

A moderate and uneven recovery is taking place in advanced economies, supported by lower oil prices, continued accommodative monetary policy, and slower fiscal adjustment. However, high public and private debt levels continue to pose headwinds to growth and debt sustainability in some advanced economies. In addition, inflation is below target by a large margin in many countries, making the task of reducing high public debt levels more difficult. Growth in emerging market economies is softening, and financial and exchange rate volatility has increased public financing costs for some of them. Meanwhile, lower oil and commodity revenues have created challenges for exporting countries.

In light of these challenges, it is important to focus on growth in a coordinated fashion. Although continued support from monetary policy is welcome, decisive action is also needed on fiscal policy and structural reforms. Fiscal policy has an essential role to play in both building confidence and sustaining aggregate demand but is constrained in many economies by high explicit and implicit public debt. Countries should continue to implement fiscal policy flexibly to support growth while ensuring the sustainability of their medium-term fiscal outlook and strengthening their fiscal frameworks.

Fiscal reforms will be essential to catalyze growth. Lower oil prices provide a golden opportunity to reduce inefficient energy subsidies in favor of more productive and equitable spending. Energy tax reform could help reduce negative externalities caused by energy consumption, such as pollution and global warming, and provide breathing room for growth-enhancing tax reforms—for example, by lowering taxes on labor to boost employment (see the October 2014 *Fiscal Monitor*).

The Fiscal Impact of Lower Oil Prices

Independent of its impact on global growth (see the April 2015 *World Economic Outlook*), the fall in interna-

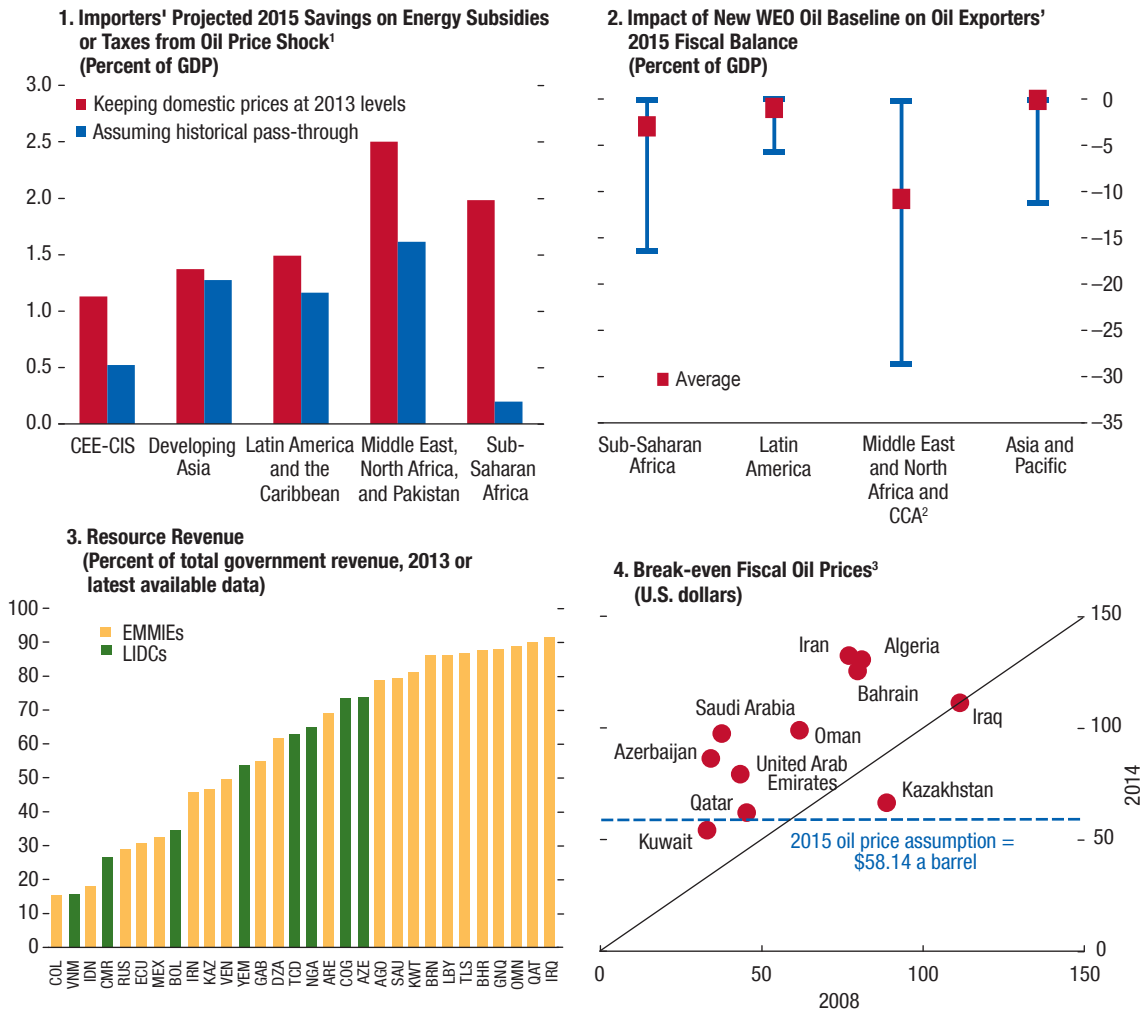
tional oil prices is expected to help the public finances of importers and hurt those of exporters. The impact could be large, but whereas the gains will be spread across many economies, the adverse fiscal effects will be concentrated in relatively few. Although oil exporters account for a lower share of global GDP than oil importers, exporters face a much larger shock given that oil has a much bigger weight in their economies and budgets.

Oil importers in emerging market and developing economies could reap, on average, fiscal savings of 1 percent of GDP in 2015. Country-specific estimates range from near zero to 5 percent of GDP, depending on the expected pass-through of international to domestic retail prices and the structure of energy taxation (Figure 1.1, panel 1): the higher the pass-through, the lower the fiscal savings. Oil importers that provide no subsidies on oil products but earn some fiscal revenues through oil import tariffs and other domestic taxes on fuel and petroleum products could see some deterioration in revenues—as those tariffs and taxes are ad valorem—but the impact is expected to be small (less than 0.1 percent of GDP in advanced economies). Where fuel prices are liberalized and the entire decline in international prices is expected to be passed on to consumers, there could be positive second-round effects, through stronger aggregate demand and revenues.

For oil exporters—most of which are emerging market and middle-income economies—the fiscal loss associated with lower oil prices is estimated to average 4 percent of GDP this year. Country estimates range from close to zero to more than 25 percent of GDP, depending on the contribution of oil revenues to fiscal revenues (Figure 1.1, panel 2). In many oil exporters, oil revenues often account for more than 50 percent of total revenues; the share is as high as 80 to 90 percent in some countries (Equatorial Guinea, Iraq, Qatar—Figure 1.1, panel 3). The impact on the overall balance will also depend on the weight of fuel

Figure 1.1. Fiscal Impact of Lower Oil Prices

Lower oil prices will help importers and hurt exporters, and the impact could be considerable. The gains will be spread across many economies, whereas the adverse effects will be concentrated in relatively few.



Sources: IMF, Fiscal Affairs Department Tax Policy database; and IMF staff estimates.
 Note: CCA = Caucasus and Central Asia; CEE-CIS = Central and Eastern Europe and the Commonwealth of Independent States; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries; WEO = *World Economic Outlook*. Data labels in the figure use International Organization for Standardization (ISO) country codes.
¹ The pass-through is calculated as the change in domestic retail price divided by the change in international price of fuel products. Historical pass-through refers to the pass-through in the second half of 2008, when the oil price also dropped sharply. Data on retail prices are collected by IMF staff.
² Impact on fiscal revenues.
³ Price of oil that is sufficient to ensure that total revenues are equal to or greater than government spending.

subsidies, the size of fiscal buffers, and exchange rate movements.

- Countries whose governments have amassed significant financial assets (net of public debt), including the Gulf Cooperation Council countries and Norway, are well placed to cope with the

short-term impact of the shock. Others, with fewer accumulated financial assets, such as Libya, Nigeria, and Venezuela, are already facing major budget challenges.

- Oil exporters that have allowed their currencies to weaken (including Azerbaijan, Colombia, Nigeria,

Russia) will be able to partially offset lower oil revenues in foreign currency terms. This is not the case for oil exporters with fixed or tightly managed exchange rates (such as Ecuador, Kazakhstan, Venezuela), whose fiscal positions have deteriorated more sharply.

For many oil exporters, vulnerabilities were building before oil prices started to fall. Fiscal revenues from higher oil prices were used to pay for large increases in current and capital expenditures. As a result, the fiscal break-even price for oil (that is, the price necessary to balance the budget) increased significantly in most exporting countries in the Middle East between 2008 and 2014 (Figure 1.1, panel 4). Currently, most oil exporters need prices considerably above the \$58 a barrel projected for 2015 to cover budgetary spending (at current exchange rates). Furthermore, in many countries, net government assets fell from 2011 to 2014 as they drew on their sovereign wealth funds or increased gross debt.

The outlook has also worsened for other commodity exporters, particularly in Latin America. The downward trend in commodity prices preceded the fall in oil prices and has been more gradual. Nonetheless, lower metal prices have contributed to lower commodity fiscal revenues and a slowdown in investment and growth in Chile and Peru. The fiscal impact could be severe in some resource-rich African countries, including Zambia. Some economies are experiencing negative spillovers from some commodity producers, notably Russia. For example, in emerging Europe and the Commonwealth of Independent States, sovereign bond spreads have increased recently and exports, remittances, and foreign direct investment have suffered. Countries in Central America and the Caribbean could face tighter financing conditions if Venezuela's budget woes lead to a reduction in the Petrocaribe regional loans-for-oil scheme.

The decline in oil prices could negatively affect profit margins and balance sheets of some state-owned energy corporations, especially those with significant upstream (exploration and production) activity and external debt. In Brazil, Petrobras's finances have come under stress as a result of adverse economic trends and internal issues, with the company's difficulties reflected in its stock price, downgrades to the ratings of both its global foreign currency and local currency debt, and lack of normal access to funding markets. In Russia, the impact of international sanctions, lower oil prices, and the deteriorating economy may lead to further public support of the banking sector and sanctioned companies.

Advanced Economies: Low Growth and Low Inflation Complicate Debt Reduction

Very low inflation and sluggish growth adversely affect debt dynamics in most advanced economies.¹ Despite significant fiscal adjustment since 2010 and record low nominal bond yields, the average ratio of debt to GDP remains above 100 percent and is expected to decline only slowly in coming years. In some countries, debt paths have been revised upward and the turning point postponed (Tables 1.1a, 1.1b, 1.2; Figure 1.2, panel 1). The impact of lower inflation is sizable, as shown by a simple simulation: if nominal growth were to reach 4 percent by 2017 in countries now experiencing low growth and low inflation, the average debt ratio in 2020 for advanced economies would be 6 percentage points lower than under the current baseline. For some countries (Austria, Belgium, Italy, Japan, Portugal), the impact could be as large as 10 percentage points.

A few advanced economies, notably the United States, have experienced stronger-than-expected growth, supporting debt reduction efforts. Some countries overperformed relative to their 2014 budget targets thanks to robust activity, together with lower-than-expected interest payments and one-off measures (Figure 1.2, panel 6). In particular, lower-than-expected interest payments and some one-off revenue, contributed to the stronger outturn in Germany. Canada, Ireland, the Netherlands, and the United States benefited from strong tax revenues.

In general, however, the pace of fiscal consolidation in advanced economies has slowed to support economic activity (from 1 percent of GDP a year during 2011–13 to ½ percent of GDP in 2014, and an expected ¼ percent of GDP in 2015). After increasing strongly over 2010–14, in part due to tax hikes, overall revenue ratios are now broadly back to precrisis levels and expected to stabilize or decline slightly in the coming years (Box 1.1). The fiscal stance for the euro area as a whole was neutral in 2014 and is expected to remain broadly neutral through 2016. At the same time, output gaps are still sizable in many countries, and fiscal space is lacking where demand support is needed the most (Figure 1.2, panels 3–5).

With fiscal policy constrained at the national level, the European Commission announced an investment

¹ For a detailed discussion of the implications of low inflation on debt dynamics, see Box 1.1 of the October 2014 *Fiscal Monitor*.

Table 1.1a. Fiscal Balances, 2008–16: Overall Balance
(Percent of GDP)

	2008	2009	2010	2011	2012	2013	2014	Projections		Difference from October 2014 <i>Fiscal Monitor</i>		
								2015	2016	2014	2015	2016
World	-2.2	-7.3	-5.9	-4.3	-3.9	-3.2	-3.3	-3.4	-2.9	-0.1	-0.8	-0.6
Advanced Economies	-3.6	-8.9	-7.8	-6.4	-5.7	-4.2	-3.9	-3.3	-2.7	0.1	-0.1	-0.1
United States ¹	-7.0	-13.5	-11.3	-9.9	-8.6	-5.8	-5.3	-4.2	-3.9	0.2	0.2	0.3
Euro Area ²	-2.1	-6.2	-6.1	-4.1	-3.6	-2.9	-2.7	-2.3	-1.7	0.2	0.2	0.2
France	-3.2	-7.2	-6.8	-5.1	-4.9	-4.1	-4.2	-3.9	-3.5	0.2	0.4	0.2
Germany	-0.1	-3.0	-4.0	-0.8	0.1	0.1	0.6	0.3	0.4	0.3	0.1	0.1
Greece	-9.9	-15.2	-11.1	-10.1	-6.3	-2.8	-2.7	-0.8	0.7	0.0	1.1	1.3
Ireland ³	-7.0	-13.9	-32.4	-12.6	-8.0	-5.7	-3.9	-2.4	-1.5	0.4	0.4	0.2
Italy	-2.7	-5.3	-4.2	-3.5	-3.0	-2.9	-3.0	-2.6	-1.7	0.0	-0.3	-0.4
Portugal	-3.8	-9.8	-11.2	-7.4	-5.6	-4.8	-4.5	-3.2	-2.8	-0.5	-0.7	-0.4
Spain ³	-4.4	-11.0	-9.4	-9.4	-10.3	-6.8	-5.8	-4.3	-2.9	-0.1	0.4	0.9
Japan	-4.1	-10.4	-9.3	-9.8	-8.8	-8.5	-7.7	-6.2	-5.0	-0.6	-0.4	-0.3
United Kingdom	-5.1	-10.8	-9.7	-7.6	-7.8	-5.7	-5.7	-4.8	-3.1	-0.4	-0.7	-0.1
Canada	-0.3	-4.5	-4.9	-3.7	-3.1	-2.8	-1.8	-1.7	-1.3	0.8	0.4	0.4
Others	2.4	-0.9	-0.2	0.4	0.4	0.2	0.1	-0.4	0.0	0.0	-0.8	-0.9
Emerging Market and Middle-Income Economies	0.9	-3.6	-2.4	-0.7	-0.7	-1.5	-2.4	-3.7	-3.3	-0.5	-1.8	-1.4
Excluding MENAP Oil Producers	-1.1	-4.1	-3.1	-1.6	-1.9	-2.5	-2.8	-3.4	-3.2	-0.3	-1.0	-0.9
Asia	-1.9	-3.4	-2.7	-1.2	-1.4	-2.1	-2.1	-2.8	-2.9	0.0	-0.9	-1.1
China	0.0	-1.8	-1.2	0.6	0.0	-1.1	-1.1	-1.9	-2.2	-0.1	-1.2	-1.4
India	-10.0	-9.8	-8.4	-8.1	-7.5	-7.2	-7.1	-7.2	-7.1	0.1	-0.5	-0.6
Europe	0.8	-5.8	-3.8	-0.1	-0.7	-1.5	-1.6	-2.9	-2.0	0.0	-1.5	-0.9
Russia	4.9	-6.3	-3.4	1.5	0.4	-1.3	-1.2	-3.7	-2.6	-0.2	-2.6	-1.9
Turkey	-2.7	-6.0	-3.4	-0.6	-1.7	-1.3	-1.5	-1.4	-0.9	0.5	0.5	1.2
Latin America	-0.8	-3.8	-3.0	-2.7	-3.1	-3.2	-4.9	-4.9	-4.4	-1.0	-1.1	-0.8
Brazil	-1.5	-3.2	-2.7	-2.5	-2.6	-3.1	-6.2	-5.3	-4.7	-2.4	-2.2	-1.7
Mexico	-1.0	-5.1	-4.3	-3.3	-3.7	-3.8	-4.6	-4.1	-3.5	-0.4	-0.1	0.0
MENAP	13.3	-0.7	2.7	4.7	7.1	4.9	0.0	-7.5	-4.7	-2.2	-8.5	-5.2
South Africa	-0.5	-4.7	-4.8	-3.9	-4.1	-4.1	-4.1	-4.2	-3.4	0.8	1.0	1.6
Low-Income Developing Countries	1.1	-4.3	-2.7	-1.1	-2.0	-3.2	-3.1	-3.5	-3.2	0.0	-0.4	-0.3
Oil Producers	7.2	-2.5	-0.1	2.8	2.8	1.2	-0.8	-4.5	-3.0	-1.0	-4.2	-2.7
Memorandum												
World Output (percent)	3.1	0.0	5.4	4.2	3.4	3.4	3.4	3.5	3.8	0.1	-0.4	-0.3

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 assessments of current policies. For country-specific details, see Data and Conventions and Tables A, B, and C in the Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan.

¹ For cross-country comparability, expenditure and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditures under the 2008 System of National Accounts (2008 SNA) recently adopted by the United States, but not in countries that have not yet adopted the 2008 SNA. Data for the United States in this table may thus differ from data published by the U.S. Bureau of Economic Analysis.² Data for the member countries of the European Union have been revised following the adoption of the new European System of National and Regional Accounts (ESA 2010).³ Including financial sector support.

plan (the European Fund for Strategic Investment) to mobilize €315 billion (2 percent of EU GDP) in public and private investment in the next three years. The funds would be channeled to private projects of small and medium enterprises and long-term investments in energy, transport, education, research, and innovation. While the plan could help catalyze much-needed investment and remove regulatory barriers, there is uncertainty about project selection and implementa-

tion, and achieving the assumed leverage ratio of 15 could be challenging. The European Commission also issued guidance on how it will apply the existing rules of the Stability and Growth Pact to encourage structural reforms and public investment. This increased flexibility is welcome and in line with the recommendations in the October 2014 *Fiscal Monitor*.

Meanwhile, Japan responded to lower-than-expected growth in 2014 by delaying the increase in

Table 1.1b. Fiscal Balances, 2008–16: Cyclically Adjusted Balance
(Percent of potential GDP)

	2008	2009	2010	2011	2012	2013	2014	Projections		Difference from October 2014 <i>Fiscal Monitor</i>		
								2015	2016	2014	2015	2016
Advanced Economies	-4.1	-6.1	-6.8	-5.7	-4.7	-3.6	-3.1	-2.8	-2.5	-0.1	-0.3	-0.3
United States ^{1,2}	-6.2	-7.9	-9.7	-8.3	-6.8	-5.2	-4.4	-3.8	-3.8	-0.4	-0.5	-0.3
Euro Area ³	-3.2	-4.5	-4.8	-3.7	-2.6	-1.1	-1.0	-0.9	-0.7	0.1	0.1	0.1
France	-3.7	-5.4	-5.6	-4.6	-4.1	-3.0	-2.7	-2.5	-2.2	0.2	0.3	0.2
Germany	-1.1	-0.8	-3.3	-1.3	-0.2	0.5	0.8	0.3	0.2	0.1	-0.2	-0.2
Greece	-13.9	-18.6	-12.1	-8.0	-2.0	2.2	1.5	2.1	2.1	-0.1	0.9	0.9
Ireland ²	-13.0	-11.0	-8.9	-6.5	-5.0	-4.0	-2.8	-2.0	-1.4	0.5	0.2	-0.1
Italy	-3.7	-3.6	-3.5	-3.2	-1.4	-0.6	-0.6	-0.4	0.2	0.1	0.0	0.1
Portugal	-4.2	-8.9	-10.8	-6.3	-3.1	-1.7	-2.1	-1.7	-1.9	0.2	-0.2	-0.2
Spain ²	-5.6	-9.5	-7.8	-7.0	-4.2	-3.0	-2.7	-2.3	-1.5	0.7	0.6	0.9
Japan	-3.5	-7.4	-7.8	-8.3	-7.8	-8.2	-7.2	-6.0	-4.9	-0.6	-0.5	-0.5
United Kingdom ²	-6.8	-9.9	-8.1	-5.8	-5.6	-3.6	-4.2	-4.0	-2.6	-0.1	-0.3	0.1
Canada	-0.6	-3.0	-4.0	-3.2	-2.6	-2.3	-1.5	-1.6	-1.2	0.6	0.2	0.3
Others	-0.2	-1.9	-1.5	-1.2	-1.0	-1.0	-0.9	-1.2	-1.0	0.2	-0.3	-0.6
Emerging Market and Middle-Income Economies	-1.5	-3.5	-3.1	-1.7	-1.7	-2.3	-2.4	-2.9	-2.9	-0.2	-0.9	-0.9
Asia	-2.1	-3.3	-2.8	-1.2	-1.2	-1.8	-1.7	-2.5	-2.8	0.0	-0.9	-1.1
China	-0.3	-1.8	-1.3	0.6	0.2	-0.7	-0.7	-1.6	-2.0	-0.1	-1.1	-1.4
India	-9.6	-9.6	-8.8	-8.4	-7.4	-7.1	-7.0	-7.1	-7.0	0.0	-0.5	-0.6
Europe	-0.1	-5.2	-3.8	-1.3	-1.1	-1.9	-1.1	-2.2	-1.9	0.5	-0.8	-0.7
Russia	4.6	-5.5	-3.0	1.6	0.2	-1.5	0.0	-2.5	-2.4	0.9	-1.7	-1.9
Turkey	-3.1	-3.6	-2.7	-1.4	-1.8	-1.5	-1.5	-1.3	-0.8	0.6	0.5	1.3
Latin America	-1.3	-2.7	-2.8	-2.6	-2.4	-2.9	-4.5	-4.0	-3.5	-1.1	-1.0	-0.6
Brazil	-2.1	-2.3	-3.2	-2.8	-2.6	-3.4	-6.2	-4.8	-4.2	-2.6	-1.9	-1.4
Mexico	-1.2	-4.4	-4.0	-3.3	-3.8	-3.8	-4.5	-4.0	-3.4	-0.4	0.0	0.1
South Africa	-0.7	-3.1	-3.5	-3.5	-3.9	-3.8	-3.7	-3.7	-3.0	0.9	1.1	1.8
MENAP	...	...	...	...	...	...	...	...	...	...	...	...

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 assessments of current policies. For country-specific details, see Data and Conventions and Tables A, B, and C in the Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan.

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

² Excluding financial sector support.

³ Data for members of the European Union have been revised following the adoption of the new European System of National and Regional Accounts (ESA 2010).

the consumption tax from October 2015 to April 2017. It also announced temporary stimulus measures (targeted transfers and infrastructure investment). Nonetheless, the pace of consolidation (in terms of the structural primary balance) is projected to exceed 1 percent of potential GDP in 2015 (unchanged from the October 2014 *Fiscal Monitor*). Under current policies, debt is projected to rise to 250 percent of GDP by 2020.

Deficit reduction is also moderating in the United States. In contrast to Japan, fiscal consolidation in the United States is taking place on the back of stronger-than-expected growth. In 2014, the deficit as a percent

of GDP reached its lowest level since 2007, and it is expected to fall by another ½ percentage point (in cyclically adjusted terms) this year, based on already approved measures and funding. As in recent years, consolidation will largely be driven by sequester cuts and war drawdown, following the expiration of previous stimulus measures. Nonetheless, there is significant uncertainty about fiscal policy and fiscal reforms beyond the last quarter of 2015. Although the 2016 president's budget proposal includes a number of measures to simplify the tax system and make it more equitable and to contain growth in health spending, the likelihood that it will be passed by Congress remains unclear.

Table 1.2. General Government Debt, 2008–16
(Percent of GDP)

	2008	2009	2010	2011	2012	2013	2014	Projections		Difference from October 2014 <i>Fiscal Monitor</i>		
								2015	2016	2014	2015	2016
Gross Debt												
World	65.0	75.4	77.7	78.7	80.5	79.1	79.8	80.4	80.0	-0.2	1.0	1.6
Advanced Economies	78.8	92.1	98.6	102.6	106.8	105.2	105.3	105.4	105.1	-1.1	-0.6	0.1
United States ¹	72.8	86.0	94.8	99.1	102.4	103.4	104.8	105.1	104.9	-0.8	0.0	0.1
Euro Area ²	68.6	78.4	83.9	86.5	91.1	93.4	94.0	93.5	92.4	-2.4	-2.6	-2.4
France	67.9	78.8	81.5	85.0	89.2	92.4	95.1	97.0	98.1	-0.1	-0.7	-0.9
Germany	64.9	72.4	80.3	77.6	79.0	76.9	73.1	69.5	66.6	-2.4	-3.0	-2.7
Greece	108.8	126.2	145.7	171.0	156.5	174.9	177.2	172.7	162.4	2.9	1.7	1.8
Ireland	42.6	62.2	87.4	111.1	121.7	123.3	109.5	107.7	104.9	-3.0	-3.9	-3.8
Italy	102.3	112.5	115.3	116.4	123.2	128.6	132.1	133.8	132.9	-4.6	-2.7	-1.2
Portugal	71.7	83.6	96.2	111.1	125.8	129.7	130.2	126.3	124.3	-1.1	-2.4	-2.1
Spain	39.4	52.7	60.1	69.2	84.4	92.1	97.7	99.4	100.1	-1.0	-1.7	-2.1
Japan	191.8	210.2	216.0	229.8	236.8	242.6	246.4	246.1	247.0	1.4	0.7	3.1
United Kingdom	51.8	65.8	76.4	81.8	85.8	87.3	89.5	91.1	91.7	-2.4	-2.0	-1.3
Canada ¹	70.8	83.0	84.6	85.3	87.9	87.7	86.5	87.0	85.0	-1.6	0.2	-0.5
Emerging Market and Middle-Income Economies¹	35.2	39.7	39.4	38.4	38.6	39.7	41.7	43.9	44.6	1.1	2.7	3.1
Excluding MENAP Oil Producers	38.1	42.2	41.9	41.2	41.3	42.5	44.5	46.5	47.3	1.1	2.4	2.9
Asia	40.1	42.8	42.3	41.7	41.8	42.9	44.1	46.0	47.7	0.8	2.0	3.2
China	31.7	35.8	36.6	36.5	37.3	39.4	41.1	43.5	46.2	0.3	1.6	3.3
India	74.5	72.5	67.5	68.1	67.5	65.5	65.0	64.4	63.3	4.5	4.9	4.8
Europe	23.8	29.6	29.4	28.0	27.2	28.5	30.9	33.9	32.5	2.0	4.3	3.4
Russia	8.0	10.6	11.3	11.6	12.7	14.0	17.9	18.8	17.1	2.2	2.3	0.8
Turkey	40.0	46.0	42.3	39.1	36.2	36.2	33.5	33.4	32.5	-0.1	0.3	0.1
Latin America	46.5	49.2	48.4	48.0	48.2	49.2	52.2	52.3	52.2	0.9	0.6	0.4
Brazil ³	61.9	65.0	63.0	61.2	63.5	62.2	65.2	66.2	66.2	-0.6	0.6	0.6
Mexico	42.8	43.9	42.2	43.2	43.2	46.3	50.1	51.4	51.7	2.1	2.4	2.0
MENAP	19.8	25.7	24.6	22.1	23.0	23.1	24.5	27.8	27.9	0.9	3.6	3.3
South Africa	25.9	30.3	34.4	37.6	40.5	43.3	45.9	47.5	48.2	-2.1	-3.3	-5.5
Low-Income Developing Countries Oil Producers	29.7	33.0	30.5	30.0	30.2	30.7	31.3	33.9	34.4	-0.1	2.6	3.0
Oil Producers	21.8	24.7	23.1	21.2	21.3	22.2	24.2	26.7	26.3	1.5	3.7	3.7
Net Debt												
World	42.2	50.8	54.3	57.5	59.7	58.2	59.2	61.3	61.9	-3.8	-1.9	-1.2
Advanced Economies	49.0	58.3	63.4	68.1	71.3	69.8	70.4	72.0	72.3	-3.2	-2.1	-1.5
United States ¹	50.4	62.1	69.5	76.1	79.2	79.5	79.7	80.4	80.7	-1.1	-0.5	-0.3
Euro Area ²	47.5	52.8	56.4	58.5	66.7	69.0	69.8	69.8	69.2	-4.0	-4.2	-4.0
France	60.3	70.1	73.7	76.4	81.5	84.7	87.4	89.3	90.4	-0.7	-1.3	-1.5
Germany	48.7	55.0	56.8	55.0	54.3	52.7	49.7	46.9	44.7	-4.2	-4.6	-4.4
Greece	...	...	...	...	152.8	172.1	174.3	169.9	159.7	5.5	3.4	2.1
Ireland	20.4	37.2	67.5	79.1	87.9	92.1	85.7	85.5	83.8	-7.3	-7.5	-7.4
Italy	86.2	94.2	96.3	98.4	103.0	107.5	110.4	111.8	111.1	-3.8	-2.2	-1.0
Portugal	67.6	79.7	91.9	100.9	115.9	119.4	120.1	119.2	118.5	-3.7	-4.3	-3.0
Spain	30.0	24.3	32.5	39.3	51.9	59.5	64.8	67.4	68.8	-0.8	-1.4	-1.9
Japan	95.3	106.2	113.1	127.3	129.1	122.9	127.3	129.6	131.9	-10.5	-10.4	-8.4
United Kingdom	45.7	58.8	69.1	73.4	77.1	78.7	81.0	82.6	83.1	-2.9	-2.4	-1.7
Canada ¹	24.3	29.9	32.9	34.6	36.4	37.1	37.3	38.3	37.9	-1.3	-0.7	-1.1
Emerging Market and Middle-Income Economies¹	7.2	10.4	12.4	11.5	8.6	7.8	9.2	10.9	12.8	-7.8	-7.1	-6.0
Asia	...	...	...	...	...	...	...	...	...	...	...	...
Europe	23.3	29.1	29.8	28.3	26.0	26.5	25.8	26.7	27.0	1.1	2.2	3.4
Latin America	30.8	34.2	33.3	31.3	29.7	29.8	32.5	33.4	33.8	1.0	1.9	2.3
MENAP	-48.0	-46.9	-42.4	-39.4	-44.0	-48.2	-46.0	-39.0	-32.2	-30.7	-27.1	-23.4
Low-Income Developing Countries	15.0	21.7	22.1	21.7	21.7	23.9	25.8	29.7	31.0	-5.0	4.5	5.7

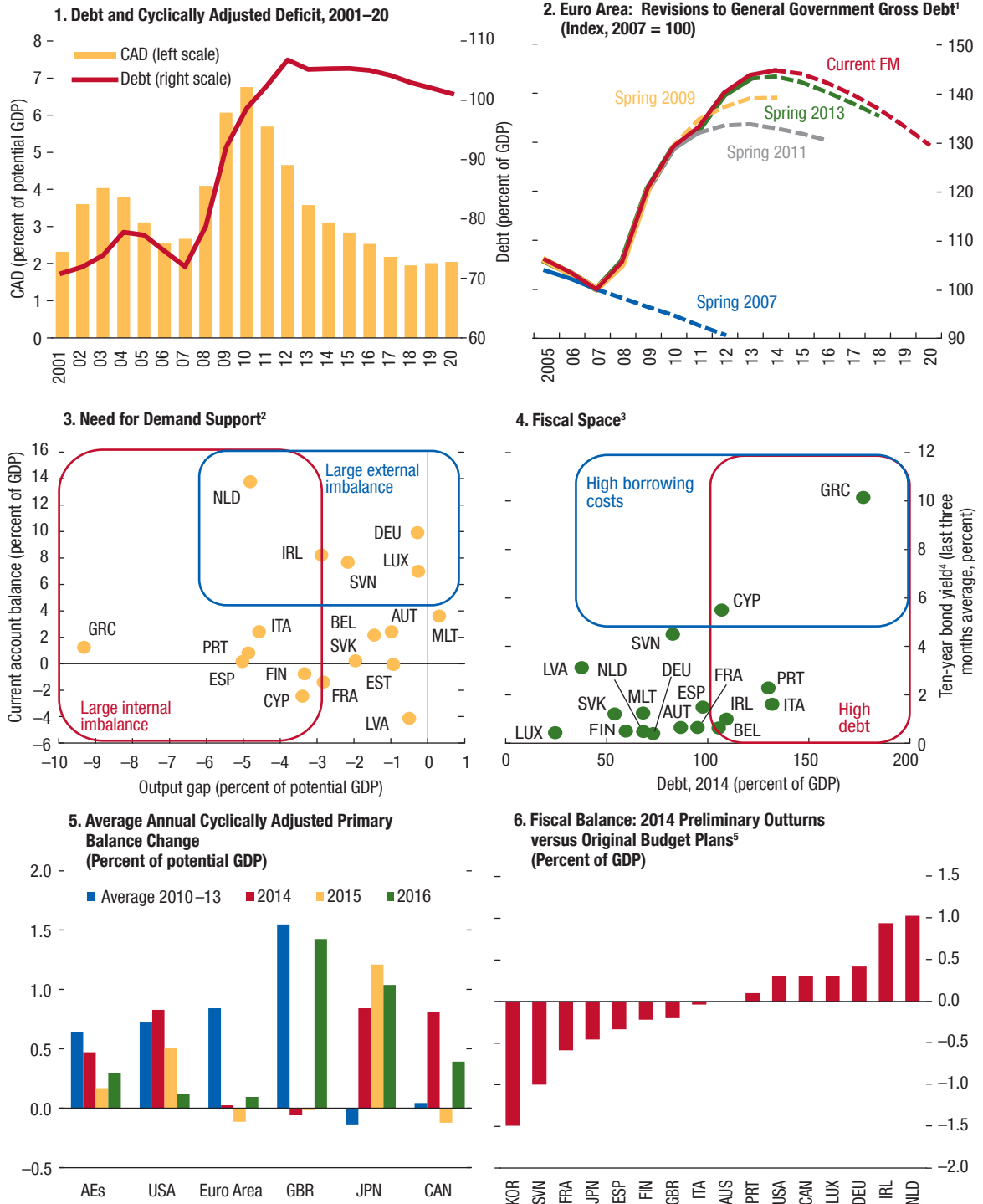
Source: IMF staff estimates and projections.

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 assessments of current policies. For country-specific details, see Data and Conventions and Tables A, B, and C in the Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan.

¹ For cross-country comparability, gross and net debt levels reported by national statistical agencies for countries that have adopted the 2008 System of National Accounts (Australia, Canada, Hong Kong SAR, United States) are adjusted to exclude unfunded pension liabilities of government employees' defined-benefit pension plans.² Data for members of the European Union have been revised following the adoption of the new European System of National and Regional Accounts (ESA 2010).³ Gross debt refers to the nonfinancial public sector, excluding Eletrobras and Petrobras, and includes sovereign debt held on the balance sheet of the central bank.

Figure 1.2. Fiscal Trends in Advanced Economies

The average ratio of debt to GDP remains above 100 percent and is expected to decline only slowly, as very low inflation and slow growth complicate debt reduction efforts. The pace of fiscal consolidation has slowed to support economic activity. In the euro area, the fiscal space is lacking where demand support is needed the most.



Sources: Thomson Reuters Datastream; and IMF staff estimates.

Note: AEs = advanced economies; CAD = cyclically adjusted deficit; FM = *Fiscal Monitor*. Data labels in the figure use International Organization for Standardization (ISO) country codes.

¹ Data for members of the European Union have been revised following the adoption of the new European System of National and Regional Accounts (ESA 2010).

² The more negative the output gap, the larger the demand support needed.

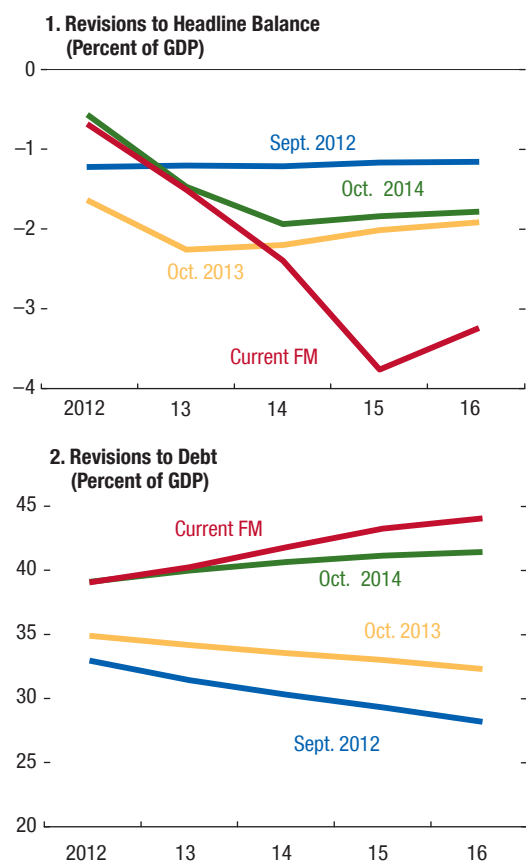
³ The higher the level of debt and the higher the cost of financing, the lower the fiscal space.

⁴ For Cyprus: five-year government bond yield.

⁵ For the United States and Canada, the 2014 budget target for the general government corresponds to IMF staff estimates as reported in the April 2014 *Fiscal Monitor*; for all other countries, data come from countries' budget laws and budget execution documents.

Figure 1.3. Fiscal Trends in Emerging Market and Middle-Income Economies

On average, fiscal deficits continue to increase for emerging market and middle-income economies, largely driven by revenue losses of oil exporters. New bouts of financial market volatility, capital outflows, and exchange rate depreciation have also affected the fiscal position of some of these economies.



Source: IMF staff estimates.
Note: FM = Fiscal Monitor.

Emerging Market and Middle-Income Economies: Financial Volatility and Lower Export Prices Stretch Already Thin Fiscal Buffers

The average deficit for the group of emerging market and middle-income economies as a whole increased in 2014 for the second year in a row and is projected to increase further in 2015, to about 3¾ percent of GDP (Table 1.1a). The trend is driven largely by oil exporters, although deficits also increased in many oil importers, albeit at a slower pace (Figure 1.3). New bouts of financial market volatility, capital outflows, and exchange rate depreciation have occurred in a number of emerging market and middle-income

economies. The cost of financing has increased considerably in some of these countries (Brazil, Ecuador, Russia). Debt ratios, while generally moderate (about 42 percent of GDP), are in many cases well above their precrisis levels and thus will constrain fiscal policy space in the future.

With sharply lower oil prices, most oil exporters are projected to record sizable deficits in 2015 (Algeria, Angola, Azerbaijan, Libya, Russia, Saudi Arabia, Venezuela). Some countries have begun to implement fiscal tightening, while others are accommodating the shock through higher deficits and exchange rate depreciation. In Russia, support to the economy could also come from off-budget stimulus through resources from the National Wealth Fund and issuance of guarantees.

The fiscal stance, including off-budget stimulus, continues to be accommodative in China. Last year, strength in infrastructure spending helped to cushion slowing investment elsewhere. Available data are not sufficient to reliably update the estimate of the augmented fiscal deficit (which includes off-budget activity by local government financing vehicles). A new budget law is being implemented this year that is expected to strengthen fiscal management, oversight, and transparency at the local government level going forward.

After its overall fiscal deficit doubled in 2014, Brazil announced an ambitious fiscal adjustment for 2015–16 to bring the primary balance back to a surplus of 1.2 percent of GDP in 2015 and at least 2 percent of GDP thereafter (from a primary deficit of 0.6 in 2014). Increases in fuel taxes and a reduction in electricity subsidies have already been approved.

Other emerging market and middle-income economies, including Croatia, Egypt, Malaysia, Mexico, Morocco, and South Africa, continued or embarked on fiscal adjustment. This follows a substantial widening of debt and deficits in the aftermath of the Arab Spring in Egypt and Morocco. Some economies supported these steps with fiscal savings from lower oil subsidies and efforts to build a broader tax base. For example, Malaysia recently introduced a goods and services tax (GST), which will help broaden the tax base and reduce reliance on volatile oil and gas revenue. India is also moving toward introducing a GST as well as measures to improve revenue administration, but they are not included in the fiscal year 2015/16 budget and their timing remains uncertain. The new budget envisages a slowdown in the pace of fiscal consolidation, although the spending mix has improved, with a

clear emphasis on infrastructure spending and further reduction in fuel subsidies.

Low-Income Developing Countries: Resisting Headwinds from Lower Growth and Lower Commodity Prices

Many low-income developing countries share the fiscal challenges of emerging market and middle-income economies, particularly those related to lower oil and commodity prices and volatility in financial markets. Growth in low-income developing countries will also be weaker than expected, although it remains relatively strong. Since October, countries in this group with access to international markets, especially in sub-Saharan Africa, have experienced capital outflows, domestic currency depreciation, and increases in bond yields (Figure 1.4, panels 1–2). The impact has been most severe in Nigeria, which is also suffering the consequences of the sharp decline in oil revenues, and Ghana, which is facing significant balance of payments challenges.

Immediate fiscal policy response to these developments has varied. Countries where high budget deficits or public debt constrain fiscal policy choices (Ghana, Honduras, Nigeria) have initiated spending adjustments. But some commodity exporters (such as Bolivia) still have sufficient fiscal space to smooth the impact on spending.

For the group as a whole, the fiscal deficit is expected to increase in 2015 (Table 1.1a). Revenue losses in oil and commodity exporters are expected to be only partially offset by spending restraint and by fiscal consolidation in commodity importers, particularly in Asia and Latin America. Public finances in many oil-importing low-income developing countries are expected to improve as the decline in oil prices lowers energy subsidies, while a few may suffer revenue losses as a result of lower value-added taxes (VATs) and tariffs (Zambia). Some countries may also be affected by negative spillovers from oil exporters. For example, most countries with access to financing through Petrocaribe² are already experiencing a decline in financing flows due to lower oil prices. Should Venezuela's fragile public finances no longer be able to support this arrangement, countries that are large recipients of these

²Petrocaribe, a multilateral agreement between Venezuela and 17 countries from the Caribbean and Central America, provides members with access to concessional financing for purchases of oil from Venezuela.

concessional loans or lack alternative sources of financing (Haiti, Nicaragua) may be further affected.

With a few exceptions, debt sustainability is not an immediate risk in low-income developing countries, reflecting strong growth and past debt relief initiatives. The average debt-to-GDP ratio is relatively low (about 30 percent) and is projected to be stable in the medium term (Table 1.2).

In West Africa, the Ebola outbreak continues to raise daunting fiscal challenges. The total expected output loss during 2014–15 in Guinea, Liberia, and Sierra Leone is, on average, more than 10 percent of GDP. The loss of revenue and increase in expenditures in these three Ebola-affected countries over the same period is expected to exceed 10 percent of GDP, resulting in widening fiscal deficits (Figure 1.4, panel 3). While other countries in the region will also incur higher spending in prevention efforts (for example, Burkina Faso), the impact on the rest of sub-Saharan Africa is likely to be limited. The international community has provided support through a combination of concessional loans, grants, and technical assistance. In addition to providing budget support, the IMF established the Catastrophe Containment and Relief Trust (CCR) to provide debt relief to countries facing catastrophic disasters, including but not limited to public health disasters.³ Guinea, Liberia, and Sierra Leone are expected to benefit from the CCR in amount equivalent to \$100 million. However, financing gaps for 2015–17 remain sizable (Figure 1.4, panel 4): donor aid is still needed to help consolidate advances against the epidemic and preserve critical growth-enhancing public spending.

Fiscal Risks

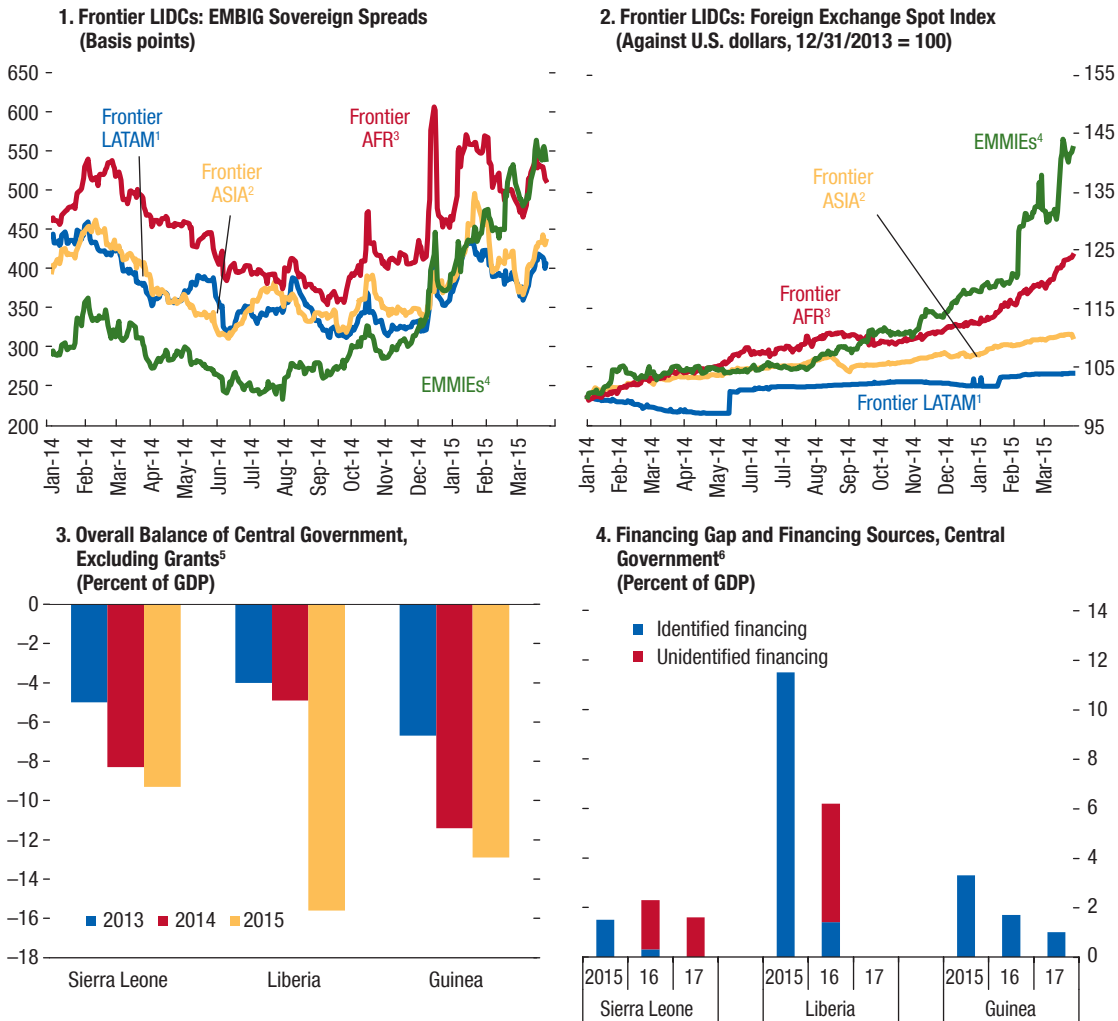
The following risks emerge as particularly daunting in the near term:

- *Low growth and protracted low inflation (or outright deflation)*: In the euro area and Japan, a spiral of entrenched sluggish growth, protracted undershooting from the inflation target, and constraints on monetary policy at the zero lower bound for nominal interest rates would have serious implications for public finances, with the possibility of continuously growing debt ratios. The recent improvement in the economic situation and the adoption of quantitative

³The Catastrophe Containment and Relief Trust started operation in February 2015. <http://www.imf.org/external/np/sec/pr/2015/pr1553.htm>.

Figure 1.4. Fiscal Trends in Low-Income Developing Countries

Many low-income developing countries face weakened (yet still strong) growth; they are being challenged by lower oil and commodity prices and volatility in the financial markets.



Sources: Bloomberg L.P.; J.P. Morgan; Thomson Reuters Datastream; IMF staff reports; and IMF staff estimates.
 Note: AFR = Africa; EMBIG = Emerging Markets Bond Index Global; EMMIEs = emerging market and middle-income economies; LATAM = Latin America; LIDCs = low-income developing countries.

¹ Bolivia and Honduras.

² Mongolia and Vietnam.

³ Côte d'Ivoire, Ghana, Kenya, Mozambique, Nigeria, Rwanda, Senegal, Tanzania, and Zambia.

⁴ Argentina, Brazil, Chile, Hungary, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, South Africa, Turkey, and Ukraine.

⁵ Liberia: data refer to fiscal years. Sierra Leone: data are expressed as a percentage of non-iron ore GDP.

⁶ Liberia: data refer to fiscal years and exclude Ebola-related support; financing gap for fiscal year 2016 could be partially covered using the funding from the Rapid Credit Facility; no data are available for fiscal year 2017. Sierra Leone: data are expressed as a percentage of non-iron ore GDP.

easing by the European Central Bank has reduced this risk in the euro area recent months. Low growth and low inflation could also affect public finances in some emerging market and developing economies. Further declines in oil prices would amplify this problem.

- *Geopolitical risks and policy uncertainty:* Events in Europe (including in Russia/Ukraine), the Middle East, and some parts of Africa could adversely affect confidence and lead to disruptions in global trade and financial transactions, with important fiscal implications. In addition, financial stress could

Table 1.3. Selected Advanced Economies: Gross Financing Need, 2015–17
(Percent of GDP)

	2015			2016			2017		
	Maturing Debt	Budget Deficit	Total Financing Need	Maturing Debt ¹	Budget Deficit	Total Financing Need	Maturing Debt ¹	Budget Deficit	Total Financing Need
Australia	2.3	3.3	5.6	1.8	2.7	4.5	2.8	2.0	4.8
Austria	5.8	1.7	7.5	5.7	1.7	7.4	6.8	1.5	8.3
Belgium	16.8	2.9	19.7	16.5	2.1	18.6	16.9	1.3	18.2
Canada	10.0	1.7	11.7	11.0	1.3	12.3	9.7	0.9	10.6
Czech Republic	6.4	1.4	7.8	7.0	1.2	8.2	6.4	1.2	7.6
Denmark	6.9	2.3	9.1	5.2	2.1	7.3	4.5	1.9	6.4
Finland	5.7	2.4	8.1	6.6	1.8	8.4	8.4	1.2	9.5
France	13.3	3.9	17.3	14.7	3.5	18.2	13.8	2.8	16.6
Germany	6.1	-0.3	5.8	6.2	-0.4	5.8	3.7	-0.4	3.4
Iceland	2.4	-0.1	2.4	10.3	-0.1	10.3	1.3	-1.2	0.1
Ireland	7.8	2.4	10.2	6.7	1.5	8.2	5.6	0.6	6.2
Italy	18.8	2.6	21.4	18.2	1.7	19.8	17.8	1.1	18.9
Japan	46.5	6.2	52.7	46.0	5.0	50.9	38.7	4.3	43.0
Korea	3.3	-0.3	2.9	3.4	-0.6	2.7	2.7	-0.9	1.9
Lithuania	7.1	1.4	8.4	5.9	1.6	7.5	4.5	1.6	6.1
Malta	4.4	1.8	6.3	6.4	1.6	8.0	5.7	1.5	7.2
Netherlands	9.4	1.4	10.8	7.8	0.5	8.3	10.2	0.3	10.5
New Zealand	4.6	0.0	4.6	2.1	-0.5	1.6	5.9	-1.0	4.9
Portugal	17.0	3.2	20.1	14.7	2.8	17.5	14.2	2.5	16.7
Slovak Republic	4.0	2.6	6.6	6.4	2.3	8.7	6.7	1.8	8.5
Slovenia	5.3	4.0	9.2	10.7	3.4	14.2	7.4	3.4	10.8
Spain	17.2	4.3	21.5	19.0	2.9	21.9	17.3	2.5	19.8
Sweden	5.8	1.3	7.1	4.9	0.6	5.5	4.9	0.4	5.4
Switzerland	2.2	0.4	2.7	3.1	0.2	3.3	2.4	0.2	2.6
United Kingdom	7.4	4.8	12.2	7.1	3.1	10.2	7.4	1.5	8.9
United States ²	15.8	4.2	20.0	16.4	3.9	20.3	14.4	3.4	17.8
Average	15.7	3.5	19.1	15.9	2.9	18.8	14.0	2.4	16.4

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. For country-specific details, see Data and Conventions and Table A in the Methodological and Statistical Appendix.

¹ Assumes that short-term debt outstanding in 2015 and 2016 will be refinanced with new short-term debt that will mature in 2016 and 2017, respectively. Countries that are projected to have budget deficits in 2015 or 2016 are assumed to issue new debt based on the maturity structure of debt outstanding at the end of 2014.

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

reemerge in the euro area, triggered by policy uncertainty associated with Greece or political turbulence, and reintensify the links between banks and sovereigns and the real economy.

- *Financial market volatility and tighter financing conditions:* With low borrowing costs and continued consolidation in some large economies, financing needs are declining in advanced economies to their lowest levels since 2010 (Table 1.3). In emerging market economies, financing needs remain above the levels of 2011–13 (Table 1.4). Surges in financial volatility could prompt capital outflows in emerging

market economies as investors deleverage, transform maturity, or change the risk profile of their portfolio. At the same time, surprises about the prospective normalization of monetary policy in the United States could adversely affect government financing costs in many emerging market economies and frontier low-income developing countries.

A Supportive Role for Fiscal Policy

Many advanced economies face a triple threat from interrelated challenges: low growth, low inflation (or

Table 1.4. Selected Emerging Market and Middle-Income Economies: Gross Financing Need, 2015–16
(Percent of GDP)

	2015			2016		
	Maturing Debt	Budget Deficit	Total Financing Need	Maturing Debt	Budget Deficit	Total Financing Need
Argentina	6.6	4.1	10.7	6.1	4.0	10.1
Brazil	7.8	5.3	13.1	9.3	4.7	14.0
Chile	0.9	2.1	3.0	0.7	1.9	2.6
China	2.4	1.9	4.4	1.8	2.2	3.9
Colombia	3.2	3.2	6.4	2.3	2.6	4.9
Croatia	16.2	4.8	21.1	14.6	3.8	18.5
Dominican Republic	3.9	2.4	6.4	3.1	2.2	5.3
Ecuador	3.1	5.4	8.5	2.6	4.8	7.4
Egypt ¹	50.1	11.8	61.9	50.4	9.4	59.8
Hungary	20.3	2.7	23.0	16.5	2.5	19.0
India	3.7	7.2	10.9	3.4	7.1	10.5
Indonesia	1.6	2.3	3.9	1.8	2.1	3.9
Malaysia	6.0	3.5	9.4	6.8	2.9	9.6
Mexico	6.0	4.1	10.1	6.3	3.5	9.7
Morocco	12.1	4.3	16.4	11.7	3.5	15.2
Pakistan	25.2	4.7	29.9	24.3	3.8	28.1
Peru	1.1	1.7	2.8	1.4	1.4	2.7
Philippines	5.7	0.9	6.6	6.2	1.0	7.2
Poland	7.7	2.9	10.6	7.4	2.3	9.7
Romania	6.4	1.8	8.2	6.5	1.7	8.2
Russia	1.4	3.7	5.1	1.3	2.6	3.9
South Africa	7.2	4.2	11.4	7.7	3.4	11.2
Sri Lanka	13.7	6.7	20.4	9.9	7.4	17.3
Thailand	7.9	1.9	9.9	7.9	2.0	9.9
Turkey	4.3	1.4	5.7	5.2	0.9	6.1
Ukraine	13.1	4.2	17.3	9.1	3.7	12.8
Uruguay	14.3	2.8	17.1	13.8	2.9	16.8
Average	4.8	3.3	8.0	4.6	3.1	7.6

Source: IMF staff estimates and projections.

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

¹ Projections do not incorporate the potential impact of the investment agreements reached at the March 2015 Economic Development Conference.

deflation in some cases), and high debt. A lasting solution to the debt overhang problem is not possible without higher growth and moderate inflation. This underscores the need to continue monetary stimulus and accelerate structural reforms to catalyze growth. Combining structural reforms with demand support would bring forward investment and raise expectations of future growth. A greater push for structural reforms is also needed in emerging market economies and low-income developing countries to boost potential growth and reduce vulnerabilities. Furthermore, financial volatility and the prospect of tighter external financing conditions put a premium on building resilience and creating policy buffers, particularly if they help reduce external imbalances. In all cases, fiscal policy should have a supportive role. The modality will, however, depend on country-specific circum-

stances, including the size of government debt and market access risks.

Use fiscal policy flexibly to support growth

In the absence of relevant risks that may lead to market pressure, negative temporary shocks to growth should not trigger additional fiscal consolidation efforts. Countries should let automatic stabilizers play fully and should consider measures to increase their efficiency. As discussed in Chapter 2, automatic stabilizers account for a large share of the stabilizing effects of fiscal policy, and the induced reduction in macroeconomic volatility is good for medium-term growth. In addition, countries with fiscal space could use it to support growth. For example, in the United States and Germany, where infrastructure investment needs are well documented, such

investment would raise aggregate demand in the short term and potential output in the medium term (October 2014 *World Economic Outlook*). Countries that are more constrained should pursue more growth-friendly fiscal rebalancing, including budget-neutral tax reforms, to support growth while ensuring debt sustainability. In the euro area, flexibility under the Stability and Growth Pact should be used to promote investment and structural reforms to support growth. Effective and coordinated policy action at the EU level would help, including by enhancing long-term confidence. Meanwhile, in countries where mounting fiscal risks may lead to market pressure, rebuilding fiscal buffers should be a priority.

In oil exporters, the government's financial assets, if large enough, can be used to gradually adjust to the shock from lower oil prices and weaker global growth. Allowing for exchange rate depreciation will also help cushion the impact of the oil price shock. However, adjustments in expenditures are unavoidable where gross debt is high, the government's accumulated financial assets are low, there are immediate market pressures, or the exchange rate lever is constrained. In these countries, expenditures will need to be prioritized to avoid cuts that fall disproportionately on productive spending.

Given the possibility of a prolonged period of lower oil prices, in most oil exporters, the focus of policy should gradually shift toward lasting reforms, such as broadening taxation to create a non-oil fiscal base, improving natural resource management, and, where needed, reducing expenditures to sustainable levels. These reforms will increase exporters' future fiscal resilience to oil price fluctuations and facilitate the use of countercyclical fiscal policy and automatic stabilizers in the future.

In economies with oil subsidies, the windfall gains from lower prices may provide some fiscal space, especially for growth-enhancing spending, including infrastructure. But in economies where macroeconomic vulnerabilities have increased and slack is limited, it should also be used to rebuild fiscal buffers. In addition, policymakers should take into account the volatility of oil prices and the uncertainty about the duration of the current low-price environment.

Seize the opportunity created by falling oil prices

The decline in oil prices presents a golden opportunity to reform energy subsidies and taxes. Energy tax reforms would reduce the adverse environmental side effects of energy consumption through more rational pricing, and the revenues received could be used to lower other taxes (such as on labor), meet fiscal consolidation needs, or

fund growth-enhancing spending. High taxes on coal and road fuels, in particular, are warranted across developed and developing economies alike to charge for carbon emissions, detrimental health effects from local air pollution, road congestion, and accidents. For example, current U.S. fuel taxes are estimated to be less than one-fourth of their efficient levels (Parry and others 2014). At the global level, getting energy prices right would yield substantial benefits—a reduction of about 20 percent in carbon emissions and of about 60 percent in deaths from fossil fuel air pollution, and gains in revenue would be substantial at 2½–3 percent of GDP, on average. The numbers vary across countries—for example, coal-intensive China could see revenue gains of about 6 percent of GDP. Finance ministries have a critical role to play not only in championing and administering carbon taxes and broader energy price reforms, but also in ensuring that revenues are put to good use (Lagarde 2014).⁴

In developing economies, further reform of energy subsidies could provide space for growth-enhancing spending in education, health, and infrastructure, as well as for programs to compensate the poor. Box 1.2 discusses ways to reform energy subsidies and describes recent country experiences. More than 20 countries have recently taken steps to decrease or eliminate energy subsidies. However, these are not permanent solutions unless they address the core problem of how governments determine energy prices. Moving toward deregulating domestic oil prices while international oil prices are falling can lead to permanent fiscal improvement, as well as to significant longer-term economic and environmental gains. Countries should, however, have in place social safety nets that can be expanded in times of large increases in international oil prices to help protect low-income households.

For countries that cannot move to full oil price deregulation, due to political economy or other considerations, an attractive interim solution may be to adopt an automatic fuel-pricing mechanism, possibly with short-term price smoothing (Coady and others 2012). A number of countries (including Chile, Peru, and some sub-Saharan African countries) have already adopted such mechanisms. This approach allows both increases and decreases in oil prices, but caps these changes. This ensures that international oil prices can be fully passed through to domestic consumers in the medium term while protecting domestic consumers from sudden price

⁴ For more information about the IMF's environment work, see imf.org/environment.

increases. It also helps contain the effects of higher international fuel prices on the budget.

Strengthen institutional frameworks for managing fiscal policy

Bold action is needed to improve the frameworks to manage public finances as part of a comprehensive approach to macroeconomic policies that facilitates sustainable growth. Fiscal frameworks anchor fiscal policy and provide guidance toward its medium-term objectives. They help enhance the play of automatic stabilizers over the course of the business cycle and thus reduce output volatility and raise medium-term growth. Chapter 2 shows that in the absence of strong fiscal frameworks, many countries tend to suppress the impact of automatic stabilizers in good times, possibly contributing to significant public debt buildup. Well-grounded fiscal frameworks are particularly necessary in countries where levels of public debt are high and the burden of age-related spending is expected to increase (Box 1.3).

- In Japan, an explicit, concrete medium-term fiscal plan could help respond flexibly to short-term shocks to the economy, including through temporary, targeted stimulus when growth underperforms.
- In the euro area, efforts should be made to simplify the increasingly complicated fiscal governance framework, while enhancing its credibility and fostering greater compliance. A streamlined framework, which should be subject to further discussion, could center on a single anchor (such as the ratio of public debt to GDP ratio) and a single operational target linked to the anchor (such as an expenditure rule with a debt brake).⁵

⁵See IMF forthcoming (b).

- In the United States, in the face of rapidly increasing spending related to the aging of the population, forging agreement on a credible medium-term fiscal consolidation plan is a high priority. Furthermore, reform of the tax code, focused on streamlining and simplification, is long overdue. Most of the measures in the president's proposed fiscal year 2016 budget are a step in the right direction, including expanding the base and lowering the business tax rate; capping deductions and reducing loopholes, particularly at the higher end of the income distribution; and expanding the earned income tax credit.
- In emerging market and developing economies, frameworks for managing fiscal policy must be framed to address an environment of volatile commodity prices, capital flows, and exchange rates. This would require enhancing fiscal transparency and analyzing and managing fiscal risks. In some cases, the frameworks would need to take into account risks from natural disasters and climate change. In frontier low-income countries, strong multiyear budget frameworks with effective commitment controls and institutional oversight are crucial to ensure increased discipline when countries borrow externally. Improvements in fiscal institutions, including those involved in revenue administration and in planning and executing public investment, can help improve revenue mobilization and the efficiency of spending.⁶

⁶See for example Chakraborty and Dabla-Norris (2009), Dabla-Norris and others (2010, 2011), and Gupta and others (2011). A forthcoming IMF policy paper (IMF forthcoming (c)) examines how fiscal institutions can be strengthened to improve the efficiency of public investment in advanced economies, emerging markets, and low-income developing countries.

Box 1.1. Past, Present, and Future Patterns in Revenues

During the global financial crisis, revenue-to-GDP ratios fell sharply in advanced economies (by 1 percent of GDP, on average) to levels comparable to those observed in the early 2000s (Figure 1.1.1). Lower receipts from corporate income taxes (CIT) and, to a lesser extent, personal income taxes explain most of the decline. In Japan and New Zealand, for example, CIT revenues fell by 2 percentage points of GDP or more.¹

Total revenue rebounded from 2010 to 2014, and the average revenue-to-GDP ratio exceeded precrisis levels in 2013. The increase could have been higher if tax compliance had not worsened as a result of the crisis (IMF forthcoming (a)). Most revenue components (taxes on goods and services, personal income taxes, and social security contributions) rose, reflecting the implementation of tax hikes (largely focused on the personal income tax and the value-added tax) and the resumption of economic growth.² One exception is the CIT, which has not yet returned to its precrisis average. Four factors have likely contributed to the hysteresis of the CIT in advanced economies. First, about half of advanced economies cut the CIT rate permanently at least once after 2008. Second, loss carry-forward has likely been reducing the tax base since the crisis. Organisation for Economic Co-operation and Development countries in which gross operating surpluses fell the most in 2009 are also countries in which CIT recovered the least between 2009 and 2013 (Figure 1.1.2). Third, the share of gross operating surpluses to GDP declined in most advanced economies during 2008–13 (0.6 percentage points, on average). Finally, asset price declines, a proxy for the contribution of the financial sector to government revenues, appear to be associated with changes in CIT revenues.

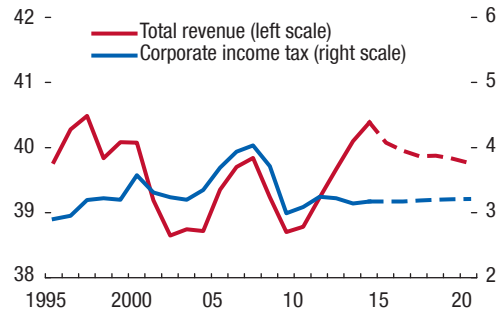
Average revenue ratios are projected to decline slightly to around precrisis levels over the medium term as consolidation efforts come to rely more on expenditure measures (October 2014 *Fiscal Monitor*). CIT revenues can be expected to remain relatively flat if cuts to tax rates remain permanent and if there

¹ Other country-specific factors besides the crisis contributed to the CIT decline in individual countries, but for all countries the peak and trough of the CIT overlap closely with the period of the global financial crisis.

² Between 2010 and 2013, 21 advanced economies took measures to raise personal income taxes (increasing the rate, expanding the base, or both) and 18 countries took measures to raise the value added tax (October 2013 *Fiscal Monitor*).

Figure 1.1.1. Advanced Economies: Total Revenue and Corporate Income Tax
(Percent of GDP, unweighted averages)

During the global financial crisis, revenue-to-GDP ratios fell sharply in advanced economies. Total revenue has since rebounded, but the increase could have been higher if tax compliance had not suffered as a result of the crisis.

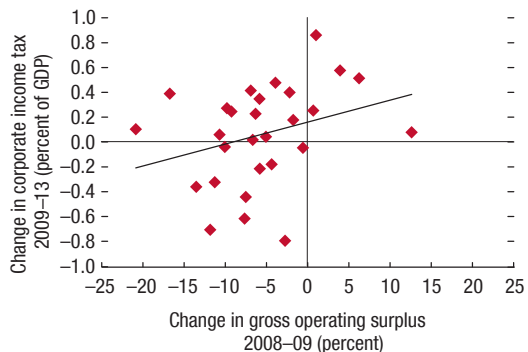


Sources: IMF, Fiscal Affairs Department Tax Policy database; and IMF staff estimates.

Note: Corporate income tax average is based on a sample of 32 advanced economies; projections for 2015–20 are based on IMF staff estimates when available, or assume a GDP elasticity of one, when not. Dashed lines show projections.

Figure 1.1.2. OECD Countries: Corporate Income Tax versus Gross Operating Surplus

Corporate income tax revenue fell during the global financial crisis and has not yet returned to precrisis levels. Losses incurred during 2008–09, proxied by the change in gross operating surpluses, contributed to the decline.



Sources: Organisation for Economic Co-operation and Development (OECD); IMF, Fiscal Affairs Department Tax Policy database; and IMF staff estimates.

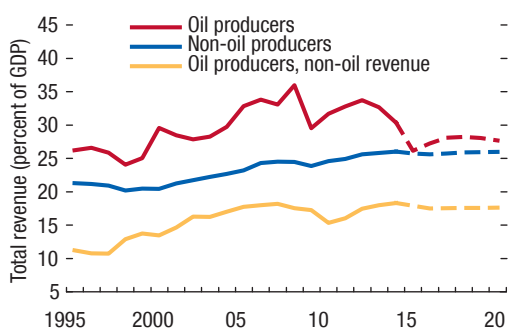
Note: Gross operating surplus (OECD, national accounts data) includes gross fixed income.

Box 1.1 (continued)

Figure 1.1.3. Emerging Market and Developing Economies: Total Revenue

(Percent of GDP, unweighted averages)

Revenue dynamics differ greatly for oil producers and non-oil producers. Oil producers experienced sharp revenue declines during the global financial crisis and as a result of falling oil prices. In contrast, total revenues continue on a positive upward path for non-oil producers, with only temporary effects from the crisis.



Sources: IMF, Fiscal Affairs Department Tax Policy database; and IMF staff estimates.

Note: Dashed lines show projections.

are still losses to carry forward. Nonetheless, there is significant uncertainty around these estimates.

In developing economies, revenue dynamics differ greatly for oil and non-oil producers (Figure 1.1.3). For oil producers, ratios of total revenue to GDP fell sharply in 2009 (by 6.5 percent of GDP, on average) and 2013–14 (by 3.5 percent of GDP, on average), reflecting oil price declines. Total revenue to GDP is projected to remain low, at pre-2000 levels, over the medium term. Conversely, for non-oil producers, the precrisis positive trend growth in total revenues halted only temporarily during the global financial crisis, and revenues to GDP are now at an all-time high. Revenue ratios are projected to keep increasing, although at a slower pace than before the crisis, largely as a result of downward revisions to growth projections (April 2015 *World Economic Outlook*).

Box 1.2. Reforming Energy Subsidies

The decline in global energy prices provides a golden opportunity for countries to reform energy subsidies and raise energy taxes to better account for the negative externalities from fossil fuel consumption. How can countries move forward in this area? Earlier work by the IMF (Clements and others 2013), drawing on the IMF's technical assistance experience, identifies six key ingredients for successful energy subsidy reform (Figure 1.2.1).¹

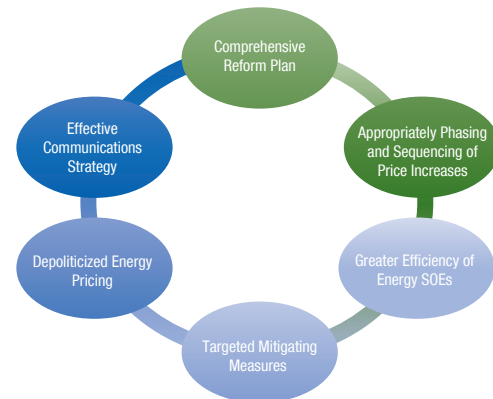
First, a comprehensive reform plan, which clearly articulates the reform's long-term objectives, is needed. Second, price increases should be appropriately phased and sequenced. The prices of products such as gasoline that are more heavily consumed by upper-income groups should generally be increased first; products such as kerosene that are more heavily consumed by the poor should be raised later. Third, improvements should be made in the efficiency of state-owned enterprises in the energy sector to help reduce their fiscal burden. Fourth, mitigating measures should be undertaken to protect the poor. Targeted cash or near-cash transfers, such as vouchers, are the preferred approach. Fifth, energy pricing should be depoliticized to make reforms durable. An automatic price mechanism, which incorporates a smoothing rule to prevent sharp increases in domestic prices, can be introduced, and implementation should be carried out by an independent body. Sixth, an effective communication strategy should be put in place to inform the public about the size of subsidies as well as the potential benefits of subsidy reform, such as the scope to reallocate spending to other priorities, such as health and education.

A number of countries have recently taken steps to reduce energy subsidies, including Angola, Bahrain, Cameroon, Côte d'Ivoire, Egypt, India, Indonesia, Jordan, Kuwait, Malaysia, Morocco, Sudan, Thailand, Tunisia, United Arab Emirates, and Yemen. Recent experiences with energy pricing reform in Côte d'Ivoire, Indonesia, Malaysia, and Yemen help illustrate some of the features behind successful reforms.

In Indonesia, prices were increased in two steps between mid-2013 and 2015: first, administered prices for gasoline and diesel were raised and second, gasoline subsidies were removed, and diesel subsidies were capped at Rp 1,000 per liter. Several factors have contributed to the success of the effort:

Figure 1.2.1. Six Elements of Successful Energy Reforms

Falling energy prices create an opportunity to reform energy subsidies. Recent country experience points to six components that characterize successful reform efforts.



Source: Clements and others (2013).
Note: SOEs = state-owned enterprises.

- The price increases were appropriately sequenced. Gasoline and diesel prices were increased by 44 percent and 22 percent, respectively, in 2013, and 31 percent and 36 percent, respectively, in 2014. The 2014 price increase paved a way for the removal of gasoline subsidies and the introduction of the per liter subsidy cap for diesel in January 2015. The price for liquefied petroleum gas, on the other hand, was kept largely unchanged, because the fuel is heavily consumed by poor households.
- An effective communication campaign helped the public understand the rationale for reform. For example, President Joko Widodo announced the price hike in a televised speech, explaining the need to reallocate public spending from fuel subsidies to infrastructure.
- To mitigate negative income shocks to the poor, low-income households (the bottom 25 percent of the income distribution) have received cash transfers after each price hike.

In December 2014, Malaysia took advantage of the sharp decline in international oil prices by eliminating fuel subsidies on regular unleaded gasoline and diesel. This culminated a reform effort that began with the

¹The IMF offers a free online course on subsidy reform. See <https://www.edx.org/course/energy-subsidy-reform-imfx-esrx>.

Box 1.2 (continued)

liberalization of prices for premium gasoline in 2010 and included additional price increases in regular unleaded gasoline and diesel in 2013 and 2014. Prices for unleaded gasoline and diesel are now set monthly to fully reflect changes in international oil prices. Factors that contributed to the reform success include:

- *Well-sequenced fuel price increases.* Subsidies were first eliminated on premium gasoline, which is more heavily consumed by upper-income groups. Prices of regular unleaded gasoline and diesel were increased in several phases, with increases in September 2013 and October 2014 of about 11 percent each. This created an opportunity such that when declining international prices helped close the gap between international and domestic prices, the authorities were able to move to a managed float regime ahead of their timetable.
- *Mitigating measures.* These included an increase in cash transfers through the Malaysia People's Aid (BR1M) program. The 2015 budget also calls for increased cash transfers to poorer households. At the same time, the authorities are reviewing overlapping and fragmented cash transfer programs to improve their targeting.
- *Strong communication.* The path to success was paved by effective and early communication. In 2013, press statements by the prime minister highlighted some of the problems associated with subsidies and the gains from reform. They also explained the mitigation measures that were envisaged for low-income groups.

Côte d'Ivoire adopted an automatic pricing mechanism with smoothing in 2013. This allows domestic fuel prices to follow international prices with no need to apply subsidies if international prices increase. Two main factors contributed to the success of the reform:

- To improve acceptance of the reform by shareholders and the public, all stakeholders were invited to discuss the reform, and TV and radio campaigns were broadcast.
- To mitigate the potential impact on poor households, the pricing formula sets a maximum price for diesel.

Côte d'Ivoire's effort also illustrates the challenges to reforming energy subsidies in low-income developing countries. Like many other such countries, it does not have well-targeted cash transfers that can be used to compensate low-income households for increases in energy prices, because it lacks administrative capacity to design and manage such programs. Under such conditions, governments will need to rely on a careful sequencing of price increases to ensure that the negative effects on low-income groups can be contained. Governments may also need to rely on other offsetting instruments, such as school meals, subsidies for mass transit, or reductions in health and education fees.

In Yemen, prices of gasoline, diesel, and kerosene increased during the second half of 2014, by 20, 50, and 100 percent, respectively. While the government's reform efforts met some opposition from the public, two factors played an important role in solidifying progress toward removing subsidies over the medium term:

- Social transfers to the poor—through the Social Welfare Fund (SWF)—increased by 50 percent in late 2014 to mitigate the impact of higher fuel prices. The authorities started working with the World Bank to improve the targeting of the SWF.
- The government committed to the adoption of an automatic fuel pricing mechanism in 2015 and requested technical assistance from the IMF.

Box 1.3. The Pressure of Age-Related Spending on Public Debt in Advanced Economies

Bringing public debt ratios to safer levels is an important long-term challenge in advanced economies. Reaching this goal will become more difficult as populations age over the next 30 to 40 years and spending on health and pensions is expected to increase. How much would this rise in age-related spending add to public debt burdens, assuming no offsetting changes in fiscal policy or reforms? The additional public debt burden can be assessed by examining the net present value (NPV) of these spending increases. Over the 2015–50 period, age-related spending increases are estimated at about 81 percent of GDP (Figure 1.3.1). This compares with median public debt of 71 percent of GDP in 2014 (55 percent of GDP in 2011).

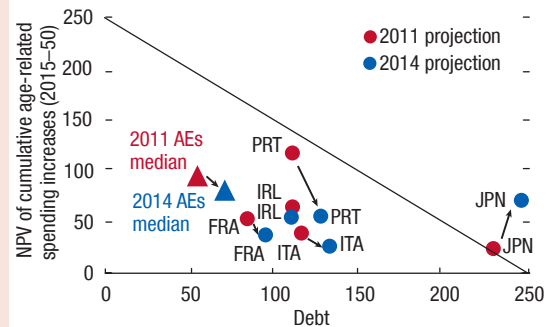
On average for the group of advanced economies, the NPV of expected increases in age-related spending has declined relative to earlier IMF staff projections due to two main factors:

- Some of the decline reflects pension reforms since 2011. For the countries that implemented reforms between 2011 and 2014, the NPV of pension spending increases declined by 10 percentage points of GDP, on average. This group includes several economies that increased retirement ages or tightened early retirement rules (Canada, Czech Republic, France, Greece, Ireland, Italy, Netherlands, Portugal, Slovenia, Spain, United Kingdom); modified benefit formulas to better link contributions to benefits (Ireland, Slovenia, Spain); introduced progressive reductions to pensions (Greece, Ireland, Italy, Portugal); or changed the indexation of benefits (Czech Republic, Spain).
- However, the bulk of the decline reflects the slowdown in the growth of health care spending in recent years. Spending growth has declined because of across-the-board reductions in national health budgets, cuts in prices for pharmaceuticals and other medical goods, reduced payments to providers, and cuts in wages and salaries of health care workers (Clements, Gupta, and Shang

Figure 1.3.1. Age-Related Spending Increases and Gross Debt

(Percent of GDP)

The impact on public debt of population aging in advanced economies can be assessed using the net present value of increased spending on such items as health and pensions.



Source: IMF staff estimates.

Note: AEs = advanced economies; NPV = net present value. Data labels in the figure use International Organization for Standardization (ISO) country codes.

2014). Few economies have undertaken fundamental reforms to improve the efficiency of health spending; however, such spending will still rise significantly over the longer term. And in some economies, expected increases in health spending are higher than projected earlier. For example, in Japan, the projected increase is related mainly to a much steeper age-spending profile than previously estimated.

In sum, while the projected burden of age-related spending has been revised down, it is still expected to be significant. Policy reforms—taking into account both efficiency and equity concerns—will be critical for laying the foundation for credible medium-term fiscal frameworks (April 2014 *Fiscal Monitor*).

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