46.4	50.1	51.8	52.4	52.7	51.7	50.7	49.3
Estonia	4.4	3.7	4.5	7.2	6.7	6.1	8.5	9.7	9.1	8.6	8.2	7.7	7.3
Finland	39.6	35.2	33.9	43.5	48.6	49.0	53.3	56.9	58.4	58.7	58.6	58.0	57.3
France	64.1	64.2	68.2	79.2	82.3	86.0	90.3	92.7	94.0	94.1	92.8	90.7	88.1
Germany	67.9	65.4	66.8	74.5	82.5	80.5	82.0	80.4	78.3	75.7	72.7	70.7	68.7
Greece	107.5	107.3	112.5	129.3	147.9	170.6	158.5	179.5	175.6	170.8	163.5	153.9	144.3
Hong Kong SAR	32.3	32.0	29.9	32.4	33.8	33.1	32.4	30.1	29.2	28.3	27.4	26.6	25.8
Iceland	30.1	29.1	70.4	88.0	90.6	102.3	99.1	91.9	86.3	84.0	79.9	76.2	71.8
Ireland	24.6	25.0	44.5	64.9	92.2	106.5	117.1	122.0	120.2	116.4	113.3	109.6	105.8
Israel	84.9	78.5	77.1	79.5	76.0	74.0	74.6	74.4	73.2	72.0	70.7	69.7	68.6
Italy	106.3	103.3	106.1	116.4	119.3	120.8	127.0	130.6	130.8	129.7	127.9	125.6	123.4
Japan	186.0	183.0	191.8	210.2	216.0	230.3	237.9	245.4	244.6	244.6	243.9	243.2	242.8
Korea	31.1	30.7	30.1	33.8	33.4	34.2	33.7	32.5	30.6	28.6	26.8	24.8	22.9
Netherlands	47.4	45.3	58.5	60.8	63.1	65.5	71.7	74.5	75.9	75.1	75.7	75.5	74.8
New Zealand	19.3	17.2	20.1	25.9	32.0	37.2	38.2	38.3	37.9	36.7	37.1	36.4	34.3
Norway	58.7	56.6	55.2	49.0	49.2	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1
Portugal	63.7	68.3	71.6	83.1	93.2	108.0	123.0	122.3	123.7	122.5	119.9	117.2	114.2
Singapore	86.4	85.6	96.3	101.5	99.3	105.2	111.0	108.2	104.3	101.0	98.0	95.2	92.5
Slovak Republic	30.5	29.4	27.9	35.6	41.0	43.3	52.3	55.3	56.4	56.6	56.7	56.6	56.6
Slovenia	26.4	23.1	22.0	35.0	38.6	46.9	52.6	68.8	71.7	73.7	75.0	75.8	76.2
Spain	39.7	36.3	40.2	53.9	61.3	69.1	84.1	91.8	97.6	101.6	105.1	108.0	110.6
Sweden	45.2	40.1	38.8	42.5	39.4	38.3	38.0	37.7	36.5	33.7	30.3	27.0	23.9
Switzerland	62.4	55.6	50.5	49.8	48.8	49.0	49.1	48.3	46.7	45.7	45.4	45.0	44.6
United Kingdom	43.0	43.7	52.2	68.1	79.4	85.4	90.3	93.6	97.1	99.7	100.7	100.2	98.2
United States	66.1	66.5	75.5	89.1	98.2	102.5	106.5	108.1	109.2	108.4	107.5	106.9	106.7
Average	76.9	74.2	81.3	94.9	101.5	105.5	110.2	109.3	109.5	108.7	107.6	106.5	105.4
Euro area	68.6	66.5	70.3	80.0	85.6	88.1	92.9	95.0	95.3	94.6	93.2	91.8	90.0
G-7	85.3	83.2	91.5	106.6	114.9	120.1	124.8	123.9	124.2	123.3	122.0	120.9	119.9
G-20 advanced	81.6	79.4	87.4	102.0	109.0	113.5	117.8	116.6	116.7	115.8	114.5	113.3	112.0
Net Debt													
Australia	–6.3	–7.3	–5.3	–0.6	4.0	8.1	11.6	12.7	12.5	11.6	10.8	9.8	5.6
Austria	43.1	40.9	42.0	49.2	52.6	52.2	53.5	54.0	53.4	52.4	51.6	50.4	49.2
Belgium	77.0	73.1	73.3	79.5	79.7	81.2	83.3	84.3	84.3	83.8	82.7	80.9	78.7
Canada	26.3	22.9	22.4	27.7	29.7	32.3	34.6	35.9	36.6	36.7	36.3	35.6	34.9
Czech Republic	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Denmark	1.9	–3.8	–6.1	–4.5	–1.6	3.3	7.6	10.3	12.2	13.7	14.0	14.2	14.0
Estonia	–2.5	–4.0	–4.7	–2.3	–2.8	–0.4	2.5	4.1	3.8	3.6	3.4	3.2	3.0
Finland	–69.4	–72.5	–52.3	–62.8	–65.5	–54.0	–50.9	–47.5	–44.6	–42.3	–40.3	–38.6	–37.1
France	59.6	59.6	62.3	72.0	76.1	78.8	84.1	86.5	87.8	87.8	86.6	84.5	81.8
Germany	53.0	50.6	50.1	56.7	56.3	55.3	57.2	56.2	54.7	53.5	51.9	51.7	51.4
Greece	107.3	107.0	112.0	128.9	146.9	168.3	155.4	176.1	172.2	166.0	156.8	147.6	138.1
Hong Kong SAR	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Iceland	7.8	10.8	41.8	55.7	59.9	66.7	68.2	62.2	59.3	56.8	53.9	51.0	47.5
Ireland	12.4	11.4	23.0	41.8	74.5	94.9	102.3	106.2	107.5	105.6	102.8	99.4	96.0
Israel	74.8	69.2	69.1	70.8	69.2	68.9	70.1	70.3	69.3	68.3	67.2	66.4	65.6
Italy	89.3	86.9	88.8	97.2	99.2	99.7	103.2	105.8	106.0	105.4	104.1	102.4	100.8
Japan	81.0	80.5	95.3	106.2	113.1	127.4	134.3	143.4	146.7	149.5	151.4	153.0	154.8
Korea	29.4	28.7	28.8	32.3	32.1	32.9	32.2	31.1	29.3	27.4	25.6	23.8	22.0
Netherlands	24.5	21.6	20.6	22.8	26.0	28.3	32.5	35.5	38.4	40.6	42.4	43.5	43.9
New Zealand	8.8	6.5	7.4	11.7	17.0	22.2	26.4	28.8	29.8	30.0	29.8	28.7	26.9
Norway	–133.5	–138.8	–123.7	–154.8	–163.8	–157.8	–165.5	–175.0	–180.8	–184.9	–187.4	–188.2	–187.7
Portugal	58.6	63.7	67.4	79.0	88.8	97.5	111.6	115.0	116.5	115.6	113.2	110.7	108.0
Singapore	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Slovak Republic	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Slovenia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Spain	30.7	26.7	30.8	42.5	49.8	57.5	71.9	79.1	84.7	88.6	91.9	95.2	98.2
Sweden	–14.0	–17.4	–12.5	–19.6	–20.9	–18.4	–17.6	–16.3	–15.1	–15.6	–16.6	–17.6	–18.5
Switzerland	39.7	32.0	29.4	28.7	28.0	28.2	28.3	27.8	26.9	26.3	26.1	25.9	25.7
United Kingdom	37.8	38.0	48.1	63.2	72.9	77.7	82.8	86.1	89.6	92.2	93.2	92.8	91.1
United States	48.4	48.0	54.0	66.7	75.1	82.4	87.9	89.0	89.7	88.6	87.6	86.9	86.6
Average	48.2	46.3	51.9	62.4	67.5	72.7	77.4	78.1	79.1	79.0	78.6	78.1	77.6
Euro area	54.3	52.1	54.0	62.3	65.5	67.8	71.9	73.9	74.5	74.4	73.6	72.9	72.0
G-7	55.5	54.4	61.0	72.7	78.9	85.2	90.4	91.5	92.6	92.4	91.8	91.4	91.0
G-20	53.1	51.8	58.1	69.4	74.8	80.5	85.2	86.1	86.9	86.7	86.0	85.5	84.9

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 SA.1.

Statistical Table 5. Emerging Market Economies: General Government Overall Balance and Primary Balance

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Overall Balance													
Argentina	–1.0	–2.1	–0.9	–3.6	–1.4	–3.5	–4.3	–2.7	–2.4	–2.9	–2.5	–2.2	–1.9
Brazil	–3.5	–2.7	–1.4	–3.1	–2.7	–2.5	–2.8	–1.2	–1.7	–1.8	–1.6	–1.5	–1.4
Bulgaria	3.3	3.3	2.9	–0.9	–3.9	–2.0	–0.5	–1.4	–0.6	0.0	0.5	0.8	0.9
Chile	7.4	7.9	4.1	–4.1	–0.3	1.4	0.6	0.1	–0.1	–0.2	–0.2	0.0	0.0
China	–0.7	0.9	–0.7	–3.1	–1.5	–1.3	–2.2	–2.1	–1.8	–1.1	–0.6	0.1	0.7
Colombia	–1.0	–0.8	–0.3	–2.8	–3.3	–2.0	0.2	–1.0	–0.9	–0.9	–0.7	–0.7	–0.8
Egypt	–9.2	–7.5	–8.0	–6.9	–8.3	–9.8	–10.7	–11.3	–8.7	–7.1	–5.8	–4.6	–3.3
Hungary	–9.4	–5.1	–3.7	–4.5	–4.5	4.3	–2.5	–3.2	–3.4	–3.3	–3.2	–3.1	–3.0
India	–6.4	–4.8	–8.6	–10.1	–8.7	–8.4	–8.3	–8.3	–8.4	–8.3	–8.2	–8.1	–8.2
Indonesia	0.2	–1.0	0.0	–1.8	–1.2	–0.6	–1.3	–2.8	–2.2	–1.8	–1.4	–1.1	–1.0
Jordan	–4.0	–4.7	–4.3	–8.5	–5.6	–6.8	–8.2	–4.8	–5.3	–3.8	–3.3	–2.7	–2.3
Kazakhstan	7.7	5.2	1.2	–1.3	1.5	5.9	4.7	4.9	4.5	4.2	3.9	3.8	3.6
Kenya	–2.5	–3.2	–4.4	–5.4	–5.5	–5.1	–5.3	–4.6	–4.0	–3.7	–3.6	–3.5	–3.4
Latvia	–0.6	0.6	–7.5	–7.8	–7.3	–3.2	0.1	–1.3	–0.8	–1.3	–1.1	–0.9	–1.1
Lithuania	–0.4	–1.0	–3.3	–9.2	–7.1	–5.5	–3.0	–2.6	–2.3	–2.3	–2.1	–2.1	–1.9
Malaysia	–2.7	–2.7	–3.6	–6.2	–4.5	–3.8	–4.3	–4.0	–3.7	–3.5	–3.4	–3.6	–4.0
Mexico	–1.0	–1.2	–1.1	–4.7	–4.4	–3.4	–3.7	–3.1	–3.0	–2.8	–2.8	–2.7	–2.7
Morocco	–2.0	–0.1	0.7	–1.8	–4.4	–6.8	–7.5	–5.5	–4.2	–3.5	–3.0	–2.7	–2.4
Nigeria	8.9	1.6	6.3	–9.4	–6.7	0.7	0.9	0.4	–0.6	–0.7	–1.1	–1.0	–1.6
Pakistan	–3.7	–5.5	–7.3	–5.2	–5.9	–7.0	–8.2	–7.0	–7.1	–7.9	–8.3	–8.5	–8.7
Peru	1.9	3.2	2.2	–2.1	–0.3	1.8	2.0	1.8	1.6	1.6	1.8	2.1	2.0
Philippines	0.0	–0.3	0.0	–2.6	–2.5	–0.6	–0.9	–0.8	–0.9	–0.9	–0.9	–1.0	–1.0
Poland	–3.6	–1.9	–3.7	–7.4	–7.9	–5.0	–3.5	–3.4	–2.9	–2.2	–2.0	–2.0	–1.9
Romania	–1.4	–3.1	–4.8	–7.3	–6.4	–4.3	–2.5	–2.1	–1.7	–1.7	–1.8	–1.8	–1.8
Russian Federation	8.3	6.8	4.9	–6.3	–3.4	1.5	0.4	–0.3	–1.0	–1.4	–1.7	–1.8	–1.7
Saudi Arabia	24.4	15.0	31.6	–4.1	3.0	12.4	15.2	9.6	6.4	3.5	2.6	1.4	–0.5
South Africa	1.2	1.4	–0.4	–5.5	–5.1	–4.0	–4.8	–4.8	–4.2	–3.4	–3.3	–3.2	–3.1
Thailand	2.2	0.2	0.1	–3.2	–0.8	–0.7	–1.7	–2.7	–3.4	–1.9	–1.9	–1.9	–1.8
Turkey	0.0	–1.7	–2.3	–5.6	–2.3	–0.4	–1.5	–2.2	–2.3	–2.3	–2.3	–2.2	–2.1
Ukraine	–1.4	–2.0	–3.2	–6.3	–5.8	–2.8	–4.6	–4.5	–5.4	–4.2	–3.5	–3.4	–3.4
Average	0.4	0.3	0.0	–4.6	–3.1	–1.7	–2.1	–2.2	–2.2	–2.0	–1.8	–1.5	–1.2
Asia	–1.8	–0.7	–2.3	–4.3	–2.9	–2.6	–3.2	–3.2	–3.0	–2.4	–1.9	–1.5	–1.0
Europe	2.7	2.0	0.6	–6.1	–3.9	0.0	–0.7	–1.2	–1.5	–1.5	–1.6	–1.7	–1.6
Latin America	–1.4	–1.2	–0.8	–3.6	–2.8	–2.4	–2.5	–1.6	–1.8	–1.8	–1.6	–1.5	–1.4
Middle East and North Africa	–6.3	–4.8	–4.9	–5.5	–7.0	–8.7	–9.7	–9.2	–7.2	–5.8	–4.8	–3.9	–3.0
G-20 emerging	0.6	0.6	0.4	–4.4	–2.8	–1.6	–2.0	–2.1	–2.2	–2.0	–1.8	–1.4	–1.1
Primary Balance													
Argentina	4.1	2.5	2.7	0.2	1.6	–0.5	–0.9	–0.6	–0.5	–0.5	–0.5	–0.5	–0.4
Brazil	3.3	3.5	4.1	2.2	2.5	3.2	2.1	3.3	3.1	3.1	3.1	3.1	3.1
Bulgaria	4.3	3.9	2.8	–0.6	–3.7	–1.7	–0.1	–0.7	–0.1	0.5	1.0	1.3	1.3
Chile	7.6	7.7	3.8	–4.3	–0.3	1.5	0.7	0.2	0.0	–0.1	0.0	0.2	0.3
China	–0.2	1.3	–0.3	–2.7	–1.2	–0.4	–1.5	–1.5	–1.2	–0.6	–0.1	0.5	1.1
Colombia	1.7	1.8	1.9	–1.1	–1.6	–0.1	1.9	0.8	0.9	0.9	1.0	0.9	0.7
Egypt	–4.2	–3.0	–3.9	–3.7	–3.8	–4.7	–5.2	–4.2	–1.0	0.5	1.0	1.6	2.0
Hungary	–5.7	–1.2	0.0	–0.3	–0.6	7.9	1.5	0.9	0.5	0.6	0.7	0.8	0.7
India	–1.5	0.0	–3.9	–5.4	–4.4	–4.2	–3.9	–3.8	–3.7	–3.5	–3.4	–3.5	–3.6
Indonesia	2.6	1.0	1.8	–0.1	0.1	0.6	–0.1	–1.4	–0.9	–0.4	–0.1	0.1	0.1
Jordan	–1.2	–1.8	–2.0	–6.3	–3.5	–4.7	–5.6	–1.4	–1.4	–0.1	0.1	0.5	0.9
Kazakhstan	7.2	4.3	1.5	–1.4	1.8	5.9	4.0	4.9	4.2	3.9	3.5	3.2	3.0
Kenya	–0.2	–1.0	–2.2	–3.3	–3.2	–2.8	–2.9	–2.4	–2.0	–1.8	–1.6	–1.5	–1.4
Latvia	–0.1	0.9	–7.4	–7.2	–6.5	–2.2	1.3	0.1	0.5	0.0	0.1	0.3	0.0
Lithuania	0.1	–0.5	–2.8	–8.1	–5.3	–3.8	–1.2	–0.9	–0.6	–0.7	–0.5	–0.3	–0.1
Malaysia	–1.7	–2.0	–2.1	–5.1	–3.0	–2.1	–3.2	–2.1	–1.8	–1.5	–1.1	–1.3	–1.7
Mexico	1.8	1.5	1.4	–2.0	–1.8	–1.0	–1.1	–0.5	–0.4	–0.2	0.0	0.1	0.1
Morocco	1.2	3.0	3.3	0.6	–2.1	–4.5	–5.2	–3.0	–1.5	–0.8	–0.3	–0.2	0.0
Nigeria	10.0	2.6	7.3	–8.2	–5.6	2.1	2.5	2.1	0.9	0.7	0.2	0.2	–0.5
Pakistan	–0.6	–1.2	–2.6	–0.2	–1.6	–3.1	–3.9	–2.8	–2.6	–3.1	–2.9	–2.8	–2.6
Peru	3.7	4.9	3.7	–0.9	0.8	2.9	3.0	2.7	2.5	2.4	2.5	2.7	2.6
Philippines	4.8	3.4	3.4	0.7	0.5	2.0	1.7	1.8	1.6	1.5	1.4	1.3	1.1
Poland	–1.0	0.4	–1.5	–4.8	–5.2	–2.3	–0.5	–0.7	–0.1	0.5	0.6	0.5	0.6
Romania	–0.7	–2.6	–4.2	–6.2	–5.1	–2.8	–0.7	–0.3	0.1	0.1	–0.1	0.1	0.1
Russian Federation	8.9	6.8	5.1	–6.0	–3.1	1.9	0.8	0.3	–0.4	–0.7	–1.0	–1.1	–1.0
Saudi Arabia	25.3	14.8	31.0	–3.9	3.4	12.6	15.3	9.6	6.5	3.5	2.6	1.2	–1.0
South Africa	4.1	4.0	2.1	–3.0	–2.5	–1.2	–1.8	–1.8	–1.2	–0.4	–0.2	–0.2	0.0
Thailand	3.5	1.2	1.0	–2.4	0.1	0.2	–0.8	–2.3	–3.0	–1.4	–1.3	–1.3	–1.2
Turkey	5.1	3.2	2.0	–1.1	1.4	2.3	1.3	0.8	0.5	0.2	0.2	0.3	0.3
Ukraine	–0.7	–1.5	–2.6	–5.1	–4.1	–0.8	–2.9	–1.8	–2.3	–1.4	–0.9	–0.9	–1.0
Average	2.9	2.5	1.9	–2.5	–1.1	0.4	–0.2	–0.4	–0.4	–0.2	0.0	0.2	0.4
Asia	0.0	0.9	–0.8	–2.9	–1.6	–1.0	–1.7	–1.8	–1.6	–1.1	–0.6	–0.2	0.2
Europe	4.7	3.6	2.1	–4.3	–2.3	1.4	0.7	0.4	0.0	–0.1	–0.2	–0.3	–0.2
Latin America	3.0	2.9	3.0	0.2	0.9	1.6	1.0	1.6	1.5	1.6	1.7	1.7	1.7
Middle East and North Africa	–2.1	–0.9	–1.4	–2.6	–3.3	–4.6	–5.3	–3.7	–1.2	0.1	0.6	1.1	1.4
G-20 emerging	3.2	2.9	2.4	–2.4	–0.8	0.5	–0.2	–0.4	–0.4	–0.3	0.0	0.2	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 SA.2.

Statistical Table 6. Emerging Market Economies: General Government Cyclically Adjusted Balance and Cyclically Adjusted Primary Balance

(Percent of potential GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cyclically Adjusted Balance													
Argentina	–1.4	–2.9	–1.5	–2.3	–1.2	–4.7	–4.6	–2.5	–2.3	–2.7	–2.4	–2.1	–1.9
Brazil	–3.3	–3.0	–2.1	–2.3	–3.3	–3.0	–2.7	–1.2	–1.7	–1.8	–1.6	–1.5	–1.4
Bulgaria	2.1	1.5	0.8	0.2	–2.7	–1.5	0.4	–0.5	0.2	0.6	0.9	1.0	0.9
Chile[1]	0.8	0.5	–1.3	–4.1	–2.4	–1.0	–0.6	–0.6	–0.8	–0.8	–0.7	–0.5	–0.5
China	0.0	1.0	–0.5	–2.6	–0.9	–0.2	–0.9	–0.9	–0.7	–0.2	0.1	0.4	0.7
Colombia	–1.7	–1.6	–1.8	–1.8	–2.9	–3.4	–0.4	–1.3	–1.1	–1.2	–1.0	–0.8	–0.9
Egypt	–9.2	–7.6	–8.3	–7.0	–8.2	–9.6	–10.1	–10.1	–7.4	–6.1	–5.2	–4.4	–3.3
Hungary[1]	–11.6	–6.7	–5.5	–2.9	–3.3	–6.7	–1.6	–2.1	–2.6	–2.8	–3.1	–3.1	–3.0
India	–6.2	–6.5	–10.4	–10.5	–9.5	–9.2	–8.8	–8.8	–8.9	–8.7	–8.6	–8.6	–6.3
Indonesia	0.3	–1.1	–0.1	–1.7	–1.2	–0.7	–1.4	–2.8	–2.2	–1.8	–1.4	–1.1	–1.0
Jordan	–3.5	–6.4	–7.7	–10.8	–6.6	–6.8	–6.2	–5.1	–4.1	–3.3	–2.7	–2.4	–2.2
Kazakhstan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Kenya	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Latvia	. . .	–1.0	–8.9	–3.3	–3.3	–1.4	0.8	–0.9	–0.7	–1.4	–1.2	–1.0	–1.2
Lithuania	–2.0	–3.9	–6.4	–6.0	–4.6	–4.5	–2.6	–2.4	–2.3	–2.3	–2.2	–2.1	–1.9
Malaysia	–3.0	–3.4	–4.3	–5.0	–4.1	–3.5	–4.2	–4.0	–3.7	–3.6	–3.4	–3.6	–4.0
Mexico	–1.4	–1.5	–1.3	–3.8	–3.9	–3.2	–3.7	–3.1	–3.0	–2.8	–2.8	–2.7	–2.7
Morocco	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Nigeria	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Pakistan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Peru[1]	0.2	1.5	0.9	–0.6	–0.8	0.8	1.4	1.4	1.4	1.6	1.8	2.0	2.0
Philippines	–1.4	–1.9	–1.6	–3.3	–3.5	–1.9	–2.4	–2.1	–2.1	–2.1	–2.1	–2.0	–2.0
Poland	–3.5	–2.5	–4.5	–7.3	–7.8	–5.2	–3.4	–2.9	–2.6	–2.0	–1.9	–1.9	–1.9
Romania	–1.8	–4.3	–7.5	–6.8	–5.1	–3.4	–1.4	–1.0	–0.8	–0.8	–1.1	–1.3	–1.5
Russian Federation	8.2	6.1	3.9	–3.2	–1.8	2.0	0.5	–0.4	–1.2	–1.6	–1.8	–1.8	–1.7
Saudi Arabia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
South Africa	0.3	–0.2	–2.2	–5.3	–4.8	–4.0	–4.6	–4.5	–4.0	–3.3	–3.3	–3.2	–3.1
Thailand	2.0	–0.1	–0.6	–2.1	–0.9	–0.8	–1.5	–2.9	–3.7	–2.0	–1.9	–1.9	–1.8
Turkey	–1.1	–3.0	–2.7	–3.2	–1.7	–1.1	–1.6	–2.0	–1.9	–2.0	–2.0	–2.1	–2.1
Ukraine	–2.7	–4.2	–3.8	–2.1	–3.7	–2.8	–4.3	–4.2	–5.2	–4.2	–3.5	–3.4	–3.4
Average	–0.7	–0.8	–1.7	–3.7	–2.9	–2.0	–2.1	–2.1	–2.1	–1.8	–1.6	–1.4	–1.1
Asia	–1.3	–1.0	–2.4	–3.9	–2.6	–1.9	–2.3	–2.4	–2.2	–1.8	–1.5	–1.2	–0.6
Europe	2.0	0.9	–0.3	–4.0	–3.0	–0.5	–0.8	–1.3	–1.7	–1.8	–1.9	–1.9	–1.9
Latin America	–2.0	–2.1	–1.6	–2.7	–3.1	–3.0	–2.7	–1.7	–1.9	–1.9	–1.7	–1.5	–1.5
G-20 emerging	–0.4	–0.5	–1.4	–3.6	–2.7	–1.8	–2.2	–2.1	–2.1	–1.8	–1.6	–1.4	–1.0
Cyclically Adjusted Primary Balance													
Argentina	3.8	1.8	2.1	1.4	1.7	–1.6	–1.2	–0.4	–0.4	–0.4	–0.4	–0.4	–0.4
Brazil	3.5	3.2	3.5	2.8	2.0	2.8	2.1	3.3	3.1	3.1	3.1	3.1	3.1
Bulgaria	3.1	2.2	0.7	0.5	–2.5	–1.1	0.7	0.2	0.7	1.1	1.4	1.5	1.3
Chile[1]	1.0	0.3	–1.7	–4.3	–2.4	–0.9	–0.5	–0.5	–0.6	–0.7	–0.5	–0.3	–0.2
China	0.5	1.4	–0.1	–2.2	–0.5	0.6	–0.2	–0.3	–0.1	0.3	0.6	0.8	1.1
Colombia	1.0	1.1	0.4	–0.1	–1.3	–1.5	1.3	0.5	0.7	0.6	0.7	0.8	0.6
Egypt	–4.2	–3.1	–4.2	–3.8	–3.7	–4.5	–4.7	–3.4	–0.1	1.2	1.4	1.8	2.0
Hungary[1]	–7.8	–2.8	–1.6	1.3	0.4	–3.0	2.4	1.9	1.2	1.1	0.8	0.8	0.7
India	–1.3	–1.7	–5.7	–5.8	–5.2	–4.9	–4.4	–4.3	–4.1	–3.9	–3.9	–3.9	–1.7
Indonesia	2.6	1.0	1.7	0.0	0.1	0.6	–0.1	–1.4	–0.9	–0.4	–0.1	0.1	0.1
Jordan	–1.0	–3.8	–5.2	–8.6	–4.5	–4.7	–3.6	–1.6	–0.2	0.4	0.8	0.9	1.0
Kazakhstan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Kenya	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Latvia	. . .	–0.7	–8.8	–2.8	–2.5	–0.5	2.0	0.4	0.6	–0.1	0.0	0.2	–0.1
Lithuania	–1.4	–3.4	–5.9	–5.0	–3.0	–2.7	–0.9	–0.7	–0.6	–0.7	–0.5	–0.4	–0.1
Malaysia	–2.0	–2.6	–2.8	–4.0	–2.7	–1.8	–3.1	–2.1	–1.8	–1.5	–1.2	–1.3	–1.7
Mexico	1.5	1.2	1.3	–1.2	–1.4	–0.8	–1.1	–0.5	–0.4	–0.2	0.0	0.1	0.1
Morocco	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Nigeria	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Pakistan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Peru[1]	1.9	3.2	2.5	0.6	0.3	1.9	2.4	2.3	2.2	2.4	2.5	2.7	2.6
Philippines	3.5	1.9	1.8	–0.1	–0.5	0.7	0.2	0.5	0.4	0.3	0.3	0.2	0.1
Poland	–0.9	–0.1	–2.2	–4.6	–5.1	–2.5	–0.5	–0.3	0.1	0.7	0.7	0.6	0.6
Romania	–1.1	–3.7	–6.8	–5.8	–3.9	–1.9	0.4	0.7	1.0	0.9	0.5	0.5	0.3
Russian Federation	8.7	6.1	4.1	–2.8	–1.5	2.3	0.8	0.2	–0.6	–1.0	–1.1	–1.1	–1.0
Saudi Arabia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
South Africa	3.3	2.4	0.4	–2.8	–2.1	–1.2	–1.7	–1.5	–1.0	–0.3	–0.2	–0.2	0.0
Thailand	3.3	0.8	0.3	–1.4	–0.1	0.1	–0.5	–2.5	–3.2	–1.5	–1.4	–1.3	–1.2
Turkey	4.2	2.1	1.7	1.0	1.9	1.7	1.2	1.0	0.8	0.5	0.4	0.3	0.2
Ukraine	–2.0	–3.7	–3.3	–1.1	–2.1	–0.9	–2.5	–1.5	–2.1	–1.4	–0.9	–0.9	–1.1
Average	1.9	1.5	0.4	–1.7	–0.9	0.2	–0.2	–0.3	–0.2	0.0	0.1	0.3	0.6
Asia	0.4	0.6	–1.0	–2.6	–1.3	–0.4	–0.9	–1.1	–0.9	–0.5	–0.2	0.0	0.5
Europe	4.1	2.6	1.2	–2.2	–1.4	0.9	0.6	0.3	–0.1	–0.3	–0.4	–0.5	–0.4
Latin America	2.5	2.1	2.2	1.0	0.6	1.0	0.8	1.5	1.5	1.6	1.6	1.7	1.7
G-20 emerging	2.3	1.9	0.7	–1.5	–0.7	0.4	–0.2	–0.2	–0.2	0.0	0.1	0.3	0.6

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 excluding net interest payments.

[1] Including adjustments beyond the output cycle; for details, see "Data and Conventions" in text and Table SA.2.

Statistical Table 7. Emerging Market Economies: General Government Revenue and Expenditure

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue													
Argentina	29.9	31.5	33.4	34.3	37.2	37.4	40.3	41.7	42.0	42.3	42.3	42.3	42.4
Brazil	34.6	35.7	36.9	34.9	37.2	36.6	37.2	37.0	36.9	37.2	37.1	37.2	37.3
Bulgaria	37.0	38.2	38.0	35.3	32.7	32.4	34.4	35.8	36.7	37.6	38.2	38.5	39.0
Chile	26.2	27.3	25.8	20.6	23.5	24.7	23.9	23.9	23.5	23.2	22.9	23.1	23.1
China	18.2	19.8	19.7	20.2	21.3	22.6	22.6	22.1	22.3	22.7	23.0	23.3	23.6
Colombia	27.3	27.2	26.4	26.7	26.2	26.9	28.4	28.1	27.6	27.0	26.8	26.7	26.4
Egypt	28.6	27.7	28.0	27.7	25.1	22.0	22.6	25.8	27.1	27.1	26.2	25.8	25.3
Hungary	42.8	45.6	45.5	46.9	45.4	53.9	46.5	47.4	48.3	48.2	48.2	48.3	48.2
India	20.2	21.7	19.9	19.3	18.8	18.8	19.2	19.5	19.6	19.6	19.7	19.7	19.8
Indonesia	20.3	19.3	21.3	16.5	17.0	17.8	17.8	17.6	17.5	17.5	17.5	17.6	17.8
Jordan	32.4	32.3	30.1	26.5	24.9	26.4	22.8	26.0	25.8	27.1	27.1	27.5	27.8
Kazakhstan	27.5	29.3	27.9	22.1	23.9	28.2	27.9	27.1	26.8	26.4	26.0	26.1	25.8
Kenya	22.2	23.1	22.9	22.7	24.6	24.0	25.2	25.9	25.5	25.7	25.5	25.4	25.3
Latvia	36.1	36.3	35.6	36.2	36.0	35.6	37.0	35.2	33.9	32.0	31.0	30.4	29.3
Lithuania	33.3	33.8	34.1	34.7	34.9	32.8	33.8	33.5	33.5	33.0	32.4	32.1	32.0
Malaysia	24.1	24.4	24.6	26.2	23.4	24.8	25.4	24.0	23.4	23.3	23.2	23.0	22.7
Mexico	21.9	21.8	24.8	22.4	22.8	23.2	23.6	23.1	22.8	22.2	21.8	21.5	21.1
Morocco	27.4	29.9	32.5	29.3	27.5	27.8	27.7	28.2	28.4	28.4	28.5	28.3	28.4
Nigeria	32.3	26.9	32.0	17.8	20.0	29.9	28.0	27.4	25.9	25.4	24.2	23.1	22.2
Pakistan	14.7	15.3	14.9	14.7	14.4	12.8	12.8	13.2	12.9	12.3	12.3	12.3	12.4
Peru	20.1	20.9	21.1	18.7	20.0	20.9	21.7	21.7	21.7	21.8	22.2	22.3	22.5
Philippines	19.0	18.7	18.7	17.5	16.7	17.3	17.9	18.1	18.3	18.4	18.5	18.5	18.5
Poland	40.2	40.3	39.5	37.2	37.6	38.5	39.8	39.2	38.8	38.6	38.5	38.3	38.1
Romania	32.3	32.3	32.2	31.2	32.2	32.6	32.9	33.7	34.1	33.9	33.7	33.5	33.2
Russian Federation	39.5	39.9	39.2	35.0	34.6	37.4	37.0	36.2	34.9	34.0	33.1	32.5	32.1
Saudi Arabia	53.7	46.6	60.5	36.0	41.6	47.5	48.6	45.3	42.4	40.2	38.3	36.7	35.3
South Africa	29.2	29.8	29.8	27.4	27.3	28.1	27.9	27.8	27.9	27.9	27.9	27.9	28.0
Thailand	22.3	21.5	21.4	20.8	22.4	22.6	22.4	21.6	21.7	21.7	21.8	21.9	21.9
Turkey	32.8	31.6	31.7	32.4	33.1	34.5	34.7	35.6	35.4	35.0	35.1	35.2	35.3
Ukraine	43.2	41.8	44.3	42.3	43.2	42.9	44.6	43.5	41.5	40.8	40.3	39.4	38.5
Average	27.3	27.7	28.4	25.6	26.5	27.6	27.7	27.1	26.8	26.7	26.6	26.5	26.4
Asia	19.1	20.2	19.9	19.8	20.4	21.4	21.5	21.1	21.3	21.6	21.8	22.1	22.3
Europe	37.5	37.6	37.4	34.9	34.9	37.0	36.8	36.5	35.7	35.0	34.5	34.1	33.8
Latin America	28.2	29.3	31.1	29.6	31.6	31.6	32.2	31.9	31.7	31.7	31.5	31.5	31.4
Middle East and North Africa	28.5	28.8	29.6	28.1	25.8	23.9	23.9	26.5	27.4	27.4	26.9	26.6	26.3
G-20 emerging	26.7	27.2	28.0	25.3	26.4	27.5	27.6	27.0	26.7	26.6	26.5	26.4	26.4
Expenditure													
Argentina	30.9	33.6	34.3	37.9	38.5	40.9	44.6	44.4	44.4	45.2	44.8	44.5	44.3
Brazil	38.1	38.4	38.2	38.0	39.9	39.1	40.0	38.2	38.6	39.0	38.7	38.7	38.7
Bulgaria	33.6	34.9	35.2	36.2	36.6	34.4	34.9	37.2	37.4	37.6	37.7	37.7	38.1
Chile	18.7	19.4	21.7	24.7	23.8	23.2	23.3	23.9	23.6	23.4	23.1	23.1	23.1
China	18.9	18.9	20.4	23.2	22.8	23.9	24.8	24.2	24.0	23.8	23.5	23.2	22.8
Colombia	28.3	28.0	26.6	29.5	29.5	28.9	28.2	29.1	28.5	27.9	27.5	27.3	27.2
Egypt	37.8	35.3	36.0	34.6	33.4	31.8	33.4	37.1	35.8	34.2	32.0	30.4	28.6
Hungary	52.2	50.6	49.2	51.4	49.8	49.6	48.9	50.5	51.7	51.5	51.5	51.4	51.2
India	26.6	26.5	28.5	29.4	27.5	27.2	27.5	27.8	28.0	28.0	27.8	27.8	27.9
Indonesia	20.1	20.3	21.3	18.3	18.2	18.5	19.1	20.5	19.8	19.2	18.9	18.7	18.8
Jordan	36.4	37.0	34.4	35.0	30.4	33.2	31.0	30.8	31.1	30.9	30.5	30.2	30.1
Kazakhstan	19.8	24.1	26.7	23.5	22.5	22.3	23.2	22.2	22.4	22.2	22.2	22.3	22.2
Kenya	24.7	26.3	27.3	28.1	30.1	29.1	30.5	30.5	29.6	29.4	29.1	28.9	28.7
Latvia	36.7	35.7	43.1	44.1	43.4	38.8	36.9	36.5	34.7	33.3	32.2	31.3	30.4
Lithuania	33.7	34.8	37.3	43.9	41.9	38.3	36.8	36.1	35.8	35.3	34.5	34.2	33.9
Malaysia	26.8	27.1	28.2	32.4	27.9	28.5	29.7	28.1	27.0	26.8	26.5	26.6	26.7
Mexico	22.9	23.0	25.9	27.1	27.2	26.6	27.3	26.2	25.7	25.0	24.6	24.1	23.8
Morocco	29.4	30.1	31.8	31.1	31.9	34.6	35.2	33.7	32.6	31.9	31.4	31.0	30.8
Nigeria	23.3	25.3	25.7	27.2	26.7	29.2	27.1	27.0	26.5	26.0	25.3	24.2	23.8
Pakistan	18.4	20.8	22.3	19.9	20.3	19.8	20.9	20.2	20.0	20.3	20.6	20.8	21.1
Peru	18.2	17.7	18.9	20.9	20.3	19.1	19.6	19.9	20.1	20.2	20.4	20.2	20.5
Philippines	19.1	19.0	18.6	20.1	19.2	17.9	18.8	18.9	19.2	19.3	19.5	19.5	19.5
Poland	43.9	42.2	43.2	44.6	45.4	43.6	43.3	42.5	41.6	40.8	40.5	40.3	40.0
Romania	33.7	35.4	37.0	38.5	38.6	36.9	35.4	35.9	35.9	35.6	35.5	35.2	35.0
Russian Federation	31.1	33.1	34.3	41.4	38.0	35.8	36.6	36.5	35.9	35.4	34.8	34.3	33.8
Saudi Arabia	29.3	31.6	29.0	40.0	38.6	35.1	33.4	35.7	35.9	36.7	35.7	35.3	35.8
South Africa	27.9	28.4	30.3	32.9	32.5	32.1	32.7	32.6	32.1	31.3	31.2	31.2	31.1
Thailand	20.1	21.3	21.2	24.0	23.2	23.4	24.1	24.3	25.1	23.7	23.7	23.7	23.7
Turkey	32.8	33.3	34.0	38.0	35.4	34.9	36.1	37.8	37.7	37.3	37.3	37.4	37.4
Ukraine	44.6	43.8	47.4	48.6	49.0	45.6	49.3	48.0	46.9	45.0	43.8	42.9	41.9
Average	26.9	27.4	28.5	30.2	29.6	29.3	29.7	29.4	29.1	28.7	28.3	28.0	27.7
Asia	20.8	20.9	22.2	24.0	23.3	23.9	24.7	24.4	24.2	24.0	23.8	23.5	23.3
Europe	34.8	35.6	36.8	41.0	38.8	37.0	37.5	37.6	37.1	36.6	36.1	35.8	35.4
Latin America	29.7	30.5	31.9	33.2	34.4	34.0	34.8	33.5	33.5	33.5	33.2	33.0	32.8
Middle East and North Africa	34.7	33.6	34.5	33.6	32.8	32.7	33.6	35.7	34.5	33.3	31.7	30.5	29.3
G-20 emerging	26.1	26.6	27.6	29.7	29.2	29.0	29.6	29.2	28.9	28.6	28.2	27.9	27.5

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 SA.2.

Statistical Table 8. Emerging Market Economies: General Government Gross Debt and Net Debt

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross Debt													
Argentina	76.4	67.4	58.5	58.7	49.2	44.9	44.9	42.4	41.7	40.5	39.0	37.3	35.4
Brazil	66.7	65.2	63.5	66.9	65.2	64.9	68.5	67.2	65.9	64.5	62.7	61.3	60.4
Bulgaria	23.4	18.6	15.5	15.6	14.9	15.4	18.5	17.8	20.2	18.3	17.7	14.6	11.9
Chile	5.0	3.9	4.9	5.8	8.6	11.1	11.2	11.1	11.4	11.8	12.1	12.2	12.3
China[1]	16.2	19.6	17.0	17.7	33.5	25.5	22.8	21.3	20.0	18.3	16.4	14.2	11.6
Colombia	36.8	32.7	30.9	36.1	36.5	35.8	32.8	32.0	31.2	29.9	28.5	27.1	25.9
Egypt	90.3	80.2	70.2	73.0	73.2	76.6	80.2	85.2	82.6	79.3	75.2	70.8	65.5
Hungary	65.9	67.0	73.0	79.8	81.8	81.4	79.0	79.9	80.3	80.3	80.2	79.8	79.2
India	78.4	75.0	73.3	75.0	68.5	66.4	66.8	66.4	66.7	66.6	66.2	66.2	66.3
Indonesia	39.0	35.1	33.2	28.6	26.8	24.4	24.0	23.6	23.1	21.9	20.9	19.3	18.2
Jordan	76.3	73.8	60.2	64.8	67.1	70.7	79.6	83.8	87.0	87.2	85.8	83.3	81.0
Kazakhstan	6.7	5.9	6.7	10.2	10.7	10.7	12.3	13.2	14.1	14.3	14.4	14.4	14.6
Kenya	46.8	46.0	45.6	47.5	49.9	48.5	48.2	47.9	47.3	47.1	46.5	46.3	45.9
Latvia	9.9	7.8	17.2	32.9	39.7	37.5	36.4	41.0	36.7	33.1	33.1	32.1	29.8
Lithuania	17.9	16.8	15.5	29.3	37.9	38.5	39.6	40.0	39.8	39.7	39.3	38.9	38.4
Malaysia	41.5	41.2	41.2	52.8	53.7	54.5	55.5	56.0	55.7	55.1	54.5	54.3	54.5
Mexico	38.4	37.8	43.1	44.5	42.9	43.7	43.5	43.5	43.9	44.1	44.3	44.3	44.3
Morocco	59.4	54.6	48.2	48.0	51.3	54.4	59.6	61.2	61.1	60.3	58.8	56.9	54.9
Nigeria	11.8	12.8	11.6	15.2	15.5	17.2	17.8	17.9	18.1	17.8	17.3	16.7	15.0
Pakistan	58.6	56.0	60.2	61.3	61.7	60.3	62.1	64.1	64.8	66.5	68.7	70.8	72.4
Peru	33.1	30.4	25.0	28.4	24.6	22.0	19.8	17.5	16.7	16.2	15.8	15.3	14.9
Philippines	51.6	44.6	44.2	44.3	43.5	41.9	41.9	39.7	38.0	36.4	34.9	33.5	32.1
Poland	47.7	45.0	47.1	50.9	54.8	56.4	55.2	56.8	56.2	55.4	54.3	53.2	52.1
Romania	12.6	12.7	13.6	23.8	31.1	34.2	37.0	36.9	36.6	35.9	35.2	34.5	33.8
Russian Federation	9.0	8.5	7.9	11.0	11.0	11.7	10.9	10.4	11.8	12.1	12.7	13.0	13.1
Saudi Arabia	25.8	17.1	12.1	14.0	8.5	5.4	3.6	3.5	3.5	3.3	3.2	3.1	2.9
South Africa	32.6	28.3	27.8	31.3	35.8	39.6	42.3	42.7	43.7	44.4	44.7	44.8	44.8
Thailand	42.0	38.3	37.3	45.2	42.6	41.7	44.3	45.9	48.2	49.5	50.6	51.5	52.3
Turkey	46.5	39.9	40.0	46.1	42.4	39.2	36.4	35.5	35.4	35.1	34.8	34.5	33.4
Ukraine	14.8	12.3	20.5	35.4	40.5	36.8	37.4	42.2	43.6	43.4	42.9	42.1	41.7
Average	36.9	35.4	33.5	36.0	40.3	36.7	35.2	34.3	33.6	32.5	31.3	29.9	28.3
Asia	34.4	34.8	31.4	31.4	40.8	34.4	32.2	31.0	30.0	28.6	27.0	25.2	23.1
Europe	26.4	23.5	23.6	29.5	29.1	27.8	26.1	25.9	26.4	26.3	26.2	26.0	25.5
Latin America	50.8	49.7	50.5	53.5	51.9	51.7	52.4	50.9	50.3	49.4	48.3	47.3	46.6
Middle East and North Africa	78.4	71.1	62.3	64.9	66.8	70.1	74.9	78.8	77.1	74.8	71.7	68.1	63.9
G-20 emerging	36.5	35.4	33.0	34.6	39.9	35.5	33.7	32.4	31.6	30.5	29.2	27.7	26.0
Net Debt													
Argentina	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Brazil	47.0	45.1	38.0	41.5	39.1	36.4	35.2	33.6	32.3	31.3	30.8	29.7	29.0
Bulgaria	–10.4	–10.2	–13.6	–13.9	–13.6	–11.3	–9.6	–8.4	–8.1	–8.6	–9.6	–11.0	–12.3
Chile	–6.6	–13.0	–19.3	–10.6	–7.0	–8.6	–7.8	–7.6	–6.9	–6.1	–5.4	–5.0	–4.6
China	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Colombia	26.3	22.7	21.0	27.2	28.5	27.2	24.6	24.6	24.1	23.3	22.3	21.3	20.5
Egypt	71.4	64.5	55.6	58.7	60.0	64.3	68.8	75.0	73.9	71.8	68.7	65.1	60.5
Hungary	64.9	65.5	65.4	73.4	76.8	75.0	72.8	73.8	74.4	74.7	74.8	74.6	74.2
India	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Indonesia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Jordan	68.9	67.6	54.8	57.1	61.1	65.4	74.9	79.6	83.0	83.5	82.4	80.1	78.0
Kazakhstan	–10.7	–14.4	–13.7	–10.9	–10.2	–13.1	–17.1	–20.6	–23.5	–25.6	–27.1	–28.3	–29.1
Kenya	42.1	41.3	40.6	42.6	44.7	43.6	43.2	42.9	42.3	42.0	41.5	41.3	40.9
Latvia	7.5	4.7	11.3	21.5	28.2	29.9	26.6	26.3	25.5	25.1	24.7	24.0	23.6
Lithuania	11.0	11.1	12.7	23.3	30.6	34.0	35.4	36.1	36.1	36.2	36.0	35.8	35.5
Malaysia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Mexico	30.2	29.3	33.4	36.7	36.8	37.9	38.0	38.0	38.3	38.5	38.7	38.8	38.8
Morocco	56.8	53.1	47.5	47.3	50.8	54.0	59.1	60.6	60.6	59.7	58.2	56.4	54.3
Nigeria	2.9	4.7	1.3	11.0	14.4	15.0	13.3	10.8	9.8	9.3	9.0	9.1	9.0
Pakistan	54.5	51.1	55.2	57.6	58.2	57.0	58.8	60.8	61.4	63.1	65.4	67.4	69.1
Peru	22.8	16.0	12.5	11.7	9.9	7.0	4.5	2.3	0.5	–1.2	–2.9	–4.7	–6.5
Philippines	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Poland	15.0	10.2	9.9	14.9	20.5	26.3	26.7	24.4	24.8	25.0	24.8	23.7	22.6
Romania	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Russian Federation	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Saudi Arabia	1.6	–15.9	–41.9	–44.0	–42.6	–42.5	–52.7	–61.0	–66.2	–67.4	–67.3	–65.6	–61.9
South Africa	26.8	24.0	23.0	26.3	29.4	32.4	35.6	37.9	39.4	40.2	40.3	40.3	40.3
Thailand	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Turkey	39.0	32.7	33.4	37.6	34.8	31.3	27.8	27.0	27.0	26.8	26.5	26.2	25.1
Ukraine	11.7	10.1	18.3	31.9	38.4	34.5	35.2	40.6	42.7	42.7	42.3	41.5	41.2
Average	30.5	26.9	23.2	27.9	28.1	26.7	24.7	23.6	22.9	22.5	22.2	21.7	21.4
Asia	54.5	51.1	55.2	57.6	58.2	57.0	58.8	60.8	61.4	63.1	65.4	67.4	69.1
Europe	26.7	22.1	22.2	27.7	28.9	28.0	25.7	24.8	24.7	24.2	23.6	22.7	21.5
Latin America	34.8	33.3	31.2	34.8	33.9	32.4	31.1	30.0	29.2	28.5	28.1	27.2	26.7
Middle East and North Africa	66.1	60.9	52.9	55.2	57.6	61.6	66.8	71.6	71.1	69.5	67.1	64.0	60.3
G-20 emerging	33.7	30.2	25.3	29.1	28.3	26.1	23.1	21.5	20.8	20.5	20.5	20.4	20.4

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 SA.2.

[1] For China: Up to 2009, public debt data include only central government debt as reported by the Ministry of Finance. For 2010, debt data include subnational debt identified in the 2011 *National Audit Report*. Information on new debt issuance by the local governments and some government agencies in 2011 and 2012 is not yet available, hence debt data reflect only amortization plans as specified in the 2011 *National Audit Report*. Public debt projections beyond 2012 assume that about 60 percent of subnational debt will be amortized by 2013, 16 percent over 2014–15, and 24 percent beyond 2016, with no issuance of new debt or rollover of existing debt.

Statistical Table 9. Low-Income Countries: General Government Overall Balance and Primary Balance

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Overall Balance													
Armenia	–2.0	–2.3	–1.8	–7.7	–5.0	–2.9	–1.5	–2.8	–2.3	–2.0	–2.0	–2.0	–2.0
Bolivia	4.5	1.7	3.6	0.2	1.7	0.8	1.8	1.5	1.4	1.3	1.2	1.1	1.0
Burkina Faso	16.1	–6.7	–4.3	–5.3	–4.7	–2.5	–3.1	–2.6	–3.0	–2.9	–2.7	–2.3	–2.2
Cambodia	–0.2	–0.7	0.3	–4.2	–2.8	–4.1	–3.2	–2.7	–2.2	–1.5	–1.0	–0.6	–0.6
Cameroon	32.8	4.5	2.3	–0.1	–1.1	–2.8	–0.9	–4.0	–4.6	–4.8	–4.9	–5.3	–5.0
Chad	2.6	3.1	4.5	–9.9	–5.2	2.8	–1.4	–3.4	–1.4	2.2	1.7	1.0	1.5
Congo, Dem. Rep. of the	–3.6	–3.8	–3.8	–2.6	4.9	–1.8	–2.4	–3.1	–4.2	–3.8	–3.6	–3.2	–3.3
Congo, Rep. of	16.6	9.4	23.4	4.8	16.1	16.4	6.1	11.0	5.4	1.4	1.7	1.6	0.8
Côte d'Ivoire	–1.8	–0.8	–0.6	–1.6	–2.3	–5.7	–3.4	–2.8	–2.7	–3.1	–2.6	–2.2	–2.0
Ethiopia	–3.8	–3.6	–2.9	–0.9	–1.3	–1.6	–1.2	–3.0	–2.3	–2.1	–2.1	–1.9	–2.0
Georgia	3.4	0.8	–2.0	–6.5	–4.8	–0.9	–0.8	–1.8	–1.6	–1.3	–1.1	–1.2	–1.2
Ghana	–4.7	–5.6	–8.5	–5.8	–7.2	–4.1	–11.5	–10.1	–8.7	–6.6	–5.8	–6.1	–6.0
Haiti	–1.7	0.2	–2.8	–4.6	2.4	–3.7	–5.9	–5.3	–5.5	–4.6	–3.4	–3.1	–3.8
Honduras	–2.7	–1.6	–1.7	–4.5	–2.8	–2.8	–4.3	–4.6	–4.8	–5.0	–5.2	–5.3	–5.3
Lao P.D.R.	–3.2	–2.4	–2.6	–6.9	–4.6	–3.0	–2.5	–2.6	–2.6	–2.6	–2.5	–2.5	–2.2
Madagascar	–0.5	–2.7	–1.1	–3.1	–1.5	–4.8	–3.1	–2.9	–3.0	–3.5	–3.5	–3.9	–3.7
Mali	31.3	–3.2	–2.2	–4.2	–2.7	–3.7	–1.1	–2.5	–3.6	–3.2	–3.0	–3.2	–3.1
Moldova	0.0	–0.2	–1.0	–6.3	–2.5	–2.4	–2.1	–2.1	–1.3	–1.1	–1.0	–0.9	–0.9
Mozambique	–4.1	–2.9	–2.5	–5.5	–3.9	–4.3	–3.0	–4.7	–6.6	–6.1	–5.7	–5.2	–5.1
Myanmar	–4.2	–3.8	–2.4	–5.2	–5.5	–6.0	–5.3	–5.2	–5.0	–4.8	–4.6	–4.4	–4.2
Nepal	0.3	–0.8	–0.4	–2.6	–0.8	–1.0	–0.6	3.7	–0.6	–1.1	–1.2	–1.3	–1.7
Nicaragua	0.5	0.9	–0.6	–1.4	–0.4	0.4	–0.5	–0.3	–1.2	–0.9	–0.9	–0.8	–0.7
Senegal	–5.4	–3.8	–4.7	–4.9	–5.2	–6.3	–5.7	–4.9	–4.3	–3.9	–3.7	–3.6	–3.3
Sudan	–1.4	–3.5	0.6	–5.1	0.3	0.2	–5.0	–4.0	–3.7	–2.8	–2.1	–1.6	–1.2
Tanzania	–4.5	–1.9	–2.6	–6.0	–6.5	–5.0	–5.0	–5.3	–4.5	–3.8	–3.2	–2.9	–2.8
Uganda	–0.7	–1.1	–2.8	–2.4	–6.7	–3.2	–3.6	–3.1	–4.8	–4.2	–3.5	–2.7	–2.7
Uzbekistan	5.4	5.2	10.2	2.8	4.9	8.8	4.7	1.8	2.7	2.3	2.1	2.0	1.9
Vietnam	0.3	–2.2	–0.5	–7.2	–3.1	–3.2	–5.2	–4.0	–4.0	–2.9	–2.7	–2.5	–2.2
Yemen	1.2	–7.2	–4.5	–10.2	–4.0	–4.3	–5.5	–5.8	–3.7	–5.1	–5.1	–4.1	–3.9
Zambia	20.2	–1.3	–0.8	–2.5	–3.0	–2.2	–4.5	–4.6	–3.4	–3.8	–4.9	–4.9	–4.4
Average	2.4	–1.6	–0.4	–4.2	–2.0	–1.7	–3.3	–3.2	–3.1	–2.8	–2.6	–2.5	–2.3
Oil producers	6.9	–0.9	1.3	–6.0	–1.8	–1.6	–3.9	–3.3	–3.4	–2.9	–2.8	–2.6	–2.4
Asia	–0.6	–2.2	–0.9	–6.2	–3.5	–3.7	–4.6	–3.5	–3.8	–3.1	–2.9	–2.7	–2.5
Latin America	0.5	0.3	0.3	–2.2	0.0	–0.9	–1.3	–1.4	–1.6	–1.5	–1.3	–1.3	–1.4
Sub-Saharan Africa	5.3	–1.5	–1.1	–3.0	–2.6	–2.3	–3.6	–3.8	–3.9	–3.6	–3.4	–3.3	–3.3
Others	0.9	–1.9	1.1	–4.4	–0.2	1.2	–1.6	–2.2	–1.4	–1.4	–1.3	–1.0	–0.8
Primary Balance													
Armenia	–1.7	–2.0	–1.5	–7.2	–4.1	–1.9	–0.5	–1.5	–1.1	–0.7	–0.6	–0.6	–0.5
Bolivia	7.0	4.3	5.5	1.9	3.1	2.1	2.8	2.6	2.3	2.2	2.0	1.8	1.7
Burkina Faso	16.7	–6.3	–3.9	–4.9	–4.2	–1.9	–2.6	–2.1	–2.3	–2.3	–2.2	–1.8	–1.8
Cambodia	0.0	–0.5	0.5	–4.0	–2.5	–3.8	–2.9	–2.5	–1.9	–1.2	–0.6	–0.2	–0.3
Cameroon	33.8	5.0	2.7	0.3	–0.8	–2.4	–0.5	–3.4	–4.1	–4.2	–4.3	–4.6	–4.2
Chad	3.1	3.4	4.7	–9.3	–4.5	3.5	–0.5	–2.8	–0.8	2.8	2.2	1.3	1.7
Congo, Dem. Rep. of the	1.0	1.4	0.9	2.9	7.1	0.9	0.0	–0.9	–2.3	–2.1	–2.1	–1.8	–2.0
Congo, Rep. of	21.1	11.9	25.8	6.1	17.0	16.5	6.1	10.6	5.0	0.7	1.0	1.0	0.3
Côte d'Ivoire	0.0	1.0	1.2	0.0	–0.6	–3.1	–1.6	–1.4	–1.1	–1.4	–0.8	–0.4	0.0
Ethiopia	–3.0	–2.9	–2.4	–0.6	–0.9	–1.2	–0.9	–2.5	–1.7	–1.4	–1.3	–1.2	–1.3
Georgia	4.1	1.4	–1.3	–5.6	–3.8	0.3	0.2	–0.7	–0.6	–0.3	–0.1	–0.2	–0.2
Ghana	–2.6	–3.7	–6.2	–3.0	–4.1	–1.4	–8.1	–6.3	–4.8	–2.8	–1.9	–2.2	–2.0
Haiti	–1.2	1.3	–2.1	–3.8	3.0	–3.3	–5.5	–4.9	–5.1	–4.2	–3.0	–2.6	–3.3
Honduras	–3.1	–2.2	–2.7	–5.4	–3.4	–3.0	–4.2	–3.9	–3.9	–3.9	–3.9	–3.9	–3.9
Lao P.D.R.	–2.5	–1.9	–2.1	–6.6	–4.1	–2.5	–1.9	–1.7	–2.0	–2.0	–2.0	–2.1	–1.9
Madagascar	1.9	–1.5	–0.3	–2.3	–0.7	–4.0	–2.3	–1.9	–1.9	–2.4	–2.4	–2.9	–2.7
Mali	31.8	–2.8	–1.9	–3.9	–2.3	–3.0	–0.5	–1.9	–3.0	–2.6	–2.5	–2.7	–2.6
Moldova	1.3	1.0	0.2	–5.0	–1.7	–1.6	–1.3	–1.3	–0.5	–0.5	–0.4	–0.4	–0.4
Mozambique	–3.3	–2.3	–2.0	–5.0	–3.1	–3.3	–1.8	–3.5	–5.5	–5.0	–4.5	–3.8	–3.7
Myanmar	–3.6	–3.2	–1.8	–4.4	–4.5	–4.8	–3.8	–3.5	–3.2	–2.9	–2.6	–2.3	–2.1
Nepal	0.9	–0.1	0.3	–1.9	0.0	–0.1	0.2	4.7	0.1	–0.3	–0.4	–0.4	–0.7
Nicaragua	2.0	1.9	0.2	–0.4	0.6	1.5	0.6	0.9	–0.1	0.2	0.2	0.6	0.6
Senegal	–4.5	–3.2	–4.0	–4.2	–4.3	–4.7	–4.1	–3.0	–2.6	–2.3	–2.0	–1.8	–1.6
Sudan	–0.2	–2.5	1.5	–4.0	1.4	1.5	–3.4	–2.3	–2.2	–1.5	–1.1	–0.7	–0.2
Tanzania	–3.3	–0.7	–1.6	–5.1	–5.5	–4.0	–3.8	–3.8	–2.8	–2.2	–1.6	–1.3	–1.2
Uganda	0.7	0.1	–1.5	–1.3	–5.7	–2.1	–2.1	–1.5	–3.2	–2.7	–2.1	–1.3	–1.3
Uzbekistan	5.6	5.3	10.3	2.9	5.0	8.9	4.8	1.9	2.8	2.4	2.2	2.0	2.0
Vietnam	1.1	–1.1	0.6	–5.9	–1.8	–1.7	–3.6	–2.7	–2.7	–1.8	–1.6	–1.4	–1.3
Yemen	3.5	–4.9	–2.1	–7.7	–1.7	–0.1	0.1	–1.4	0.4	–1.5	–1.6	–0.8	–0.9
Zambia	22.1	0.4	0.9	–0.9	–1.3	–1.0	–2.7	–2.9	–1.8	–2.4	–3.0	–3.0	–2.7
Average	3.6	–0.5	0.6	–3.1	–0.9	–0.5	–1.8	–1.8	–1.8	–1.5	–1.3	–1.2	–1.1
Oil producers	8.2	0.3	2.5	–4.8	–0.5	0.0	–1.9	–1.8	–1.9	–1.6	–1.6	–1.4	–1.3
Asia	0.2	–1.3	0.0	–5.2	–2.4	–2.5	–3.2	–2.2	–2.5	–1.9	–1.7	–1.5	–1.4
Latin America	1.6	1.3	1.0	–1.6	0.6	–0.2	–0.6	–0.4	–0.7	–0.5	–0.4	–0.4	–0.5
Sub-Saharan Africa	6.9	–0.1	0.2	–1.8	–1.3	–1.0	–2.2	–2.4	–2.5	–2.1	–1.9	–1.8	–1.7
Others	2.0	–0.9	2.0	–3.4	0.9	2.6	0.2	–0.6	0.1	–0.1	–0.1	0.2	0.3

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 SA.3.

Statistical Table 10. Low-Income Countries: General Government Revenue and Expenditure

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue													
Armenia	18.0	20.1	20.5	20.9	21.2	22.1	22.4	23.3	23.5	23.9	24.1	24.2	23.7
Bolivia	34.3	34.4	38.9	35.8	33.2	36.2	37.6	37.8	36.7	35.4	35.0	34.7	34.5
Burkina Faso	40.8	20.1	16.9	19.6	20.1	21.8	24.0	23.3	23.3	23.4	23.7	24.1	24.1
Cambodia	12.8	13.7	15.9	15.8	17.0	15.6	16.2	16.6	17.2	17.4	17.6	18.0	18.1
Cameroon	47.4	20.3	20.8	18.4	17.4	18.8	19.1	18.5	18.0	17.7	17.5	17.3	17.3
Chad	19.1	24.2	27.9	19.6	25.3	28.6	26.4	22.9	22.4	24.2	23.3	22.8	21.4
Congo, Dem. Rep. of the	19.5	17.0	21.1	24.3	33.0	27.4	30.5	29.6	28.3	28.6	28.4	28.7	28.4
Congo, Rep. of	44.4	39.3	47.0	29.5	37.5	42.5	41.9	48.0	42.6	39.6	39.7	37.4	36.1
Côte d'Ivoire	19.0	19.7	20.6	19.5	19.7	20.3	20.9	21.5	22.4	23.1	23.1	23.2	23.2
Ethiopia	18.4	17.1	16.0	16.3	17.3	16.7	15.9	15.2	15.4	15.4	15.4	15.4	15.4
Georgia	26.7	29.3	30.7	29.3	28.3	28.2	28.7	27.5	27.1	27.3	27.5	27.6	27.6
Ghana	17.1	17.5	16.0	16.5	16.8	19.5	20.0	21.2	23.0	24.3	24.5	24.1	23.7
Haiti	13.5	15.8	15.1	17.9	28.4	29.8	23.3	24.4	23.1	22.2	21.6	20.9	20.3
Honduras	23.3	24.5	26.4	24.4	24.1	23.2	23.1	23.5	23.2	22.4	22.8	22.8	22.6
Lao P.D.R.	14.5	15.6	15.9	17.1	18.0	18.1	19.5	19.7	19.6	19.6	19.5	19.3	19.2
Madagascar	21.0	16.0	17.6	12.3	12.3	11.3	11.9	12.9	13.6	12.4	12.1	12.0	12.2
Mali	56.2	21.3	19.0	21.7	20.1	21.0	17.6	21.3	21.4	21.5	21.5	21.5	21.5
Moldova	39.9	41.7	40.6	38.9	38.3	36.6	38.2	37.7	37.6	37.4	37.3	37.2	37.2
Mozambique	22.9	25.2	25.3	27.1	29.5	30.0	29.7	28.7	28.1	27.9	28.1	28.2	27.9
Myanmar	14.7	14.1	13.0	11.7	13.0	13.0	19.3	19.8	20.3	20.8	21.3	21.8	22.0
Nepal	13.0	14.2	14.9	16.8	18.0	17.7	18.3	18.0	18.2	17.9	18.0	18.3	18.3
Nicaragua	24.9	25.4	24.8	24.9	25.2	26.2	27.0	27.1	27.9	28.3	28.6	28.8	28.8
Senegal	21.2	23.6	21.6	21.7	22.0	22.4	23.0	23.8	22.5	22.9	22.7	22.9	23.2
Sudan	22.4	21.9	24.0	15.4	19.3	18.2	10.2	10.8	10.0	9.8	9.6	9.7	9.9
Tanzania	18.8	21.3	21.9	21.0	21.0	21.9	21.8	21.4	21.3	21.5	21.7	21.8	22.1
Uganda	18.3	17.6	15.5	15.3	15.7	17.4	15.6	16.6	15.5	15.7	15.8	15.9	15.9
Uzbekistan	34.4	35.6	40.7	36.7	37.0	40.2	38.6	36.3	37.3	37.1	36.9	36.7	36.6
Vietnam	28.7	28.5	28.9	27.3	29.6	27.7	25.3	25.0	23.9	24.0	23.8	23.9	23.9
Yemen	38.6	33.2	36.7	25.0	26.0	24.6	29.6	26.9	28.7	26.9	25.4	24.7	24.8
Zambia	43.6	23.0	23.0	18.9	19.6	21.7	21.3	21.6	21.9	22.1	22.1	22.0	22.2
Average	26.5	23.6	24.6	22.0	23.4	23.8	23.5	23.6	23.4	23.3	23.1	23.0	23.0
Oil producers	33.9	28.4	30.3	25.5	27.8	27.2	26.3	25.9	25.0	24.7	24.2	24.0	23.9
Asia	23.3	23.1	23.1	21.8	23.3	22.2	22.5	22.6	22.1	22.2	22.3	22.4	22.5
Latin America	26.0	26.7	29.1	27.8	28.4	29.9	29.9	30.4	29.9	29.1	29.1	29.0	28.9
Sub-Saharan Africa	27.1	20.7	21.0	19.3	20.7	21.9	21.6	22.0	21.8	22.0	22.0	21.9	21.7
Others	28.9	28.0	30.9	24.8	26.3	26.8	25.5	25.7	25.7	24.9	24.3	23.9	23.9
Expenditure													
Armenia	20.0	22.4	22.2	28.6	26.2	25.0	23.9	26.0	25.8	25.9	26.1	26.3	25.7
Bolivia	29.8	32.7	35.3	35.6	31.5	35.4	35.8	36.3	35.3	34.1	33.8	33.6	33.5
Burkina Faso	24.6	26.8	21.1	24.9	24.9	24.3	27.1	25.9	26.2	26.3	26.4	26.4	26.4
Cambodia	13.0	14.5	15.6	20.0	19.9	19.6	19.4	19.4	19.4	18.9	18.6	18.6	18.7
Cameroon	14.6	15.7	18.5	18.5	18.6	21.6	20.0	22.5	22.6	22.5	22.4	22.6	22.3
Chad	16.5	21.1	23.4	29.5	30.5	25.8	27.8	26.3	23.8	22.0	21.6	21.8	20.0
Congo, Dem. Rep. of the	23.1	20.8	24.9	26.9	28.1	29.1	32.9	32.7	32.5	32.4	32.1	31.9	31.7
Congo, Rep. of	27.8	29.9	23.6	24.7	21.4	26.1	35.8	37.0	37.2	38.2	38.0	35.8	35.3
Côte d'Ivoire	20.8	20.5	21.1	21.1	22.0	25.9	24.3	24.3	25.1	26.2	25.7	25.5	25.2
Ethiopia	22.2	20.7	18.9	17.2	18.6	18.4	17.1	18.2	17.7	17.5	17.5	17.3	17.4
Georgia	23.3	28.4	32.7	35.8	33.1	29.1	29.4	29.3	28.7	28.6	28.7	28.7	28.8
Ghana	21.8	23.1	24.5	22.3	24.0	23.6	31.6	31.3	31.7	30.9	30.3	30.2	29.7
Haiti	15.2	15.6	17.9	22.5	26.0	33.5	29.3	29.8	28.6	26.7	25.0	24.0	24.0
Honduras	26.0	26.1	28.1	28.9	27.0	25.9	27.4	28.1	28.1	27.5	27.9	28.1	27.9
Lao P.D.R.	17.7	18.0	18.6	24.1	22.7	21.0	21.9	22.2	22.2	22.2	22.0	21.8	21.4
Madagascar	21.5	18.7	18.6	15.3	13.8	16.0	15.0	15.8	16.7	15.9	15.6	15.9	15.9
Mali	24.9	24.5	21.2	25.9	22.8	24.7	18.7	23.8	25.0	24.7	24.5	24.7	24.5
Moldova	39.8	42.0	41.6	45.2	40.8	39.0	40.3	39.8	38.9	38.6	38.3	38.2	38.1
Mozambique	27.0	28.1	27.8	32.6	33.4	34.4	32.7	33.4	34.7	34.0	33.8	33.3	33.0
Myanmar	18.9	17.9	15.5	16.9	18.4	19.0	24.6	25.0	25.3	25.6	25.9	26.2	26.3
Nepal	12.7	15.0	15.4	19.4	18.8	18.6	18.9	14.4	18.8	19.0	19.2	19.6	20.0
Nicaragua	24.4	24.4	25.5	26.3	25.6	25.8	27.5	27.4	29.1	29.2	29.5	29.6	29.5
Senegal	26.6	27.5	26.3	26.6	27.2	28.6	28.7	28.7	26.8	26.8	26.5	26.5	26.6
Sudan	23.8	25.4	23.5	20.5	19.0	17.9	15.1	14.8	13.6	12.5	11.7	11.3	11.1
Tanzania	23.2	23.1	24.5	27.0	27.5	26.9	26.8	26.8	25.8	25.3	24.9	24.7	24.8
Uganda	19.0	18.7	18.3	17.7	22.4	20.6	19.2	19.8	20.3	19.8	19.3	18.6	18.6
Uzbekistan	29.0	30.4	30.5	33.9	32.1	31.4	33.8	34.5	34.5	34.8	34.7	34.7	34.7
Vietnam	28.4	30.6	29.4	34.5	32.7	30.9	30.5	29.0	27.9	26.9	26.5	26.3	26.1
Yemen	37.4	40.3	41.2	35.2	30.1	28.9	35.1	32.7	32.4	32.0	30.5	28.9	28.6
Zambia	23.5	24.3	23.8	21.3	22.6	23.9	25.8	26.1	25.4	25.9	27.1	26.9	26.6
Average	24.1	25.2	25.1	26.2	25.5	25.6	26.8	26.8	26.5	26.1	25.7	25.5	25.3
Oil producers	27.0	29.3	29.1	31.5	29.6	28.8	30.2	29.2	28.3	27.6	27.1	26.7	26.4
Asia	23.9	25.3	24.0	28.0	26.8	25.9	27.2	26.1	25.9	25.3	25.2	25.1	25.0
Latin America	25.5	26.4	28.8	30.1	28.4	30.8	31.3	31.7	31.5	30.6	30.4	30.3	30.3
Sub-Saharan Africa	21.8	22.2	22.2	22.4	23.3	24.2	25.2	25.8	25.7	25.6	25.4	25.2	25.0
Others	28.0	29.9	29.8	29.2	26.5	25.6	27.2	27.9	27.0	26.4	25.5	24.9	24.7

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 SA.3.

Statistical Table 11. Low-Income Countries: General Government Gross Debt and Net Debt

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross Debt													
Armenia	16.2	14.2	14.6	34.1	33.7	35.5	39.5	42.6	45.2	44.5	44.8	43.8	44.7
Bolivia	55.2	40.5	37.2	40.0	38.5	34.7	33.1	34.2	33.3	32.2	31.1	29.9	28.5
Burkina Faso	22.6	22.0	23.6	26.1	27.1	29.3	27.7	25.2	24.3	23.8	23.4	23.1	22.9
Cambodia	32.7	30.6	27.5	28.9	29.1	28.5	28.5	28.1	28.3	27.8	27.2	26.3	25.7
Cameroon	15.9	12.0	9.5	10.6	12.1	13.9	14.9	17.7	21.6	25.3	28.8	32.4	35.3
Chad	31.2	26.0	23.4	30.5	32.8	36.1	34.5	36.1	34.3	31.8	32.0	31.8	31.9
Congo, Dem. Rep. of the	149.0	126.1	133.1	136.3	35.1	29.9	31.5	34.4	36.5	37.1	37.0	36.5	34.9
Congo, Rep. of	98.8	98.0	68.1	57.2	23.9	22.5	21.1	25.4	26.1	22.9	21.6	17.7	15.9
Côte d'Ivoire	84.2	75.6	75.3	66.5	66.4	94.9	49.1	45.4	42.8	40.9	39.2	37.8	37.8
Ethiopia	39.0	36.8	30.5	25.1	27.6	25.9	21.6	23.0	23.8	24.0	24.2	24.3	24.5
Georgia	27.1	21.5	27.6	37.3	39.2	33.8	32.7	31.2	31.1	30.3	29.2	27.9	26.5
Ghana	26.2	31.0	33.6	36.2	46.3	43.4	56.5	56.6	56.1	55.0	54.6	54.8	55.0
Haiti	39.0	34.8	37.8	28.2	17.7	12.2	15.4	20.4	24.2	26.7	28.6	29.7	31.3
Honduras	40.2	24.6	22.9	24.6	29.7	32.1	34.7	36.2	40.3	43.4	45.9	48.8	53.2
Lao P.D.R.	71.9	64.2	59.5	61.9	61.0	54.4	53.1	51.5	50.3	49.4	48.3	47.0	45.3
Madagascar	37.0	33.5	31.9	36.0	36.1	37.4	38.3	37.5	39.3	37.8	36.7	34.2	32.0
Mali	20.4	21.1	22.6	24.7	28.7	32.9	32.0	31.2	31.3	31.4	31.7	31.9	32.1
Moldova	30.4	25.2	18.8	26.7	26.5	23.1	23.8	22.5	20.8	19.3	17.8	17.4	17.0
Mozambique	53.6	41.9	42.1	51.9	49.3	45.1	46.6	47.0	47.6	47.1	47.1	46.8	46.4
Myanmar	100.4	70.1	57.0	57.5	52.4	52.9	47.5	45.4	46.6	47.4	47.9	48.1	47.8
Nepal	49.5	42.8	41.2	39.3	35.4	33.3	33.1	26.8	26.4	26.9	27.6	28.2	29.0
Nicaragua	87.0	62.4	57.7	61.3	62.8	56.1	52.1	50.2	40.6	39.9	39.2	38.4	37.1
Senegal	21.8	23.5	23.9	34.2	35.7	40.0	45.0	47.2	48.6	49.3	49.7	49.8	49.4
Sudan	75.0	70.7	68.8	71.8	73.1	71.0	97.6	102.9	87.2	76.8	69.9	65.1	63.5
Tanzania	42.6	28.4	29.2	32.6	37.7	40.0	41.4	44.9	46.4	47.0	47.0	46.7	46.6
Uganda	72.5	23.6	22.1	22.2	27.0	32.2	34.5	37.6	40.6	42.2	43.2	42.6	41.3
Uzbekistan	21.3	15.8	12.7	11.0	10.0	9.1	8.6	8.5	8.6	8.8	8.9	9.2	9.4
Vietnam	41.8	44.6	42.9	51.2	54.0	50.8	52.1	50.9	50.8	50.4	48.9	47.5	45.9
Yemen	40.8	40.4	36.4	49.9	40.9	43.2	46.7	48.5	48.7	49.5	50.4	50.0	49.2
Zambia	29.8	26.7	23.5	26.9	25.8	25.1	26.9	28.7	29.7	31.1	33.3	35.4	36.9
Average	49.6	43.0	40.7	43.6	42.3	41.4	42.5	42.0	41.7	41.2	40.7	40.2	39.8
Oil producers	40.8	41.2	37.8	44.7	43.4	42.3	44.3	44.6	45.1	44.9	44.6	43.7	42.9
Asia	51.9	48.6	45.2	50.5	50.7	48.5	48.1	46.4	46.6	46.5	45.6	44.8	43.8
Latin America	54.5	38.8	36.6	37.3	37.2	34.6	34.5	35.6	35.2	35.7	35.8	35.8	36.0
Sub-Saharan Africa	48.4	40.4	38.4	38.6	35.0	36.3	35.3	36.5	37.3	37.4	37.8	37.8	37.9
Others	47.5	43.4	40.8	46.0	45.4	43.0	50.3	48.1	45.0	42.6	40.9	39.4	38.8
Net Debt													
Armenia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Bolivia	41.9	27.3	20.6	23.1	18.4	14.4	11.0	8.7	6.7	4.8	3.2	1.9	0.7
Burkina Faso	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Cambodia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Cameroon	15.9	12.0	9.5	10.6	12.1	13.9	14.9	17.7	21.6	25.3	28.8	32.4	35.3
Chad	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Congo, Dem. Rep. of the	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Congo, Rep. of	98.8	98.0	68.1	57.2	23.9	22.5	21.1	25.4	26.1	22.9	21.6	17.7	15.9
Côte d'Ivoire	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Ethiopia	29.3	28.9	25.6	21.0	23.5	20.5	18.2	20.2	21.3	21.9	22.4	22.7	23.2
Georgia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Ghana	21.9	23.3	30.1	32.7	43.0	39.5	53.1	53.2	52.4	50.7	49.7	49.4	49.3
Haiti	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Honduras	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Lao P.D.R.	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Madagascar	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Mali	14.9	15.2	16.7	15.5	18.5	24.1	26.9	27.1	27.8	28.5	29.8	31.2	32.4
Moldova	30.4	25.2	18.8	26.7	26.5	23.1	23.8	22.5	20.8	19.3	17.8	17.4	17.0
Mozambique	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Myanmar	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Nepal	49.5	42.8	41.2	39.3	35.4	33.3	33.1	26.8	26.4	26.9	27.6	28.2	29.0
Nicaragua	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Senegal	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Sudan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Tanzania	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Uganda	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Uzbekistan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Vietnam	35.2	36.7	36.1	47.7	51.1	48.1	49.1	48.3	48.5	48.3	47.0	45.9	44.4
Yemen	33.0	35.2	31.4	43.7	36.8	40.0	44.8	46.8	47.1	48.1	49.1	48.9	48.2
Zambia	25.8	21.4	19.9	22.0	22.1	21.5	23.5	25.5	26.3	27.5	29.2	30.9	32.0
Average	33.6	32.2	30.4	35.1	35.9	34.4	36.3	36.5	37.0	36.9	36.7	36.4	36.0
Oil producers	36.2	36.5	33.7	42.1	41.4	40.4	42.5	43.0	43.8	44.0	43.8	43.0	42.2
Asia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Latin America	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Sub-Saharan Africa	29.5	27.9	26.4	24.5	26.0	25.1	28.3	29.9	31.1	31.4	32.2	32.8	33.5
Others	32.6	33.5	29.1	40.6	35.2	37.1	41.2	42.7	42.6	43.1	43.6	43.2	42.4

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 SA.3.

Statistical Table 12a. Advanced Economies: Structural Fiscal Indicators

(Percent of GDP, except where otherwise indicated)

	Pension spending change, 2011–30[1]	Net present value of pension spending change, 2011–50[1,2]	Health care spending change, 2011–30[3]	Net present value of health care spending change, 2011–50[2,3]	Gross financing needs, 2013[4]	Average term to maturity, 2013 (years)[5]	Debt-to-average maturity, 2013	Projected interest rate–growth differential, 2013–18 (percent)	Precrisis overall balance, 2000–07	Projected overall balance, 2013–18	Nonresident holding of marketable central government debt, 2012 (percent of total)[6]	Nonresident holding of general government debt, 2012 (percent of total)[7]
Australia	0.8	23.7	2.1	67.0	4.2	5.2	5.3	–1.2	1.6	0.2	76.5	72.2
Austria	2.7	58.6	3.2	104.6	8.4	7.5	9.8	0.1	–1.7	–1.3	71.2	83.3
Belgium	4.5	117.4	2.0	64.3	18.4	7.0	14.4	1.0	–0.3	–1.3	. . .	57.1
Canada	1.9	43.3	2.0	61.1	16.1	5.1	17.1	0.2	1.2	–1.6	20.7	23.5
Czech Republic	–0.2	6.9	0.6	17.5	11.3	5.5	8.2	–0.2	–3.9	–2.7	27.8	33.2
Denmark	0.5	8.7	0.8	21.5	10.1	8.0	6.4	0.5	2.5	–1.4	42.9	45.7
Estonia	–1.1	–42.3	1.1	37.3	. . .	11.7	0.8	–2.8	1.5	0.3	. . .	70.0
Finland	3.6	82.4	2.5	76.4	7.9	5.8	9.9	–1.2	4.1	–0.7	95.3	91.1
France	0.3	6.9	1.5	43.8	17.1	6.8	13.6	–0.1	–2.8	–2.2	62.9	63.5
Germany	1.2	33.5	0.9	28.1	8.2	6.4	12.6	0.0	–2.3	–0.1	59.3	61.3
Greece	0.5	22.0	3.2	106.9	19.5	7.9	22.7	1.0	–5.6	–2.0	68.8	68.2
Hong Kong SAR	. . .	. . .	. . .	. . .	. . .	. . .	. . .	–7.4	0.0	3.1	. . .	1.7
Iceland	0.4	6.9	3.2	105.0	7.8	7.4	12.4	–0.1	1.5	0.3	28.1	. . .
Ireland	1.6	64.0	0.7	23.2	13.2	12.0	10.2	0.4	1.4	–3.0	72.6	63.9
Israel	. . .	. . .	. . .	. . .	. . .	5.6	13.3	0.5	–5.0	–2.8	11.0	15.9
Italy	–0.8	–10.3	0.6	18.8	27.8	6.5	20.2	2.4	–3.0	–1.9	40.7	35.1
Japan	–0.2	6.5	1.0	27.5	59.0	6.3	39.2	–1.2	–5.8	–6.4	. . .	8.9
Korea	4.5	152.5	3.2	111.9	0.7	5.5	5.9	–2.1	2.1	2.6	. . .	14.3
Netherlands	2.3	64.7	2.6	79.3	12.0	6.7	11.1	0.0	–0.6	–3.0	. . .	53.5
New Zealand	2.3	66.3	3.0	95.9	9.7	4.9	7.8	–0.2	3.0	0.0	36.4	. . .
Norway	2.8	78.9	1.7	52.0	–8.0	3.5	9.7	–1.7	13.4	9.7	37.8	39.4
Portugal	0.8	23.1	3.5	116.5	23.0	5.3	23.2	1.2	–4.1	–2.8	63.3	60.4
Singapore[8]	. . .	. . .	. . .	. . .	. . .	3.2	33.8	–5.4	7.1	4.8	. . .	. . .
Slovak Republic	1.4	51.0	1.2	37.1	11.1	6.2	8.9	–0.8	–3.6	–3.0	35.2	45.4
Slovenia	2.1	85.2	0.7	22.2	11.8	6.1	11.3	2.0	–1.0	–4.2	60.9	47.0
Spain	0.5	42.6	1.6	51.5	20.7	5.6	16.3	2.2	0.4	–6.3	41.6	29.1
Sweden	0.5	9.3	0.4	11.7	4.3	5.6	6.7	–1.5	1.3	0.9	43.3	46.8
Switzerland	2.2	58.4	3.9	127.7	3.3	8.1	6.0	–0.4	0.2	0.7	. . .	10.5
United Kingdom	0.0	–0.7	3.3	113.3	13.0	14.4	6.5	–0.3	–1.7	–4.8	30.7	31.9
United States	1.9	43.0	5.1	164.5	25.2	5.3	20.4	–1.8	–2.5	–4.8	55.1	32.1
Average	1.3	35.5	3.1	98.8	22.7	6.3	18.4	–0.9	–1.9	–3.2	51.8	36.2
G-7	1.2	28.1	3.3	105.8	26.7	6.4	20.7	–1.0	–2.8	–4.0	51.1	33.9
G-20 advanced	1.3	32.7	3.3	104.5	24.8	6.3	19.5	–1.0	–2.5	–3.6	52.4	34.9

Sources: Bloomberg L.P.; national authorities; Haver Analytics; Organisation for Economic Co-operation and Development, OECD.Stat; Joint External Debt Hub; 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 are based on Clements and others (2013). Projections rely on authorities' estimates when these are available. Projections do not take into account reforms enacted after December 2011.

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

[3] *Health care spending* projections are based on Soto, Shang, and Coady (2012).

[4] *Gross financing needs* are defined as the projected overall deficit and maturing government debt in 2012; for more details on the assumptions, see note 1 in Table 6. Data are from Bloomberg and IMF staff projections.

[5] For most countries, *average term to maturity* data refer to central government securities; source is Bloomberg.

[6] *Nonresident holding of central government debt* (marketable securities) data are from national authorities and OECD.Stat for 2012:Q3 or latest available. General government for Germany, Greece, Italy, Portugal, and Spain.

[7] *Nonresident holding of general government debt* data are for 2012:Q3 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 2012 gross general government debt .

[8] Singapore's general government debt is covered by financial assets and issued to develop the bond market.

Statistical Table 12b. Emerging Market Economies: Structural Fiscal Indicators

(Percent of GDP, except where otherwise indicated)

	Pension spending change, 2010–30[1]	Net present value of pension spending change, 2011–50[1,2]	Health care spending change, 2011–30[3]	Net present value of health care spending change, 2011–50[2,3]	Gross financing needs, 2013[4]	Average term to maturity, 2013 (years)[5]	Debt-to-average maturity, 2013	Projected interest rate–growth differential, 2013–18 (percent)	Precrisis overall balance, 2000–07	Projected overall balance, 2013–18	Nonresident holding of general government debt, 2012 (percent of total)[6]
Argentina	1.5	56.9	1.5	51.8	8.7	13.7	3.1	–12.6	–4.7	–2.4	31.8
Brazil	1.3	71.0	1.6	52.0	17.1	5.1	13.1	2.4	–3.5	–1.5	17.6
Bulgaria	–0.2	–2.3	1.3	44.6	3.9	4.1	4.3	–0.1	1.1	0.0	47.2
Chile	–1.9	–43.6	1.5	50.5	0.9	8.2	1.4	0.1	2.4	–0.1	15.9
China	3.4	102.7	0.8	27.8	6.2	8.3	2.6	–7.7	–1.8	–0.8	. . .
Colombia	–1.1	–40.0	. . .	. . .	3.8	6.6	4.9	1.5	–1.9	–0.8	27.7
Egypt	4.1	85.2	. . .	. . .	37.4	1.7	51.2	1.5	–9.0	–6.8	12.4
Hungary	–0.8	–2.5	1.6	51.9	21.0	5.0	16.0	1.3	–6.6	–3.2	67.7
India	0.0	–1.9	0.4	12.6	12.7	9.0	7.4	–4.5	–8.0	–8.3	6.7
Indonesia	0.5	15.3	0.5	15.6	3.7	10.1	2.3	–5.2	–1.0	–1.7	54.6
Jordan	1.8	74.7	. . .	. . .	31.8	1.7	50.3	–2.8	–3.5	–3.7	23.5
Kazakhstan	. . .	. . .	. . .	. . .	–2.9	7.4	1.8	–5.4	4.6	4.1	18.8
Kenya	. . .	. . .	. . .	. . .	. . .	5.7	8.5	–5.6	–1.9	–3.8	. . .
Latvia	–3.1	–83.1	1.0	34.7	3.1	4.7	8.7	–2.0	–1.4	–1.1	86.0
Lithuania	–0.2	5.0	1.5	49.4	8.6	4.8	8.4	–1.5	–1.8	–2.2	90.6
Malaysia	1.8	55.9	0.8	25.8	10.2	5.5	10.2	–2.4	–4.1	–3.7	28.8
Mexico	1.3	16.7	1.1	37.7	10.8	8.0	5.5	–0.2	–2.1	–2.8	33.2
Morocco	. . .	. . .	. . .	. . .	15.7	5.1	12.0	–2.9	–3.5	–3.6	19.7
Nigeria	. . .	. . .	. . .	. . .	. . .	3.2	5.6	–2.2	3.9	–0.8	. . .
Pakistan	0.1	6.1	0.2	8.3	33.2	2.2	29.4	–4.6	–3.2	–7.9	. . .
Peru	. . .	. . .	. . .	. . .	0.4	14.7	1.2	–2.7	–0.4	1.8	49.6
Philippines	1.0	32.5	0.5	15.6	7.5	11.1	3.6	–1.9	–2.4	–0.9	. . .
Poland	–0.9	–32.7	1.8	58.7	11.6	5.3	10.8	–0.1	–4.3	–2.4	52.8
Romania	0.5	22.7	1.3	43.0	11.6	4.7	7.8	–0.8	–2.6	–1.8	47.9
Russian Federation	3.5	115.0	1.1	36.7	1.6	7.7	1.4	–1.2	4.6	–1.3	19.4
Saudi Arabia	2.0	87.0	1.0	35.5	. . .	10.7	0.3	2.2	10.7	3.8	. . .
South Africa	0.8	24.4	1.1	36.5	12.0	9.8	4.3	–2.1	–0.5	–3.7	32.0
Thailand	0.7	20.4	1.1	36.5	8.2	7.7	6.0	–4.8	–0.4	–2.3	10.3
Turkey	4.6	108.5	1.3	44.0	9.4	4.3	8.2	0.2	–5.0	–2.2	29.6
Ukraine	1.2	71.6	1.2	38.8	16.6	4.0	10.5	–2.8	–2.4	–4.1	37.7
Average	2.2	70.1	1.0	32.0	8.8	7.7	5.7	–4.0	–1.7	–1.8	25.6
G-20 emerging	2.9	92.3	1.0	33.0	7.5	7.8	4.4	–4.7	–0.8	–1.0	26.3

Sources: Bloomberg L.P.; Joint External Debt Hub; 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 are based on Clements and others (2013). Projections rely on authorities' estimates when these are available. Projections do not take into account reforms enacted after December 2011.

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

[3] *Health care spending* projections are based on Soto, Shang, and Coady (2012).

[4] *Gross financing needs* are defined as the projected overall balance and maturing government debt in 2012. Data are from IMF staff projections. See Table 6.

[5] *Average term to maturity* data refer to government securities; source is Bloomberg.

[6] *Nonresident holding of general government debt* data are 2012:Q3 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 2012 gross general government debt.

Statistical Table 13a. Advanced Economies: Illustrative Adjustment Needs

(Percent of GDP)

	2013		Age-related spending, 2013–30[3]	Illustrative Fiscal Adjustment Strategy to Achieve Debt Target in 2030		
	Gross debt[1]	CAPB[2]		CAPB in 2020–30[4]	Required adjustment between 2013 and 2020	Required adjustment and age-related spending, 2013–30
	(1)	(2)	(3)	(4)	(4) – (2)	(4) + (3) – (2)
Australia	12.7	–0.6	2.9	0.0	0.7	3.6
Austria	74.2	0.7	5.9	1.2	0.4	6.3
Belgium	100.3	1.2	6.5	3.8	2.6	9.1
Canada	35.9	–1.8	3.9	0.6	2.3	6.2
Czech Republic	44.8	–0.5	0.4	0.3	0.9	1.3
Denmark	51.8	–0.1	1.3	0.2	0.3	1.6
Finland	56.9	0.6	6.1	–0.2	–0.8	5.3
France	92.7	0.5	1.8	2.9	2.4	4.2
Germany	80.4	2.3	2.1	1.2	–1.1	1.0
Greece	179.5	4.8	3.7	7.2	2.4	6.1
Iceland	91.9	4.0	3.5	2.1	–1.9	1.7
Ireland	122.0	–0.7	2.4	5.6	6.2	8.6
Israel	74.4	0.6	. . .	1.8	1.2	. . .
Italy	130.6	5.3	–0.2	6.6	1.3	1.1
Japan	143.4	–8.8	0.8	7.3	16.1	16.9
Korea	32.5	3.7	7.8	–0.9	–4.6	3.2
Netherlands	74.5	0.5	4.9	1.7	1.2	6.1
New Zealand	28.8	–1.7	5.3	0.4	2.1	7.4
Portugal	122.3	1.2	4.2	5.9	4.7	8.9
Slovak Republic	55.3	–0.5	2.6	0.4	0.9	3.5
Slovenia	68.8	0.7	2.8	1.6	0.8	3.7
Spain	91.8	–0.6	2.1	4.0	4.7	6.8
Sweden	37.7	0.3	0.9	–0.4	–0.7	0.2
Switzerland	48.3	1.2	6.1	–0.3	–1.6	4.5
United Kingdom	93.6	–1.2	3.3	4.2	5.4	8.7
United States	108.1	–2.1	7.1	4.1	6.2	13.3
Average	95.9	–1.4	4.2	3.6	4.9	9.1
G-20 advanced	99.2	–1.7	4.3	3.8	5.5	9.8

Source: IMF staff estimates and projections.

Note: The CAPB required to reduce debt and its comparison to the 2013 CAPB is a standardized calculation, and policy recommendations for individual countries would require a case-by-case assessment.

[1] Gross general government debt, except in the cases of Australia, Canada, Japan, and New Zealand, for which net debt ratios are used.

[2] Cyclically adjusted primary balance (CAPB) is reported in percent of nominal GDP (in contrast to the conventional definition in percent of potential GDP). CAPB is defined as cyclically adjusted balance (CAB) plus gross interest expenditure (this differs from the definition in Statistical Table 2), except in the cases of Australia, Canada, Japan, and New Zealand, for which CAPB is defined as CAB plus net interest payments (as in Statistical Table 2). Structural balances are used instead of CAB for Sweden and the United States. For details, see "Data and Conventions" in text.

[3] See Statistical Table 12a.

[4] CAPB needed to bring the debt ratio down to 60 percent in 2030, or to stabilize debt at the end-2013 level by 2030, if the respective debt-to-GDP ratio is less than 60 percent. For Japan, a net debt target of 80 percent of GDP is assumed, which corresponds to a target of 200 percent of GDP for gross debt. The CAPB is assumed to change in line with *Fiscal Monitor* projections in 2011–13 and adjust gradually from 2014 until 2020 (except in the cases of Ireland and Portugal, for which adjustment starts in 2015); thereafter it is maintained constant until 2030. These calculations assume that the initial country-specific interest rate–growth differentials (based on *Fiscal Monitor* projections) converge over time to model-based country-specific levels with the speed of adjustment based on empirical estimates of the effect of public debt on the interest rate (Poghosyan, 2012) and growth rates obtained from *Fiscal Monitor* projections for 2018. The assumption on the interest rate–growth differential for countries with IMF/EU-supported programs and without market access (Greece, Portugal) is drawn from their debt sustainability analyses. The interest rate–growth differential is assumed to follow the endogenous adjustment path determined by debt levels from 2019 in the case of Portugal.

Statistical Table 13b. Emerging Market Economies: Illustrative Adjustment Needs

(Percent of GDP)

	2013		Age-related spending, 2013–30[2]	Illustrative Fiscal Adjustment Strategy to Achieve Debt Target in 2030		
	Gross debt	CAPB[1]		CAPB in 2020–30[3]	Required adjustment between 2013 and 2020	Required adjustment and age-related spending, 2013–30
	(1)	(2)	(3)	(4)	(4) – (2)	(4) + (3) – (2)
Argentina	42.4	–0.4	3.0	–1.2	–0.8	2.2
Brazil	67.2	5.6	2.9	1.4	–4.2	–1.3
Bulgaria	17.8	0.6	1.1	0.3	–0.2	0.9
Chile	11.1	0.2	–0.4	–0.1	–0.3	–0.7
China	21.3	–0.3	4.2	–0.3	0.0	4.3
Colombia	32.0	1.4	. . .	0.0	–1.3	. . .
Egypt	85.2	–3.2	. . .	4.6	7.7	. . .
Hungary	79.9	2.1	0.8	3.8	1.6	2.5
India	66.4	–4.2	0.4	2.5	6.7	7.0
Indonesia	23.6	–1.4	0.9	0.3	1.7	2.7
Jordan	83.8	–1.6	. . .	3.6	5.2	. . .
Kenya	47.9	–0.4	. . .	–0.3	0.2	. . .
Latvia	41.0	0.6	–2.1	0.2	–0.4	–2.5
Lithuania	40.0	–0.6	1.3	0.5	1.0	2.3
Malaysia	56.0	–1.7	2.6	1.7	3.5	6.0
Mexico	43.5	–0.5	2.4	0.7	1.2	3.6
Morocco	61.2	–2.0	. . .	2.2	4.2	. . .
Nigeria	17.9	4.3	. . .	–0.5	–4.8	. . .
Pakistan	64.1	–2.3	0.4	2.3	4.6	4.9
Peru	17.5	2.4	. . .	–0.6	–3.0	. . .
Philippines	39.7	0.5	1.5	–0.3	–0.7	0.7
Poland	56.8	–0.3	0.9	2.2	2.4	3.3
Romania	36.9	0.7	1.8	0.3	–0.4	1.3
Russian Federation	10.4	0.4	4.6	–0.1	–0.5	4.0
South Africa	42.7	–1.5	1.9	0.8	2.3	4.2
Thailand	45.9	–2.0	1.8	–0.8	1.2	3.0
Turkey	35.5	1.5	5.9	0.1	–1.4	4.5
Ukraine	42.2	–1.5	. . .	1.2	2.7	. . .
Average	36.5	0.2	3.1	0.5	0.3	3.5
G-20 emerging	34.9	0.2	3.4	0.4	0.2	3.6

Source: IMF staff estimates and projections.

Note: The cyclically adjusted primary balance (CAPB) required to reduce debt and its comparison to the 2013 CAPB is a standardized calculation, and policy recommendations for individual countries would require a case-by-case assessment. For countries with debt to GDP below 40 percent of GDP in 2013, calculations show the CAPB required to stabilize debt at the end-2013 level by 2030.

[1] CAPB is reported in percent of nominal GDP (in contrast to the conventional definition in percent of potential GDP). CAPB is defined as cyclically adjusted balance (CAB) plus gross interest expenditure (this differs from the definition in Statistical Table 6). Structural balances are used instead of CAB for Chile and Peru. For countries not reporting CAB in Statistical Table 6, a Hodrick-Prescott filter is used to estimate potential output, and the CAB is estimated assuming growth elasticities of 1 and 0 for revenues and expenditure, respectively. For details, see "Data and Conventions" in text.

[2] See Statistical Table 12b.

[3] CAPB needed to bring the debt ratio down to 40 percent in 2030, or to stabilize debt at the end-2013 level by 2030 if the respective debt-to-GDP ratio is less than 40 percent. The CAPB is assumed to change in line with *Fiscal Monitor* projections in 2011–13 and adjust gradually from 2014 until 2020; thereafter it is maintained constant until 2030. The analysis makes some simplifying assumptions: in particular, country-specific interest rate–growth differentials are assumed to increase linearly from their 2013 level (from *Fiscal Monitor* projections) to 1 by 2027. Thereafter, the differential is maintained at 1 percentage point, regardless of country-specific circumstances. The speed of convergence to 1 is determined by the gap between the 2013 level and this long-run differential. For large commodity-producing countries, even larger fiscal balances might be called for in the medium term than shown in the illustrative scenario, given the high volatility of revenues and the exhaustibility of natural resources.

Statistical Table 14. General Government Nonfinancial Assets

(Percent of GDP)

			Produced Assets							Nonproduced Assets				
				Fixed assets										
	Latest Available Data	Total Nonfinancial Assets	Total produced assets	Total fixed assets	Buildings and structures	Machinery and equipment	Other fixed assets	Inventories	Valuables	Total non-produced assets	Land	Subsoil assets	Other naturally occurring	Intangible non-produced
Australia	2010	109.3	40.7	40.6	33.9	2.9	3.8	0.1	. . .	68.6	21.9	46.0	0.7	0.0
Austria	2011	37.0	37.0	37.0	34.3	2.5	0.3	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Barbados[1]	2010	33.7	. . .	17.3	13.7	1.7	1.9	. . .	. . .	16.5	16.4	. . .	. . .	0.1
Belgium	2011	37.6	. . .	37.6	35.7	1.8	0.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Bolivia[1]	2007	5.7	. . .	3.2	2.8	0.3	0.0	0.1	. . .	2.4	2.4	. . .	. . .	. . .
Canada	2010	43.1	33.9	33.9	31.4	2.5	. . .	0.0	. . .	. . .	9.2	. . .	. . .	. . .
Colombia	2010	35.7	. . .	26.3	22.6	2.8	0.9	1.0	0.1	8.3	4.4	4.0	. . .	. . .
Costa Rica[1]	2010	48.7	. . .	0.9	0.6	0.3	. . .	. . .	. . .	47.8	47.8	. . .	. . .	. . .
Czech Republic	2011	161.3	138.8	131.7	127.7	3.7	0.3	7.0	0.1	22.5	19.7	0.0	0.0	2.8
Dominican Republic[1]	2006	11.0	. . .	10.8	9.3	1.5	. . .	. . .	. . .	0.2	0.2	. . .	. . .	. . .
El Salvador	2010	1.5	. . .	0.9	0.4	0.3	0.3	0.1	. . .	0.5	0.5	. . .	. . .	. . .
Estonia	2009	. . .	. . .	. . .	3.8	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Finland	2011	47.7	47.7	47.7	44.8	2.7	0.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
France	2011	88.3	54.4	53.5	51.8	1.3	0.5	0.9	0.0	33.9	33.8	0.1	0.0	0.0
Germany	2011	43.4	43.4	43.4	42.0	1.3	0.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Hong Kong SAR	2010	18.3	. . .	18.1	15.0	0.6	2.5	0.1	. . .	. . .	. . .	. . .	. . .	. . .
Hungary	2010	115.1	115.1	115.1	109.4	5.5	0.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Israel	2007	37.8	37.8	37.4	35.3	. . .	. . .	0.3	. . .	. . .	. . .	. . .	. . .	. . .
Italy	2010	. . .	. . .	. . .	3.5	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Japan	2010	120.2	. . .	93.9	91.4	2.2	0.3	0.4	. . .	26.0	26.0	. . .	. . .	. . .
Korea	2010	127.9	57.1	. . .	. . .	. . .	. . .	0.5	. . .	69.3	63.3	4.9	1.0	. . .
Latvia	2010	184.0	168.8	166.4	161.9	3.9	0.6	2.3	. . .	15.2	. . .	. . .	. . .	. . .
Lithuania	2011	57.2	57.2	57.2	53.9	3.0	0.4	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Luxembourg	2010	87.3	87.3	87.3	84.0	3.0	0.3	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Netherlands	2011	99.4	63.6	63.5	60.5	2.8	0.3	0.1	. . .	35.7	9.0	26.8	. . .	. . .
New Zealand	2010	94.0	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Norway	2010	46.5	. . .	46.5	43.0	3.5	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Poland	2010	. . .	. . .	. . .	4.2	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Russian Federation	2010	46.3	. . .	38.8	17.1	5.0	16.7	5.0	. . .	. . .	0.1	. . .	2.5	. . .
Slovak Republic	2010	74.4	. . .	66.0	61.2	4.3	0.4	0.8	0.0	7.6	7.5	. . .	. . .	. . .
Slovenia	2011	51.2	51.2	51.2	46.4	3.8	1.0	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Sweden	2010	. . .	. . .	. . .	0.3	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Switzerland	2009	23.2	. . .	19.8	18.6	1.1	0.1	0.1	. . .	3.3	3.3	. . .	. . .	0.0
United Kingdom	2011	49.2	49.2	49.2	47.0	2.1	0.2	0.0	. . .	. . .	. . .	. . .	. . .	. . .
United States	2011	66.3	66.3	66.3	62.9	2.9	0.5	. . .	. . .	. . .	. . .	. . .	. . .	. . .

Sources: Bova and others (2013); IMF, *Government Finance Statistics*; Eurostat; National sources; Organisation for Economic Co-operation and Development; and IMF staff estimates.

[1] Central government.

Statistical Table 15. Components of Consolidated Government and Central Bank Debt, 2012[1]

(Percent of GDP)

	Gross general government debt	Gross consolidated government and central bank debt[2]	Net general government debt[3]	Central bank nonmonetary liabilities	Central bank net claims on government	Central bank net foreign assets	Central bank claims on other sectors	Net consolidated government and central bank debt	Difference from April 2012 *Fiscal Monitor*
	1	2	3	4	5	6	7	(3+4–5–6–7)	
United States	106.5	96.0	87.9	0.0	10.4	0.1	6.2	71.2	8.5
Japan[4]	237.9	217.0	134.3	0.0	16.3	1.3	10.7	106.1	7.8
Euro area	92.9	112.8	71.9	26.1	5.3	5.6	38.9	48.3	–1.4
Austria[5]	73.7	90.7	53.5	22.2	4.5	4.7	28.2	38.3	–1.6
Belgium[5]	99.6	117.0	83.3	22.8	4.6	4.9	35.9	60.8	–0.8
France[5]	90.3	109.3	84.1	24.8	5.0	5.3	37.6	61.0	–1.5
Germany[5]	82.0	101.4	57.2	25.4	5.1	5.4	29.4	42.7	–2.2
Ireland[5]	117.1	135.5	102.3	24.1	4.8	5.1	108.2	8.3	–12.0
Italy[5]	127.0	148.6	103.2	28.3	5.7	6.0	42.8	76.9	–0.9
Netherlands[5]	71.7	89.7	32.5	23.5	4.7	5.0	25.6	20.6	–3.1
Portugal[5]	123.0	151.6	111.6	37.4	7.5	8.0	55.9	77.6	3.0
Spain[5]	84.1	105.5	71.9	28.0	5.6	6.0	46.8	41.6	10.5
Australia	27.2	24.5	11.6	0.0	1.5	3.1	0.0	7.1	4.0
Canada	85.6	81.7	34.6	0.1	3.4	0.2	0.0	31.0	1.4
Denmark	50.1	57.9	7.6	7.8	–11.5	27.6	5.0	–5.7	1.6
Korea	33.7	32.6	32.2	0.2	1.1	27.7	0.3	3.4	–0.9
Sweden	38.0	38.0	–17.6	0.0	–2.5	9.1	0.0	–24.3	3.9
Switzerland	49.1	61.2	28.3	12.4	0.2	79.8	1.1	–40.5	4.2
United Kingdom	90.3	64.0	82.8	0.0	26.3	–1.6	0.1	57.9	–2.2

Sources: European Central Bank; IMF, *International Financial Statistics*; and IMF staff estimates and calculations.

[1] Net consolidated government and central bank debt is computed as the net debt of the general government (excluding central bank net claims on the government) plus nonmonetary liabilities of the central bank (excluding currency in circulation and reserves) minus central bank assets (foreign assets and central bank claims on other sectors). The nonmonetary liabilities of the central bank consist of deposits that are not part of base money and central bank securities. See Buiter (1995, 2010).

[2] Excludes central bank gross claims on government and includes central bank nonmonetary liabilities, for example, deposits not part of base money or central bank securities.

[3] Gross general government debt minus financial assets, excluding shares and other equity and financial derivatives.

[4] Central bank data based on latest available.

[5] In the Eurosystem, profits and losses from most monetary policy operations are pooled and shared among national central banks according to their respective capital shares in the European Central Bank. For calculation of the net consolidated debt of euro area countries, the assets and liabilities of the consolidated Eurosystem are split among individual member states, on the basis of their capital shares. The only exception is the liquidity assistance provided by the national central banks to domestic banks, which is excluded from these sharing arrangements.

ACRONYMS

CAB	cyclically adjusted balance
CAPB	cyclically adjusted primary balance
CBO	Congressional Budget Office (United States)
CIS	Commonwealth of Independent States (WEO classification)
EFSF	European Financial Stability Facility
ESM	European Stability Mechanism
EU	European Union
FC	fiscal council
GDP	gross domestic product
GFS	Government Finance Statistics
GFSM	*Government Finance Statistics Manual*
GFSR	*Global Financial Stability Report*
LAC	Latin America and the Caribbean
LIC	low-income country
MDRI	Multilateral Debt Relief Initiative
MENA	Middle East and North Africa
NFA	nonfinancial assets
OECD	Organisation for Economic Co-operation and Development
OMB	Office of Management and Budget (United States)
PB	primary balance
SB	structural balance
SNGs	subnational governments
SSA	Sub-Saharan Africa
VAT	value-added tax
WEO	*World Economic Outlook*

COUNTRY ABBREVIATIONS

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

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

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

GLOSSARY

Term	Definition
Automatic stabilizers	Budgetary measures that dampen fluctuation in real GDP, automatically triggered by the tax code and by spending rules.
Contingent liabilities	Obligations of a government whose timing and magnitude depend on the occurrence of some uncertain future event outside the government's control. Can be explicit (obligations based on contracts, laws, or clear policy commitments) or implicit (political or moral obligations) and sometimes arise from expectations that government will intervene in the event of a crisis or a disaster, or when the opportunity cost of not intervening is considered to be unacceptable.
Cyclical balance	Cyclical component of the overall fiscal balance, computed as the difference between cyclical revenues and cyclical expenditures. The latter are typically computed using country-specific elasticities of aggregate revenue and expenditure series with respect to the output gap. Where unavailable, standard elasticities (0, 1) are assumed for expenditure and revenue, respectively.
Cyclically adjusted balance (CAB)	Difference between the overall balance and the automatic stabilizers; equivalently, an estimate of the fiscal balance that would apply under current policies if output were equal to potential.
Cyclically adjusted (CA) expenditure and revenue	Revenue and expenditure adjusted for temporary effects associated with the deviation of actual from potential output (i.e., net of automatic stabilizers).
Cyclically adjusted primary balance (CAPB)	Cyclically adjusted balance excluding net interest payments.
Expenditure elasticity	Elasticity of expenditure with respect to the output gap.
Fiscal multiplier	The ratio of a change in output to an exogenous and temporary change in the fiscal deficit with respect to their respective baselines.
Fiscal stimulus	Discretionary fiscal policy actions (including revenue reductions and spending increases) adopted in response to the financial crisis.
General government	All government units and all nonmarket, nonprofit institutions that are controlled and mainly financed by government units comprising the central, state, and local governments; does not include public corporations or quasi-corporations.
Gross debt	All liabilities that require future payment of interest and/or principal by the debtor to the creditor. This includes debt liabilities in the form of Special Drawing Rights, currency, and deposits; debt securities; loans; insurance, pension, and standardized guarantee schemes; and other accounts payable. (See the 2001 edition of the IMF's *Government Financial Statistics Manual* and the *Public Sector Debt Statistics Manual*). The term "public debt" is used in the *Monitor*, for simplicity,

Term	Definition
	as synonymous with gross debt of the general government, unless otherwise specified. (Strictly speaking, the term "public debt" refers to the debt of the public sector as a whole, which includes financial and nonfinancial public enterprises and the central bank.)
Gross financing needs (also gross financing requirements)	Overall new borrowing requirement plus debt maturing during the year.
Interest rate–growth differential ($r - g$)	Effective interest rate (r, defined as the ratio of interest payments over the debt of the preceding period) minus nominal GDP growth (g), divided by 1 plus nominal GDP growth: $(r - g)/(1 + g)$.
Net debt	Gross debt minus financial assets, including those held by the broader public sector: for example, social security funds held by the relevant component of the public sector, in some cases.
Nonfinancial public sector	General government plus nonfinancial public corporations.
Output gap	Deviation of actual from potential GDP, in percent of potential GDP.
Overall fiscal balance (also "headline" fiscal balance)	Net lending/borrowing, defined as the difference between revenue and total expenditure, using the 2001 edition of the IMF's *Government Finance Statistics Manual* (GFSM 2001). Does not include policy lending. For some countries, the overall balance continues to be based on GFSM 1986, in which it is defined as total revenue and grants minus total expenditure and net lending.
Policy lending	Transactions in financial assets that are deemed to be for public policy purposes but are not part of the overall balance.
Primary balance	Overall balance excluding net interest payment (interest expenditure minus interest revenue).
Public debt	See *Gross debt*.
Public sector	The general government sector plus government-controlled entities, known as public corporations, whose primary activity is to engage in commercial activities.
Revenue elasticity	Elasticity of revenue with respect to the output gap.
Stock-flow adjustment	Annual change in gross debt not explained by the budget balance.
Structural fiscal balance	Difference between the cyclically adjusted balance and other non-recurrent effects that go beyond the cycle, such as one-time operations and other factors whose cyclical fluctuations do not coincide with the output cycle (for instance, asset and commodity prices and output composition effects).
Tax expenditures	Government revenues that are foregone as a result of preferential tax treatments to specific sectors, activities, regions, or economic agents.

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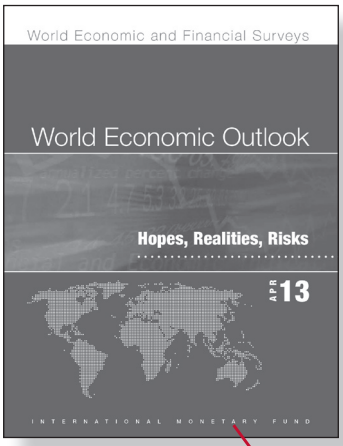

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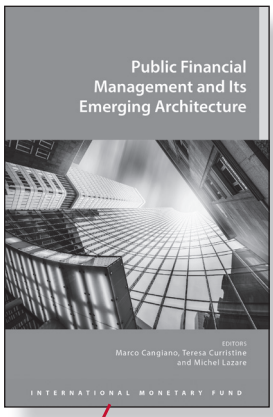

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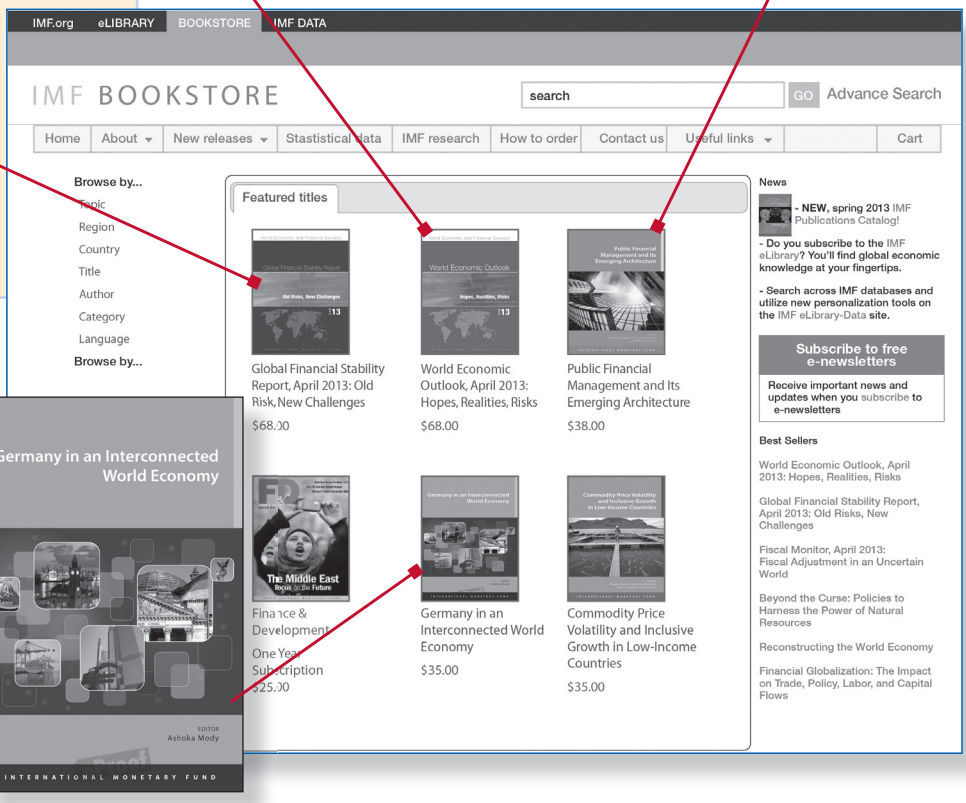

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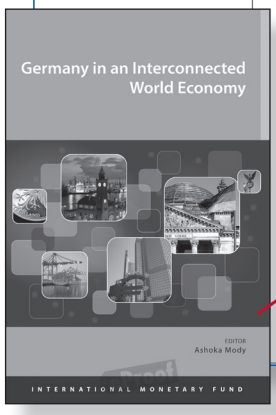

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