



Limiting Central Government Budget Deficits: International Experiences

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Summary

The global financial crisis and economic recession spurred national governments to boost fiscal expenditures to stimulate economic growth and to provide capital injections to support their financial sectors. Government measures included asset purchases, direct lending through national treasuries, and government-backed guarantees for financial sector liabilities. The severity and global nature of the economic recession raised the rate of unemployment, increased the cost of stabilizing the financial sector, and limited the number of policy options that were available to national leaders. In turn, the financial crisis negatively affected economic output and contributed to the severity of the economic recession. As a result, the surge in fiscal spending, combined with a loss of revenue, has caused government deficit spending to rise sharply when measured as a share of gross domestic product (GDP) and increased the overall level of public debt. Recent forecasts indicate that budget deficits on the whole likely will stabilize, but are not expected to fall appreciably for some time.

The sharp rise in deficit spending is prompting policymakers to assess various strategies for winding down their stimulus measures and to curtail capital injections without disrupting the nascent economic recovery. The threat of sovereign defaults in Greece and Ireland, followed by potential defaults in Italy, Portugal, and Spain, have prompted a broad range of governments in Europe and elsewhere to develop plans to reduce the government's budget deficit. This report focuses on how major developed and emerging-market country governments, particularly the G-20 and Organization for Economic Cooperation and Development (OECD) countries, limit their fiscal deficits. Financial markets support government efforts to reduce deficit spending, because they are concerned over the long-term impact of the budget deficits. At the same time, they are concerned that the loss of spending will slow down the economic recovery and they doubt the conviction of some governments to impose austere budgets in the face of public opposition.

Some central governments are examining such measures as budget rules, or fiscal consolidation, as a way to trim spending and reduce the overall size of their central government debt. Budget rules can be applied in a number of ways, including limiting central government budget deficits to a determined percentage of GDP. To the extent that fiscal consolidation lowers the market rate of interest, such efforts could improve a government's budget position by lowering borrowing costs and stimulating economic growth. Other strategies include authorizing independent public institutions to spearhead fiscal consolidation efforts and developing medium-term budgetary frameworks for fiscal planning. Fiscal consolidation efforts, however, generally require policymakers to weigh the effects of various policy trade-offs, including the trade-off between adopting stringent, but enforceable, rules-based programs, compared with more flexible, but less effective, principles-based programs that offer policymakers some discretion in applying punitive measures.

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Overview and Background

The International Monetary Fund (IMF) has indicated,¹ that growing concerns over the fiscal balances, or the annual budget balance, of the economically advanced G-20² countries continue to pose a risk to economic recovery. Currently, government debt managers are being challenged by the requirement of managing higher debt levels, large fiscal imbalances, and the necessity of managing on-going funding needs in financial markets where conditions remain fragile. Through their actions, debt managers can affect a country's bond market and international capital markets. At the same time, public perceptions of sovereign risk have intensified, reflecting the deteriorated condition of government and financial sector balance sheets. These higher debt levels and the burden they impose on debt managers to constantly roll over short-term debt has increased the perception of the credit risk associated with sovereign debt that is complicating the interconnections between the debt capital markets, the financial sector, and national governments.

Financial turmoil in Greece, Ireland, and in other European countries has placed increased pressure on national governments to adopt austerity measures to satisfy credit markets. At the same time, most advanced economies are navigating a fine line between fiscal austerity on one hand, and maintaining public support programs to forestall a slip back into recession on the other. Indeed, the IMF warned that renewed turbulence in the sovereign debt market, or government bond market, could “trigger an adverse feedback loop” and inflict “major damage on the recovery.”

The IMF has indicated that government fiscal balances weakened by 6 percentage points of GDP between 2007 and 2009, rising from 1.9% to 7.9% of GDP. The largest impact on the fiscal balances of the advanced G-20 countries was projected to occur in 2009 and 2010. In 2009, the IMF estimated that fiscal deficits increased by 5% of GDP in 2009, another three-fourths of a percent in 2010, and 1.25% in 2011. Also, the forecast projected that government debt, or the accumulated amount of government deficits, among the advanced G-20 countries would rise on average by 14.5% of GDP by the end of 2009, compared with 2007, as indicated in **Table 1**.³ This forecast was considered by the IMF to represent the middle of the range of estimates, and it was based on the assumption that the economic recovery would continue at the pace experienced in mid-2009.

In the same forecast, the annual budget deficits for the emerging G-20 countries were projected to widen on average from a surplus of 0.2% of GDP in 2007 to a deficit of 3.2% of GDP in 2009, while government debt was expected to remain at a constant share of GDP. For European governments, the rise in government budget deficits and the increase in the total amount of government debt is undermining their efforts to reduce the size of their annual central government budget deficits. These estimates for the growth in government debt could change, depending on the success governments have in liquidating at favorable prices the assets they acquired during the financial crisis, the timing and strength of the economic recovery, and the extent of any payout on official guarantees.

¹ *World Economic Outlook*, International Monetary Fund, October 2010.

² Members of the G-20 are: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States, and the European Union.

³ *The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crisis*, International Monetary Fund, March 6, 2009.

The magnitude and pervasive nature of the government deficits is unsettling international capital markets. In general, public sector debts are rising relative to national gross domestic product (GDP), the broadest measure of a nation's economic output. The international markets also have become increasingly wary of rising government deficits due to an increased perception of risk. In particular, these perceived risks are viewed as being especially high in Europe where financial institutions are exposed to economic troubles in Greece, Portugal, and Spain. According to the Bank for International Settlements (BIS) the euro area banks hold more than 70% of the outstanding public sector debt of Greece.⁴ Furthermore, the uneven pace of the economic recovery is adding to perceptions of risk.

Table I. Fiscal Balance and Government Debt of G-20 Countries

(expressed as a percent of national GDP)

Country	Fiscal Balance					Government Gross Debt				
	2007	2008	2009	2010	2014	2007	2008	2009	2010	2014
Argentina	-2.3%	-0.5%	-3.6%	-2.3%	-0.4%	65.9%	49.2%	38.6%	33.7%	23.5%
Australia	1.6	1.7	1.8	1.7	1.7	8.9	8.1	7.9	7.2	4.2
Brazil	-2.2	-1.1	-1.3	-1.2	-0.6	67.7	65.4	64.7	62.9	54.1
Canada	1.4	0.5	-1.5	-1.9	2.1	64.2	60.8	63.0	62.6	46.5
China	0.9	-0.1	-2.0	-2.0	-0.5	20.2	17.9	22.2	23.4	18.6
France	-2.7	-3.3	-5.5	-6.3	-2.7	63.9	66.1	72.3	77.1	79.4
Germany	-0.2	-0.1	-3.3	-4.6	0.1	65.0	68.7	76.1	80.1	77.2
India	-5.2	-7.8	-8.5	-7.4	-4.5	80.5	80.6	82.7	82.9	71.6
Indonesia	-1.2	0.1	-2.6	-2.0	-1.6	35.0	32.5	31.8	31.3	28.3
Italy	-1.6	-2.7	-3.9	-4.3	-4.2	104.1	105.6	109.4	112.4	118.0
Japan	-3.4	-4.7	-7.1	-7.2	-6.4	195.5	202.5	217.0	225.1	222.3
Korea	3.8	1.4	-0.8	-0.8	0.6	32.1	32.8	32.9	33.0	29.3
Mexico	-1.4	-1.7	-2.9	-2.8	-2.3	38.3	39.3	42.1	42.5	42.0
Russia	6.8	5.3	-2.6	-2.0	-3.5	7.3	5.8	6.5	6.5	6.4
Saudi Arabia	15.8	35.0	-1.2	1.7	2.6	18.7	12.9	11.6	9.7	5.8
South Africa	0.9	-0.2	-1.9	-1.7	-0.3	28.5	27.2	27.0	26.7	22.2
Spain	2.2	-3.1	-6.1	-6.0	-2.1	36.2	38.6	48.6	53.8	56.3
Turkey	-2.3	-2.5	-2.3	-2.0	0.3	38.9	38.7	40.4	40.4	29.7
United Kingdom	-2.7	-4.2	-7.2	-8.1	-4.8	44.0	50.4	61.0	68.7	76.2
United States	-2.9	-6.4	-12.0	-8.9	-5.1	63.1	68.7	81.2	90.2	99.5
G-20	-1.1	-2.6	-6.2	-5.3	-3.0	63.5	65.5	72.5	76.7	76.8

⁴ *BIS Quarterly Review*, The Bank for International Settlements, March 2010, p.1.

Country	Fiscal Balance					Government Gross Debt				
	2007	2008	2009	2010	2014	2007	2008	2009	2010	2014
Advanced G-20 Countries	-1.9	-4.1	-7.9	-6.8	-3.8	78.8	83.2	93.2	99.8	103.5
Emerging Market G-20 Countries	0.2	-0.1	-3.2	-2.8	NA	37.7	35.7	37.6	37.8	32.0

Source: *The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crash*, the International Monetary Fund, March 6, 2009, Table 6.

Generally, the rising level of public sector debts in most countries does not reflect profligate spending, but reflects measures policymakers adopted to avert a more serious and protracted economic recession. Nevertheless, policymakers and financial markets are especially concerned over the situation in Europe, where some investors view the rising deficits in Portugal, Spain, Greece, and Ireland as increasing the risks for a default and the potential for additional turmoil in the financial markets.⁵ In some cases, these countries have borrowed heavily from the European Central Bank (ECB). The ECB requires borrower countries to provide government bonds rated above BBB- as collateral, but that minimum rating was expected to rise to A- by the end of the 2010 and would rule out Greek bonds if rating agencies continue to downgrade the sovereign bonds.

Austerity Measures in Europe

Concerns in credit markets and among policymakers over economic conditions in Europe, particularly the economic conditions of Portugal, Greece, Spain, and Ireland, drove the topic to the top of the agenda at the early February 2010 meeting of G7 finance ministers. In addition, the exchange value of the euro depreciated against the dollar in late 2010 amid broader concerns over the impact budget deficits are having on the larger economies in the Eurozone.⁶ Such concerns could tighten credit and raise borrowing costs for a broad number of countries. Rather than relying on the International Monetary Fund to provide loans to the four countries in the most immediate danger, the richer economies of the Eurozone, particularly France and Germany, have stepped in and provided loans and other assistance to those nations in trouble. Prospects of a default by any member of the Eurozone, however, could severely strain the cohesion of the zone and challenge some aspects of European economic integration.

The potential for insolvency in Greece, Ireland, Portugal, and Spain has increased concerns among EU members over the impact the financial crisis and the economic recession are having on the future of the Eurozone. In addition, the continuing financial and economic weaknesses are buffeting the economies of Central and Eastern Europe and raising concerns regarding the prospects for political instability⁷ and future prospects for market reforms. Moreover, the pace of

⁵ Faiola, Anthony, Debt Concerns Weigh on Europe, *The Washington Post*, February 6, 2010, p. A1.

⁶ The sixteen members of the Eurozone are: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, and Spain.

⁷ Pan, Phillip P., Economic Crisis Fuels Unrest in E. Europe, *The Washington Post*, January 26, 2009, p. A1.

economic recovery in Central and East European countries is compounding the current problems facing financial institutions in EU member states, since many of them are financially exposed in Central and Eastern Europe. Mutual necessity helped EU members agree to support a generally unified position to increase aid to Central and East European economies and to Greece. In May 2010, European leaders and institutions adopted a package of emergency measures to stem rising financial market tensions associated with concerns over the fiscal solvency of Greece and several other Eurozone countries. In coordination with the International Monetary Fund (IMF), Eurozone members announced a three-year, 110 billion Euro (about \$145 billion) financial assistance program for Greece, a 60 billion Euro (\$78 billion) European Financial Stabilization Mechanism (EFSM), and a 440 billion Euro (about \$580 billion) European Financial Stability Facility (EFSF). In June 2011, public protests and demonstrations preceded a vote by the Greek parliament to implement austerity measures that were required by the IMF and the European Central Bank as necessary conditions for a second assistance package for Greece.

The EFSM is a new supranational EU balance of payments loan facility available from the European Commission to any EU member country facing financial difficulties. The facility is similar in design to an existing 50 billion Euro (\$65 billion) EU balance of payments facility that can only be drawn on by non-Eurozone EU member nations.⁸ Since 2008, Hungary, Latvia, and Romania have borrowed from this later facility as part of a joint EU-IMF economic adjustment program. Under the new EFSM, the borrowing nation would be subject to economic austerity measures that would be supervised by the European Commission, which would decide at regular intervals whether sufficient fiscal progress has been made to warrant the continued release of funds. The funds are available immediately and there is no sunset date for the EFSM. To date, no country has requested funds from the EFSM.

On November 21, 2010, Irish officials reversed policies and asked the EU and the IMF for financial assistance to avert a financial crisis. The loans and stand-by credits are expected to be provided through the EFSM and the EFSF and could amount to 85-90 billion Euros, or about \$110-\$120 billion, spread over three years, with the possibility of supplemental funds provided by Britain and some other countries. Ireland is set to restructure some of its banks and to nationalize others to stem the outflow of deposits that has drained Irish banks. Irish authorities had earlier adopted income tax cuts and cuts in public sector pay and social welfare benefits to reduce the government's deficits. On November 24, 2010, Ireland's Prime Minister, Brian Cowen, announced a four-year \$20 billion plan to reduce Ireland's government debt. The plan included cuts of thousands of public sector jobs, phased-in increases in Ireland's value-added tax (VAT) rate starting in 2013, and social welfare savings of \$3.7 billion by 2014, but does not touch the country's ultra-low corporate tax rate. News of the government's call for financial assistance fractured the current coalition government and sparked public protests. The Irish crisis has rattled international investors who had dumped Spanish and Portuguese bonds in panic selling, raising the prospects that one or both countries may need financial assistance.

Impact on Central Government Budgets

The current financial and economic crises have worsened the financial position of the central government budgets of the G-20 countries, although the impact of the crises has varied by

⁸ The current balance of payments facility was created under Article 143 of the Lisbon Treaty, which limits assistance to "member states with a derogation," i.e., to those outside the Eurozone.

country. The two crises have affected the balance sheets of the central governments in three broad areas. First, governments adopted a broad range of special measures to support the financial system. Second, policymakers adopted discretionary fiscal stimulus measures to spur economic growth in order to stem the effects of the sharp drop in economic activity. Third, most economies experienced a loss in tax revenue and a surge in non-discretionary spending, referred to as automatic stabilizers, including such activities as unemployment insurance, that rise without direct legislative authorization. As a result of these factors, the financial crisis has undermined the effectiveness of budget rules as government budgets are being affected by large or prolonged internal or external shocks.

Table 2 displays the combination of these three spending activities on the overall balance of G-20 countries, as estimated by the IMF. The data indicate that over the 2009-2010 period, the overall fiscal balance for the United States was expected to fall from -5.9% to -8.9% of GDP as automatic stabilizers kicked in and as discretionary policy actions, in the form of deficit spending, increased. Additionally, the data indicate that the U.S. budget balance was being affected almost equally by automatic stabilizers, discretionary fiscal policy actions, and by other actions, including extraordinary measures, that were taken to shore up the financial sector. In comparison, Saudi Arabia and Russia experienced a double-digit deterioration in their budget balances as their government budgets shifted from running a surplus to being in deficit, due in large part to the drop in oil revenues as the price of oil fell during the economic recession. The increase in oil prices in 2010 and 2011, combined with renewed demand for oil, has improved the budgets in these two countries. Saudi Arabia also adopted other discretionary fiscal measures that contributed to its budget deficit. Great Britain, as is the case with other G-20 members, adopted discretionary spending measures. Those measures, however, were less a factor in driving up its budget deficits than spending associated with automatic stabilizers.

Table 2. Overall Central Government Budget Balances, Automatic Stabilizers and Discretionary Measures of G-20 Countries
(as a percent of GDP)

	Overall Balance				Average Annual Change in 2008-2010 compared to 2007			
	2007	2008	2009	2010	Overall Balance	Automatic Stabilizers	Discretionary Measures	Other
Argentina	-2.3	-0.5	-3.6	-2.3	0.2	-0.6	-0.4	1.2
Australia	1.6	0.1	-2.2	-2.8	-3.3	-1.7	-1.5	0.0
Brazil	-2.2	-1.5	-1.0	-0.8	1.1	-0.7	-0.2	2.0
Canada	1.4	0.4	-3.2	-3.7	-3.6	-1.8	-0.9	-0.9
China	0.9	-0.3	-3.6	-3.6	-3.4	-0.6	-2.1	-0.7
France	-2.7	-3.1	-6.0	-6.2	-2.5	-2.4	-0.4	0.3
Germany	-0.2	-0.1	-4.0	-5.2	-3.0	-1.6	-1.1	-0.2
India	-5.2	-8.4	-10	-8.6	-3.8	-0.4	-0.4	-3.0
Indonesia	-1.2	0.1	-2.5	-2.1	-0.3	-0.1	-0.6	0.5
Italy	-1.5	-2.7	-4.8	-5.2	-2.7	-2.6	-0.1	0.0
Japan	-3.4	-5.0	-8.1	-8.3	-3.7	-2.2	-0.7	-0.9

	Overall Balance				Average Annual Change in 2008-2010 compared to 2007			
	2007	2008	2009	2010	Overall Balance	Automatic Stabilizers	Discretionary Measures	Other
Korea	3.8	1.2	-2.2	-3.2	-5.1	-1.5	-1.6	-2.1
Mexico	-1.4	-1.9	-3.2	-2.9	-1.3	-1.3	-0.5	0.6
Russia	6.8	4.2	-5.2	-5.1	-8.8	-1.4	-1.3	-6.1
Saudi Arabia	15.8	35.5	-8.3	-6.5	-8.9	-0.5	-3.1	-5.4
South Africa	0.9	-0.1	-2.7	-3.4	-3.0	-0.6	-1.0	-1.5
Turkey	-2.1	-3.0	-4.2	-3.3	-1.4	-2.1	0.0	0.7
United Kingdom	-2.7	-5.5	-9.5	-11.0	-6.0	-2.5	-0.5	-2.9
United States	-2.9	-5.9	-7.7	-8.9	-4.6	-1.6	-1.6	-1.4
G-20 PPP GDP-weighted average	-1.1	-2.6	-5.9	-6.3	-3.8	-1.4	-1.2	-1.2
Memorandum item: EU G-20	-1.6	-2.7	-6.0	-6.9	-3.5	-2.2	-0.6	-0.7

Source: *Global Economic Policies and Prospects*, IMF Staff Note for the Group of Twenty Meeting, March 13-14, 2009, the International Monetary Fund.

Notes: PPP stands for purchasing power parity, or the data have been adjusted to account for exchange rates. The three spending areas are: (1) automatic stabilizers, or those governments payments that are ratcheted up automatically as the rate of economic growth slows (unemployment insurance, for instance); (2) discretionary measures, or macroeconomic policy actions that were taken specifically to address the economic downturn; (3) other expenditures, such as fiscal expenditures to shore up distressed banks; and (4) the overall balance, or the combination of the three effects. Negative numbers indicate deficit spending as a percent of GDP.

The OECD also has estimated the impact of spending increases and the loss of tax revenue on the budget balances of major economies that are associated with the fiscal stimulus packages that the developed economies adopted, as indicated in **Table 3**. On average, a decrease in tax revenue and an increase in spending due to the stimulus packages adopted by the developed countries in 2008 to counter the economic recession and the financial crisis are expected to have a relatively equal impact on the budget balances of the developed countries. For the United States, the loss in tax revenue is expected to have a larger negative impact on the budget balance than the negative effect associated with a higher level of spending. The OECD estimates indicate that the economic recovery that began in 2009 will stem the continued deterioration in budget balances in 2010, but that it likely will not be a strong enough recovery to turn around the budget balances in most of the larger economies.

Table 3. Size and Timing of Fiscal Packages
(Change in central government budget balances by component and period)

	2008-2010 net effect on fiscal balance			Distribution over the period		
	Spending	Tax revenue	Total	2008	2009	2010
	Percent of 2008 GDP			Percent of total net effect		
Australia	-4.1%	-1.3%	-5.4%	13.0%	54.0%	33.0%
Austria	-0.4	-0.8	-1.2	0.0	79.0	21.0
Belgium	-1.1	-0.3	-1.4	0.0	51.0	49.0
Canada	-1.7	-2.4	-4.1	12.0	41.0	47.0
Czech Republic	-0.3	-2.5	-2.8	0.0	56.0	44.0
Denmark	-2.6	-0.7	-3.3	0.0	33.0	67.0
Finland	-0.5	-2.7	-3.2	0.0	47.0	53.0
France	-0.6	-0.2	-0.7	0.0	68.0	32.0
Germany	-1.6	-1.6	-3.2	0.0	48.0	52.0
Greece	0.0	0.8	0.8	0.0	100.0	NA
Hungary	7.5	0.2	7.7	0.0	51.0	49.0
Iceland	1.6	5.7	7.3	0.0	28.0	72.0
Ireland	2.2	6.0	8.3	6.0	39.0	55.0
Italy	-0.3	0.3	0	0.0	15.0	85.0
Japan	-4.2	-0.5	-4.7	2.0	74.0	25.0
Korea	-3.2	-2.8	-6.1	17.0	62.0	21.0
Luxembourg	-1.6	-2.3	-3.9	0.0	65.0	35.0
Mexico	-1.2	-0.4	-1.6	0.0	100.0	NA
Netherlands	-0.9	-1.6	-2.5	0.0	49.0	51.0
New Zealand	0.3	-4.1	-3.7	6.0	54.0	40.0
Norway	-0.9	-0.3	-1.2	0.0	100.0	NA
Poland	-0.8	-0.4	-1.2	0.0	70.0	30.0
Portugal	-0.8	0.0	100.0	0.0
Slovak Republic	-0.7	-0.7	-1.3	0.0	41.0	59.0
Spain	-2.2	-1.7	-3.9	32.0	44.0	23.0
Sweden	-1.7	-1.7	-3.3	0.0	43.0	57.0
Switzerland	-0.3	-0.2	-0.5	0.0	68.0	32.0
Turkey	-2.9	-1.5	-4.4	17.0	46.0	37.0
United Kingdom	-0.4	-1.5	-1.9	11.0	85.0	4.0

	2008-2010 net effect on fiscal balance			Distribution over the period		
	Spending	Tax revenue	Total	2008	2009	2010
	Percent of 2008 GDP			Percent of total net effect		
United States	-2.4	-3.2	-5.6	21.0	37.0	42.0
Major seven	-2.1	-2	-4.1	15.0	47.0	38.0
OECD average	-0.9	-0.9	-1.7	12.0	60.0	28.0

Source: Official Packages Across OECD Countries: Overview and Country Details, Organization for Economic Cooperation and Development, March 31, 2009.

This continued erosion in budget balances through 2010 has raised concerns among some policymakers who contend that the budget deficits are undermining market confidence in their governments. As a result of these concerns, some analysts argue that capital markets could grow reluctant to finance the budget deficits without greater compensation in the form of higher returns, which would add to the overall cost of the deficits. In a recent report, however, the IMF concluded that a rise in the level of the central government's debt, by itself, does not necessarily have a major adverse impact on a government's solvency and, therefore, on financial markets. Nevertheless, the IMF cautions that the rise in government debt represents an important challenge that should not be ignored. The IMF contends that the source of the rise in government debt is a factor in market confidence.

According to the IMF, the current rise in government deficits for most countries does not represent an explosive upward path in spending, but represents targeted and necessary policy responses to the financial and economic crises. A rise in government debt that is directed at stemming an economic recession or a financial crisis does not necessarily undermine market confidence as long as governments can undertake credible programs to reduce spending once the crisis has been averted. With some notable exceptions such as Greece, the rise in spending generally is not viewed as representing profligate spending by central governments, but is attributed to measures to address the financial crisis, including spending on social programs that rise without overt discretionary actions. Such automatic stabilizers have an especially large impact on the spending of governments within the European Union, where the government sector accounts for a larger share of total GDP.

Fiscal Consolidation: Country Efforts

Since 1990, numerous national governments in developed countries have undertaken fiscal consolidation efforts, often by adopting a budgetary rule that restricts the size of the annual amount of the government budget deficit to a certain percentage of GDP. The reasons for fiscal consolidations are as varied as the governments themselves. Most often, policymakers are motivated to reduce the government's budget deficit due to a variety of concerns. These include: the rising pressure on public finances of aging populations; the cost of financing a rising amount of debt; the impact on price inflation; the crowding out of private investment; and the reputation and credibility of the government and its economic policies in the financial markets. **Table 4** details fourteen instances between 1990 and 2005 identified by the IMF in which governments in

developed countries undertook fiscal consolidation. As is indicated, these efforts generally were initiated for a short period of time and were designed to meet a specific objective. The details provided by the IMF include the political and macroeconomic environment in which the fiscal consolidation occurred and the condition of the central governments' budget. In a number of cases, budget consolidation can be associated with a change in governments in which the budget deficit was an issue in the preceding election.

The IMF concluded that successful fiscal consolidation efforts generally were accompanied by a supportive domestic and international environment, including, but not limited to, periods of sustained positive economic growth among trading partners. While fiscal consolidation generally tends to reduce the overall rate of growth in an economy in the short run due to the drop in the central government's contribution to GDP growth, the IMF authors concluded that: (1) this negative effect was not as pronounced as had been indicated in previous studies; (2) that in some cases fiscal consolidation had a positive impact on the rate of economic growth; and (3) that the long-term impact on economic growth from a reduction in central government spending depended on a range of factors, including the strength of private domestic demand.⁹

Table 4. Fiscal Consolidation Efforts in Selected Developed Countries

Episode	Political Background	Macroeconomic Background	Government Finances
Canada, 1994–97	Majority federal government elected in 1993 to address fiscal issues; similar election result in 1994-95 in the two largest provinces.	Recovery from recession; low inflation; high output gap and unemployment; exchange rate depreciation; improving current account balance.	Sizable deficit and debt stock; large share of debt held at short term and by nonresidents; high tax-to-GDP ratio; expending entitlements; sub-federal fiscal issues.
Denmark, 2004–05	The ruling center-right coalition entered the second half of its term with a diminishing voter support.	Continued economic slowdown (since 2001) characterized by gradually rising unemployment.	A moderate level of public debt (of about 50% of GDP), a near-balanced budget.
Finland, 1998	Both the coalition elected in 1991 and the grand coalition elected in 1995 had a clear mandate for EMU membership.	Gradual consolidation (from 1992) started at the time of deep recession characterized by high output gap, rising unemployment, low inflation, and depreciating exchange rate. By 1998 the economy had recovered and enjoyed a growth rate well above the EU average.	High deficit and medium-level but rapidly increasing debt, high tax-to-GDP ratio and expanding entitlement programs.

⁹ Kumar, Manmohan S., Daniel Leigh, and Alexander Plekhanov, *Fiscal Adjustments: Determinants and Macroeconomic Consequences*, International Monetary Fund, IMF Working Paper WP/07/178, July 1007, p. 22.

Episode	Political Background	Macroeconomic Background	Government Finances
France, 1996–97	The president brought forward parliamentary elections by one year to ensure that the new government had a clear mandate for fiscal consolidation and that domestic elections did not interfere with the pre-EMU meeting of the European Council in early 1998.	The consolidation was launched against the background of a slow recovery from a recession, characterized by relatively high unemployment, low inflation, and exchange rate depreciation.	The expansionary policy in response to the 1993 recession left France with a large fiscal deficit and a medium-level but rapidly rising public debt, falling short of the EMU criteria.
Germany, 2003–05	The coalition led by the Social-Democratic Party narrowly won the elections in September 2002. The comprehensive reform plan (Agenda 2010) was unveiled in March 2003.	Three years of static output, high unemployment, concerns about possible deflation, heavy losses in the financial sector.	Fiscal deficit widened to about 3.7% of GDP in 2002, with public debt hovering around 60% of GDP.
Ireland, 2003–04	The coalition government enjoyed a strong parliamentary majority since 2002. In addition, there were few differences of views within the coalition.	After a decade of strong growth, economic activity (excluding profits of multinationals) decelerated markedly in 2002 and remained subdued in 2003.	Relatively low level of public debt (below 35% of GDP), a near-balanced budget, a relatively low tax-to-GDP ratio.
Italy, 1997	The consolidation was preceded by the electoral reforms at both the central and regional levels, which resulted in more stable governments with longer political horizons.	The consolidation attempt was launched during the time when growth turned negative in late 1996 - early 1997 after strong performance in 1995, and the return of the recession of the early 1990s was perceived as likely. Inflation was declining but the unemployment remained high.	Very high debt (of over 115% of GDP in 1997), rising in spite of fiscal consolidation attempts since early 1990s.
Japan, 2004	Ruling coalition since 2000. In 2004, the positions of the ruling party in both houses of parliament shrank as the government's approval rating hit the low of 36 percent (compared to 70–90% in 2001), partly due to the passage of pension reforms.	Gradual economic recovery since mid-2002, with contributions from both exports and domestic demand, characterized by gradually declining unemployment and easing of deflation.	A decade of high fiscal deficits (about 8 percent of GDP in 2003) led to a rapid accumulation of public debt, which reached 160% of GDP. The revenue-to-GDP ratio remained below 30%, while social security outlays kept rising.

Episode	Political Background	Macroeconomic Background	Government Finances
Netherlands, 2004–05	As a result of early elections in January 2003, center-right coalition government took office.	There had been a significant downturn in activity since 2000. During the two years, growth averaged barely 0.2%, with unemployment rising. Activity began to pick up in 2004 and growth was projected at about 1% in 2004 and 1¾% in 2005. The authorities had the challenge of nurturing the emerging recovery while ensuring fiscal sustainability.	There had been a sharp deterioration in the fiscal position with the 3 percent Maastricht deficit ceiling breached in 2003. The general government balance worsened by almost 5½ percentage points during the first three years of the decade, as a result of the 2001 tax reform, increases in health care and education spending, and a higher deficit of local governments (reaching 0.6 percent of GDP).
New Zealand, 2003	Competitive political environment, with the opposition calling on the ruling Labor Party to introduce more tax cuts and improve the quality of health and education services. However, the September 2005 elections did not lead to any significant relaxation of fiscal policy and the incumbent party was re-elected with a confirmed mandate for continued fiscal consolidation.	Solid and accelerating economic growth, narrowing current account deficit, unemployment at a 16-year low.	A slight budget surplus and a moderate level of public debt (of about 40% of GDP), which exceeded, however, the government's long-term target of 30% of GDP.
Spain, 1996–97	Elected in March 1996, the coalition government had a mandate for fiscal consolidation.	A relatively rapid economic recovery after the recession that culminated in a negative growth in 1993. While economic activity was on the rise and inflation gradually subsided, high unemployment (at above 20% of labor force) proved to be persistent.	Public finances have gradually deteriorated since 1988 with annual fiscal deficits exceeding 7% of GDP in 1995. Public debt has rapidly risen to over 70% of GDP.
Sweden, 1994–98	The Social Democrat minority government launched fiscal consolidation following the 1994 general elections.	The deepest recession since the 1930s, accompanied by high inflation, quickly rising unemployment, exchange rate depreciation and associated improvement in the current account balance.	Fiscal deficit exploded to over 12% of GDP as a result of the cyclical downturn and the underfinanced tax reform of 1990–91, with public debt reaching 80% of GDP.

Episode	Political Background	Macroeconomic Background	Government Finances
United Kingdom, 1995–98	The popularity of the conservative party by the middle of the term was low. After 18 years of being in opposition, the Labor Party won elections in May 1997 with an overwhelming majority in Parliament. The new government confirmed the course of fiscal consolidation and introduced a number of new policy reforms, including transferring the responsibility for setting interest rates from the Treasury to the Bank of England.	Three successive years of solid economic growth, led by private consumption. Unemployment was falling rapidly, while inflation remained relatively low.	Public sector fiscal deficit increased to over 7 percent of GDP by 1994, the debt-to-GDP ratio was on the rise and already exceeded the target level of 40% by about 8 percentage points.
United States, 1994	New Democratic President took over in January 1993. The Congress was also Democratic and there was expectation of an initiative to reduce debt.	Economic activity had been weak for some time, and unemployment was rising.	The federal government fiscal situation had been deteriorating at a sharp pace. The deficit was almost 5% of GDP. In nominal terms federal debt had quadrupled over 1980–92 and the debt ratio was projected to continue rising at a high rate.

Source: Kumar, Manmohan S., Daniel Leigh, and Alexander Plekhanov, *Fiscal Adjustments: Determinants and Macroeconomic Consequences*, International Monetary Fund, IMF Working Paper WP/07/178, July 1007, p. 10-11.

To reduce the size of the government’s deficit spending, policymakers have a number of options. These options include reducing current spending, increasing current revenue, reducing capital spending, or some combination of spending reductions and revenue increases. While the record on the economic effects of these various approaches to fiscal consolidation is mixed, a study by the OECD concluded that “spending restraint (notably with respect to government consumption and transfers) is more likely to generate lasting fiscal consolidation and better economic performance” than revenue enhancements.¹⁰ Despite this general result, the OECD study also concluded that the experiences of OECD countries was that revenue increases “accounted for a larger fraction of the total reduction,”¹¹ than did reductions in government spending. In addition, the study concluded that three-fourths of the episodes involved a combination of cuts in government expenditures and increases in government revenues. Reductions in capital spending generally played a small role in such fiscal consolidation efforts, according to the OECD study.

As a number of countries have adopted or are considering adopting fiscal austerity measures, an important consideration is the impact such simultaneous fiscal consolidation will have on economic performance. A recent study by the IMF focused on the economic effects of

¹⁰ Guichard, Stephanie, Mike Kennedy, Eckhard Wursel, and Christophe Andre, *What Promotes Fiscal Consolidation: OECD Country Experiences*, the Organization for Economic Cooperation and Development, Working Paper No. 553, May 28, 2007, p. 7.

¹¹ *Ibid.*, p. 10.

simultaneous fiscal consolidation by a number of countries. The study indicates that such actions have a contractionary effect on output. According to the IMF, a reduction in fiscal expenditures of 1 % of GDP typically reduces GDP by about 0.5 %, reduces employment by about 0.3% over two years, and offers no short-term stimulus. In the cases studied by the IMF, some of the contractionary effect of the fiscal consolidation measures were offset by central banks, which lowered interest rates. When interest rates are close to zero, as they currently are in most advanced economies, the IMF indicated that fiscal consolidation has a more negative effect on output. In addition, a fiscal consolidation generally depreciates a nation's currency, which tends to reduce the negative impact of fiscal consolidation by boosting net exports. The IMF also determined that fiscal contractions that rely on cuts in spending typically have less of a negative effect on output than do adjustments to tax rates, because central banks provided more stimulus following a reduction in spending than they did in response to a contraction based on higher taxes. Over the long-run, such fiscal consolidation proved to be beneficial, because lower government debt levels lowered interest rates and reduced interest payments by governments, which provided room for reducing taxes.¹²

The IMF has grown increasingly concerned over the challenges being posed to national debt managers who are attempting to manage higher debt levels, large fiscal imbalances, and the necessity of managing on-going funding needs in financial markets where conditions remain fragile. In addition, the higher debt levels and the burden they impose on debt managers to constantly roll over short-term debt has increased the perception of the credit risk associated with sovereign debt that is complicating the interconnections between the debt capital markets, the financial sector, and national governments. The 2009-2010 financial crisis demonstrated the broad interrelationships that have developed among financial firms across national borders and between the public sector and the financial sector. These interrelationships have raised the prospect of contagion, or that an increased awareness of the fiscal, structural, and financial sector vulnerabilities of sovereign credit risk in various countries could spread market concerns to other countries that are perceived to be experiencing similar vulnerabilities.

The Stockholm Principles

In order to address these issues, the IMF assembled debt managers from 33 countries, central bankers, representatives from the private sector, and other international financial organizations for a debt managers conference in Stockholm in July 2010. The managers agreed on a set of 10 best practices, known as the Stockholm principles, to increase confidence in public debt management and to reassure financial markets. The principles were adopted by the G-20 group of nations in the Seoul Summit in November 2010. The 10 principles represent three major areas: framework and operation; communications; and risk management. The principles are:

1. The scope of debt management should consider the relevant variables and the policy and financial risk implications of those variables be defined in a way that also accounts for any relevant interactions between the nature of financial assets, explicit and implicit contingent liabilities, and the structure of the debt portfolio.
2. Strategic and operational debt management decisions should be supported by relevant information sharing at the domestic, regional, and global levels.

¹² *World Economic Outlook*, International Monetary Fund, October 2011, p. 93-96.

3. Debt managers face challenges in issuing and managing increased amounts of debt. They should retain sufficient flexibility in market operations that they can minimize execution risk, improve price discovery, relieve market dislocations, and support secondary market liquidity.
4. Debt managers should maintain proactive and timely market communication strategies to support a transparent and predictable operational framework.
5. Debt managers should communicate to the public changes that are made such as an introduction of a new debt instrument or an adjustment to an existing debt issuance mechanism.
6. Higher levels of debt and increased uncertainties regarding fiscal, monetary, and regulatory policies imply the need for close communication among debt managers and monetary, fiscal, and financial regulatory authorities.
7. Debt managers need to maintain a close and continuing dialogue with the investor base to assess shifts in investment philosophy to identify vulnerabilities and new opportunities to offer instruments that better match investor's needs.
8. Given the increased exposure to macroeconomic and financial risks, debt managers should have a framework that helps them identify, assess, and monitor risk associated with debt management.
9. Debt managers should develop a risk management system based on relevant economic and financial stress scenarios with the broadest definition of the debt portfolio.
10. Debt managers should adopt prudent risk management strategies that cover the full range of risks facing sovereign debt management and communicate those strategies to investors.

Recent EU Austerity Measures

As **Table 5** indicates, EU member countries have adopted various tax and spending measures to reduce the size of their government budget deficit, many of which were exacerbated by the economic recession and stimulus measures adopted during the 2008-2009 financial crisis to stem the impact of the economic recession. The lingering effects of the recession are compounding the problems of EU members, because most members have large automatic stabilizers, or public support measures that are activated by economic events. Such measures include unemployment benefits and other types of social welfare spending. In many cases, governments have chosen to reduce public sector jobs or to freeze wages, because such changes usually can be adopted without legislative action. Other governments have chosen to increase the value added tax (VAT), or the tax that is applied through the various stages of production. Such taxes are less visible to consumers, because the tax is incorporated into the final cost to consumers.

Table 5. Tax and Spending Policies Adopted by Members of the European Union as Part of Economic Austerity Programs

Country	Tax Policies	Spending Policies
Austria	Increase taxes on banks, tobacco, gas, airline tickets.	Undetermined cuts in spending.
Belgium	Proposals include tax increases on pensions, taxes on CO2 emissions, and a “crisis” tax on banks.	Proposal to bar increases in health-care spending.
Bulgaria		Reduce spending by all government ministries; Reduce public sector jobs by 10%; freeze public sector wages for three years.
Cyprus	Increase fuel taxes and corporate taxes by 1%. Considering an increase in VAT.	A hiring freeze placed on civil servant jobs.
Czech Republic	Apply taxes on pensions of high earners.	Reduce public sector wages by up to 43%.
Denmark		Cut unemployment benefits from 4 years to 2 years; cut public sector employment by 20,000; reduce child benefits; cut ministerial salaries by 5%; reduce subsidies to universities.
Estonia	Considering an increase in VAT taxes.	
Finland	Adopted taxes on energy; new excise taxes on sweets and soft drinks; VAT tax will rise by 1%.	
France	Target tax loopholes; adopt a 1% surtax on the highest wage earners.	Withdraw stimulus measures; raise retirement age from 60 to 62; raise tenure to qualify for state pension from 41 to 41.5 years of service; raise age requirement for full pension from 65 to 67 years.
Germany	Increase taxes on nuclear power.	Reduce subsidies to parents; cut 10,000 to 15,000 public sector jobs; reduce welfare spending; reduce number in military by 40,000.
Greece	Target tax evasion. Raise VAT from 19% to 23%; raise taxes on fuel, alcohol, and tobacco by 10%; raise property and gambling taxes.	Raise pension age; public sector wages cut by up to 25%; eliminate public sector bonuses; freeze public sector salaries and pension payments for 3 years; raise retirement age from 61.4 to 63.5.
Hungary	Adopted a tax levy on financial sector for 2010 and 2011; adopted a temporary increase of VAT rate to 25%.	Lower wage ceilings for public sector employees; reduce by 15% subsidies to political parties; reduce the number of seats in parliament and local assemblies; increase retirement age to 65; adopted a two-year freeze in public sector pensions; cuts in pay for prime minister, ministers and state secretaries; 10% cut in sick pay; suspending housing subsidy.

Country	Tax Policies	Spending Policies
Ireland	Increase capital gains and capital acquisition tax by 25%; increase cigarette tax; increase carbon tax; adopted a new water tax.	Cut public sector wages by 5%; cut 24,750 public sector jobs; cut public sector investment projects; reduce social welfare and child benefits; cut minimum wage by 1 euro per hour.
Italy	Target tax evaders; adopted a carbon tax.	Reduce spending by 1.6% of GDP including cutting salaries of public sector workers; freeze new hiring; raise retirement age by 6 months; cut pensions for public sector workers; reduce payments to regions and cities.
Latvia	Raise real estate taxes; raise the VAT on products from 10% to 18%; income tax increased from 23% to 26%; VAT increased from 18% to 21%; raise taxes on cars and real estate; adopted tax on natural gas.	Cut public sector wages by 30% to 50%; closed hospitals and schools; cut pensions; unemployment benefits linked with "forced" labor.
Lithuania	Raise taxes on alcohol and pharmaceuticals; raise corporate taxes by 5%.	Freeze public sector wages for two years; public sector pensions cut by 11%; reduce parental leave benefits.
Luxembourg		Reduce spending on transportation and education.
Malta		Focusing efforts on creating more jobs.
Netherlands	Increases in undetermined taxes.	Raise retirement age; cut military personnel by 10,000; cut spending on grants for university students, healthcare subsidies, and art subsidies. Number of parliamentarians to be cut, along with number in civil service.
Poland	Increase VAT by 1%.	Tighten pension requirements; cut military spending.
Portugal	Increase corporate and income taxes by 2% to 5%; increase in VAT of 1%.	Wages of the highest paid public sector workers to be cut by 5%; reduce defense spending by 40%; delayed completion of high-speed rail links; cuts in social programs; privatize certain enterprises.
Romania	Raise VAT by 5%.	Cut civil servant wages by 25%; cut pensions by 15%; cut up to 125,000 public sector jobs.
Slovakia	Increase the VAT by 1%; raise taxes on alcohol and cigarettes.	Reduce salaries of government ministers and lawmakers by 10%; postpone public sector investment projects; cut wages of civil servants; reduce up to 20,000 civil servant jobs.
Slovenia		Reduce bonuses for civil servants; cancel cost of living increases for civil servants.

Country	Tax Policies	Spending Policies
Spain	Raise tobacco tax by 28%; increase income tax by 1% on high earners.	Cut public sector pay by 5%; freeze pay at that level for 2011; freeze public sector pensions; eliminate 13,000 public sector jobs; reduce public sector investment; raise income taxes on wealthier; cancel cost of living adjustments for those on pensions; subsidies to regions will be cut; sell off 30% interest in national lottery and national government holdings in airport authority.
Sweden	No austerity measures implemented.	
United Kingdom	Increase the VAT from 17.5% to 20%.	Reduce budget for government departments by an average of 19%; cut in the Department of Culture of 24%; raise the retirement age from 65 to 66; eliminate 490,000 public sector jobs; cuts in spending for universities; reduce long-term unemployment benefits by 25%; eliminate benefits to those not actively seeking employment; reduce welfare spending, including eliminating child benefits for those making over a certain income; reduce military spending by 8%; reduce police spending by 4%

Source: Developed by CRS from publicly available sources.

Budget Rules

One approach developed countries have used to address government budget deficits has been to adopt some type of a budget rule to promote long-term fiscal sustainability. Such rules represent institutional mechanisms that are aimed at supporting fiscal credibility and discipline. According to the IMF, by early 2009 there were 80 countries with national and/or supranational fiscal rules, including 21 advanced economies, 33 emerging market economies and 26 low-income countries.¹³ Also, countries surveyed by the IMF had moved away from a single rule and toward a combination of rules, generally budget rules and debt rules, closely linked to debt sustainability. In general, these rules are of four different kinds. First, balanced budget rules are designed to ensure that a specified debt-to-GDP ratio is maintained. These rules can specify an overall balance, a structural or cyclically adjusted balance, and a balance over the course of a business cycle, rather than on an annual basis. Second, debt rules set an explicit limit or target for public debt as a percent of GDP. Third, expenditure rules set permanent limits on total, primary, or current spending in absolute terms, in growth rates, or in percent of GDP. Fourth, revenue rules set a ceiling or a floor on revenues and are aimed at increasing revenue collection and/or preventing an excessive tax burden.¹⁴

¹³ *Fiscal Rules – Anchoring Expectations for Sustainable Public Finances*, International Monetary Fund, December 16, 2010.

¹⁴ *Ibid.*

A study by the OECD on fiscal consolidation concluded that most developed countries have at some time adopted budget rules that restrict the amount of deficit spending to a specified percent of GDP and that constrain the overall level of the central government's debt, as indicated in **Table 6**.¹⁵ One common feature of these rules is that most of them were applied for a relatively short period of time. In contrast, members of the European Union (EU), which account for half of the total number of developed countries, have adopted both short-term, country-specific budget rules, and long-term EU-wide budget rules.

In general, the OECD concluded after observing fiscal consolidation efforts among OECD countries since 1990 that the more successful of these efforts combined rules to balance the budget with requirements to reduce expenditures. The study argues that no one rule fits all countries and all circumstances, but that successful programs of consolidation seem to have some common features. These features include rules that are simple to manage, while incorporating enough flexibility, or discretion, to respond to downturns in the business cycles. The OECD study also observed that budget rules that rely on reducing expenditures generally have been more successful. By focusing on expenditures, the rules were more successful because: (1) they were not reliant on cyclically volatile revenues; (2) they were designed to let economic stabilizers work during a downturn; and (3) they saved windfall gains during an upturn. The data in **Table 6** also indicate if the budget rules include provisions for dealing with windfall surpluses and a "Golden Rule" provision. A golden rule provision requires that the central government's current expenditures match its current revenues, exclusive of capital investments.

One example of a fiscal rule is that adopted by Switzerland in 2002, known as a "debt brake" or a "debt containment rule." The rule is a constitutional provision aimed at financing expenditures through current revenues. In Switzerland, an upper limit on tax rates is established in the Swiss constitution and are set at levels that are consistent with a structural budget balance, or a federal budget that is in balance when the economy is at full employment. As a result, it is difficult to adjust tax rates to respond to changes in economic conditions. However, the rule includes an escape clause for unexpected situations and uncontrollable developments. The law does not specify what these conditions are and provides considerable latitude for interpretation. The debt rule also does not include spending for such social welfare programs as social security and such automatic stabilizers as unemployment insurance. These items are funded through separate accounts.¹⁶

The Swiss debt rule does not attempt to balance the budget on an annual basis, but over the course of a business cycle. Surpluses that accrue during the expansion phase of a cycle are deposited into a compensation account that is then drawn down when the budget is in deficit during the contraction phase of the cycle. In any year, the maximum level of federal government expenditures must equal revenues after an adjustment for the business cycle and an adjustment factor that corrects for past differences between budget targets and outcomes. The cyclical adjustment is determined by a ratio between a projection of the trend rate of growth of Gross Domestic Product (GDP) and actual GDP. The projected level of GDP assumes that the rate of growth in the economy fluctuates around a long-term trend. As a result, if the ratio between trend GDP and actual GDP is less than one, the economy is operating at a level that is less than trend

¹⁵ Guichard, Stephanie, Mike Kennedy, Eckhard Wursel, and Christophe Andre, *What Promotes Fiscal Consolidation: OECD Country Experiences*, Organization for Economic Cooperation and Development, May 28, 2007.

¹⁶ Danniger, Stephan, *A New Rule: "The Swiss Debt Brake"*, IMF Working Paper WP/02/18, International Monetary Fund, January 2002.

and a deficit occurs, whereas if the ratio is greater than one, actual GDP is greater than trend GDP and a surplus occurs. After nearly a decade of experience with the debt rule, Swiss officials have concluded that the approach is not a “fiscal panacea.” Some of the drawbacks of the approach are that it is not comprehensive, since important budget items are excluded from the calculations, and that the approach does not provide incentives to spend funds in a more effective manner.¹⁷

Germany also has a constitutional provision to balance its federal budget, which it strengthened in June 2009 and began implementing in January 2011. The German provision applies not only to the federal government, but also requires the individual states to balance their budgets. The federal requirement is comprised of two components: a structural component and a cyclical component. The structural component is a constitutional provision that requires that the structural federal budget not exceed 0.35% of GDP by 2016 and by 2020 for the states. The cyclical component is based on the difference between actual economic performance and an estimate of potential output and estimates of revenue and expenditure elasticities, or sensitivity to changes in output. If actual output is below potential output and the debt to GDP ratio rises to 1.5%, the constitutional provision requires that the budget be adjusted. The budget rule also provides for exceptions in case of natural disasters or exceptional emergencies, if adopted by a majority of the members of parliament. There are no binding sanctions for violating the budget rules. A listing of the statutory provisions authorizing budget rules in a number of the advanced economies is in the **Appendix**.

Table 6. Fiscal Rules Applied in Developed Countries

Country	Name and date	Characteristics of the set of rules			
		Budget target	Expenditure target	Rule to deal with windfall revenues	Golden rule
Australia	Charter of Budget Honesty (1998)	yes	no	no	no
Austria	Stability and Growth Pact (1997) Domestic Stability Pact (2000)	yes	no	no	no
Belgium	Stability and Growth Pact (1997) National budget rule (2000)	yes	no	yes	no
Canada	Debt repayment plan (1998)	yes	no	yes	no
Czech republic	Stability and Growth Pact (2004) Law on budgetary rules (2004)	yes	yes	no	no
Denmark	Medium term fiscal strategy (1998)	yes	yes	no	no
Finland	Stability and Growth Pact (1997) Spending limits (1991, revised in 1995 and 1998)	yes	yes	no	no

¹⁷ *The Debt Brake – the Swiss Fiscal Rule at the Federal Level*, Working Paper of the FFA No. 15, Federal Finance Administration, February 2011, p. 23.

		Characteristics of the set of rules			
Country	Name and date	Budget target	Expenditure target	Rule to deal with windfall revenues	Golden rule
France	Stability and Growth Pact (1997) Central Government Expenditure Ceiling (1998)	yes	yes	Since 2006	no
Germany	Stability and Growth Pact (1997) Domestic Stability Pact (2002)	yes	yes	no	yes
Greece	Stability and Growth Pact (1997)	yes	no	no	no
Hungary	Stability and Growth Pact (2004)	yes	no	no	no
Ireland	Stability and Growth Pact (1997)	yes	no	no	no
Italy	Stability and Growth Pact (1997) Nominal ceiling on expenditure growth (2002)	yes	yes	no	no
Japan	Cabinet decision on the Medium Term Fiscal Perspective (2002)	yes	yes	no	no
Luxembourg	Stability and Growth Pact (1997) Coalition agreement on expenditure ceiling (1999, 2004)	yes	no	no	no
Mexico	Budget and Fiscal Responsibility Law (2006)	yes	no	yes	no
Netherlands	Stability and Growth Pact (1997) Coalition agreement on multiyear expenditure targets (1994, revised in 2003)	yes	yes	yes	no
New Zealand	Fiscal Responsibility Act (1994)	yes	yes	no	no
Norway	Fiscal Stability Guidelines (2001)	yes	no	yes	no
Poland	Stability and Growth Pact (2004) Act on Public Finance (1999)	yes	no	no	no
Portugal	Stability and Growth Pact (1997)	yes	no	no	no
Slovak Republic	Stability and Growth Pact (2004)	yes	no	no	no
Spain	Stability and Growth Pact (1997) Fiscal Stability Law (2004)	yes	no	no	no
Sweden	Fiscal Budget Act (1996, revised in 1999)	yes	yes	no	no
Switzerland	Debt containment rule (2001, but in force since 2003)	yes	yes	yes	no
United Kingdom	Code for Fiscal Stability (1998)	yes	no	no	yes

Source: Guichard, Stephanie, Mike Kennedy, Eckhard Wurzel, and Christophe Andre, *What Promotes Fiscal Consolidation: OECD Country Experiences*, Organization for Economic Cooperation and Development [EC/WKP(2007)13], 2007.

Notes: The Golden Rule generally restricts central governments from borrowing to fund current spending. Borrowing to fund investments generally is exempted from the budget rules. Essentially, the rule attempts to equate current spending with current revenues.

Budget Rules in Europe: The Stability and Growth Pact

In contrast to the short-term, country-specific budget rules most OECD countries have adopted at various times to address rising central government budget deficits, the members of the EU also operate within the requirements of the Stability and Growth Pact, which was adopted in 1997. EU members decided that, due to the disparate performance and composition of their economies, it was necessary to adopt a fiscal rule in lieu of relying on market forces to coordinate their economic policies. The Pact consists of preventive measures that include monitoring the fiscal policies of the members by the European Commission and the European Council so that fiscal discipline is maintained and enforced in the Economic and Monetary Union (EMU). The Pact also includes corrective measures that provide for fines for countries that fail over a number of years to meet the Pact's requirements. The European Union comprises the largest single bloc of countries that collectively have applied a long-term set of rules. These rules require the members to apply corrective measures to reduce their annual budget deficits and to reduce the overall level of their government debt if the annual deficits or the overall amount of debt exceed certain prescribed percentages of GDP. Since the Stability and Growth Pact was adopted, however, it has not always been applied consistently, which eventually led the EU to amend the Pact.

The basic elements of the Stability and Growth Pact did not originate with the Pact itself, but were part of the original Maastricht Treaty that served as the founding document for the present-day EU. The budget rules are based on Articles 99 and 104 of the Treaty, and related decisions, including the excessive deficit procedure protocol. Article 99 of the Treaty requires the members to "regard their economic policies as a matter of common concern." They also are required to coordinate their economic policies in order to have "similar economic performance." Article 104 requires EU members to "avoid excessive government deficits." EU members are expected to follow established guidelines regarding the ratio of the government deficit relative to GDP and the ratio of government debt to gross domestic product. The Protocol on Excessive Deficit Procedure established the specific guidelines that are applied under Article 104. Under this protocol, EU members are expected to have an annual budget deficit no greater than 3% of GDP at market prices and government debt no more than an amount equivalent to 60% of GDP. The number of member states with a fiscal deficit above 3% of GDP increased from two in 2007 to twenty in 2010.¹⁸

All of the members of the EU are expected to meet the requirement of the budget rules. Nevertheless, the rules are of especial importance to the group of countries known as the euro area, because the members have adopted the euro as their common currency. Typically, countries have a set of economic policy tools available to them to manage their economies. These macroeconomic policy tools generally include such monetary and fiscal policy measures as

¹⁸ Public Finances in the EMU 2009, p. 30.

control over the nation's money supply, adjustments in tax rates, and control over government spending. In addition, nations have tools to affect the international exchange value of their currency. By adopting a common currency, however, the euro area countries ceded control of their currency to the European Central Bank. Consequently, the euro area countries agreed that the loss of the exchange rate tool meant that they would need to make greater efforts to control their government spending and their government budgets in order to restrain inflationary pressures and to promote similar economic performance among countries that have widely disparate economies. As a result, the euro area countries adopted budget rules as a component of their common policy approach.

As the Pact took effect in 1999, EU members began criticizing the rules-based approach of the Pact for being too stringent and they questioned whether the rules could be enforced. In 2003, the weaknesses of the Pact were exposed when the European Council voted not to apply the punitive procedures under the Excessive Deficit Procedure to France and Germany, which had experienced rising levels of government debt. Some EU members argued that the Pact focused too heavily on the rules-based percentage guidelines associated with the Pact without regard for the circumstances under which a government's level of debt or its deficit spending may rise, for instance as a result of a temporary increase in government spending to counter an economic downturn.¹⁹

The EU experience with the Pact demonstrates the policy tradeoffs that generally are involved in adopting such programs. In order to have a fiscal consolidation program be effective, the program needs to have stringent rules and penalties for violating the rules. At the same time, the current economic recession and financial crisis have demonstrated that policymakers need some flexibility and discretion in implementing budget rules in order to adjust the policy mix and generally to respond to differences in economic conditions. A fiscal deficit during periods of economic recession or very slow growth, for instance, likely would require a different policy prescription than one that arises during periods of strong economic growth when revenues would be high and payments made through automatic stabilizers would be low.

In 2005, the EU members adopted a number of changes to the Stability and Growth Pact. These changes shifted the enforcement of the Pact from a rules-based regime to one based more on a set of principles with more latitude for discretion in enforcing the corrective requirements. In the area of prevention, the modified Pact provides for each EU member to develop its own medium-term objectives to bring its deficit spending and its debt level into compliance based on the unique economic conditions of each member. The modified Pact also relaxes the annual deficit targets as Members move their budget balances into compliance and the Pact factors in the effects of cyclical economic activity.

The corrective measures also were modified in a number of important ways. The changes allow Members to avoid the corrective measures if their annual fiscal deficit is above 3% of GDP if they can demonstrate that the deficit is caused by "exceptional and temporary" circumstances. In addition, members can argue that their budget deficit should be exempt from the penalties of the Excessive Deficit Procedure if they can demonstrate that the deficit is the result of "other relevant factors." Among the other relevant factors that are listed as fiscal expenditures are: (1) officially sponsored research and development; (2) European policy goals; (3) support for international

¹⁹ Beetsma, Roel M.W.J., and Xavier Debrun, *Implementing the Stability and Growth Pact: Enforcement and Procedural Flexibility*, IMF Working Paper WP/05/59, International Monetary Fund, March 2005.

objectives; (4) capital expenditure programs; (5) pension reform; (6) fiscal consolidation programs; and (7) high contributions to EU-wide initiatives.

In 2008 as the financial crisis was unfolding, EU members were asked to provide a fiscal stimulus to their economies in ways that would comply with the Stability and Growth Pact. These efforts were part of a \$256 billion Economic Recovery Plan²⁰ proposed by the European Commission to fund cross-border projects, including investments in clean energy and upgraded telecommunications infrastructure. In order to comply with the Stability and Growth Pact, the EU asked its members to make their fiscal stimulus plans timely, temporary, and targeted, so they would not have a permanent impact on tax rates or on spending commitments beyond that necessary to counter the effects of the two crises. As a result, each EU member was asked to contribute an amount equivalent to 1.5% of their GDP to boost consumer demand. In addition, members were tasked to invest in such capital projects as energy efficient equipment in order to create jobs and to save energy, invest in environmentally clean technologies to convert such sectors as construction and automobiles to low-carbon sectors, and to invest in infrastructure and communications. This plan also proposed official support measures to increase the rate of employment and to focus investments on such high technology sectors as telecommunications and environmentally safe technologies.

While many in Europe and elsewhere felt the fiscal expansion during the depth of the economic recession was an appropriate response, the sovereign debt crises in Greece and Ireland emphasized shortcomings of the Stability and Growth Pact. As a consequence, some members of the European Commission have proposed changing the Pact to strengthen its provisions and to broaden the scope to include non-fiscal economic imbalances that have been outside the scope of surveillance under the Pact. The proposals would promote medium term budget targets to signal budget imbalances at an earlier stage and numerical benchmarks would be adopted to gauge the pace of debt reduction. The reinforced Pact also would monitor certain macroeconomic indicators to flag imbalances that could undermine the European Economic and Monetary Union (EMU). The proposal also calls for incentives and sanctions to enforce the economic surveillance that would be applied either automatically or semi-automatically on a sliding scale depending on the extent to which the corrective measures were adopted by EU members that were found to be not in compliance with the Pact.

Conclusions

Financial markets and policymakers are growing increasingly concerned over the high level of deficit spending and the growing amount of government debt among a large number of advanced and developing economies. Unlike previous bouts with rising government deficits in developing countries, most of the current increase in government spending does not reflect out of control spending, but represents a calculated response to a severe economic downturn and a global financial crisis. In general, the two crises have affected the balance sheets of the central governments in three broad areas: (1) special fiscal measures to address the financial crisis; (2) discretionary fiscal stimulus measures to spur economic growth; and (3) a surge in non-discretionary spending and a loss of tax revenue. As a result of these factors, the financial crisis

²⁰ *A European Economic Recovery Plan: Communication From the Commission to the European Council, Commission of the European Communities, COM(2008) 800 final, November 26, 2008. The full report is available at: http://ec.europa.eu/commission_barroso/president/pdf/Comm_20081126.pdf*

has undermined the effectiveness of budget rules as government budgets are affected by large or prolonged internal or external shocks. Most estimates indicate that such deficits will stabilize in 2010, but will not decline appreciably for some time after that. On balance, losses in tax revenue and an increase in spending associated with fiscal stimulus measures to counter the economic recession and the financial crisis are expected to have a relatively equal negative impact on the budget balances of the developed countries.

One approach most developed countries have used to address government budget deficits has been to adopt a budget rule. In general, most developed countries have at some time adopted budget rules to restrict the amount of deficit spending to a specified percent of GDP and to constrain the overall level of the central government's debt. One common feature of these rules, however, is that most of them were applied for a relatively short period of time. In contrast, members of the EU have adopted both short-term, country-specific budget rules, and long-term EU-wide budget rules. Academic studies seem to indicate that the more successful budget efforts combined rules to balance the budget with requirements to reduce expenditures. In developing such budget rules, policymakers are caught between designing rules that are enforceable, but inflexible, versus rules that are flexible and responsive to discretion, but less enforceable.

For national policymakers, the rising budget deficits and nascent economic recovery present a challenging policy mix. Various governments have budget rules in place to limit the budget deficits, but the necessity of continuing to provide stimulus to their economies to keep the recovery on track has put these budget rules on hold. For policymakers, the challenge is to unwind the fiscal stimulus measures that were adopted to prop up the financial sector and boost economic growth without short-circuiting the economic recovery. The strength of the economic recovery will determine the extent to which these dual policy goals are in conflict. A faster pace recovery will reduce the size of the government's budget deficits, which should work to ease the concerns of financial markets. Over the short-term, however, financial markets have displayed increased weariness over the magnitude and the pervasive nature of the deficits, especially in Europe. This could result in tighter credit and higher interest rates for all market participants. Investors are particularly concerned over the exploding government debts and public unrest in Spain, Greece, Portugal, and Ireland. So far, the wealthier economies of Europe, particularly France and Germany, have felt compelled to step in and provide financial assistance to the four struggling economies as a necessary price for preserving the Eurozone. If the situation is prolonged, it may well challenge the willingness of populations in Germany and France to continue supporting financial transfers to other members of the Eurozone and possibly challenge the goal of European economic integration.

Appendix. Fiscal Rules in Advanced Economies

Table A-1. Fiscal Rules by Country

Country	Statutory Base	Time Frame	Other Features of Rules
Australia	International Treaty, Statutory.	Expenditure rule (multiyear). Balanced budget rule, Debt rule (annual).	The Fiscal Responsibility Law (FRL) provides a framework for the conduct of fiscal policy, requiring that a fiscal strategy statement covering the next four years is released with each annual budget. The key elements of the fiscal strategy are to achieve budget surpluses on average over the cycle, keep tax as a share of GDP on average below the level for 2007-08 and to improve the government's net financial worth over the medium term. The medium-term strategy does not require that the budget remain in surplus every year over the economic cycle. An additional expenditure rule, which comes into force once the economy grows above trend, restrains real growth in spending to 2 % a year until the economy returns to surplus.
Austria	International Treaty, Statutory.	Expenditure rule (multiyear); Balanced budget rule, debt rule (annual).	National rules: Balanced budget rule: Deficit targets for the central government, regional government (Länder), and local governments contained in a National Stability Pact within a multiyear budgetary setting. Formal enforcement procedures. Expenditure rule: An expenditure rule was adopted in 2007 and took effect with the 2009 budget. Supranational rules: Euro area.
Belgium	International Treaty.	Annual.	Euro area.
Canada	Political Commitment.	Annual	FRL in place. Independent body monitors budget developments.
Czech Republic	International Treaty; Statutory.	Expenditure rule (multiyear).	National rules: ER: Expenditure limits inserted in a medium term expenditure framework (MTEF), covering 2 years beyond the budget year. The government may change the MTEF for the originally second and third years when a state budget bill is introduced. Nevertheless, this is possible only in defined cases. The government has to provide reasons in case of deviations from the approved MTEF to the parliament, and have these approved. Supranational rule: EU.
Denmark	International Treaty; Political Commitment.	Cyclical adjustment or Multiyear.	National rules: Balanced budget rule: At least balance on the structural budget balance in 2015. ER: Real public consumption on a national account basis must not increase by more than certain amounts per year. Besides, total ceiling of 26.5 percent of

Country	Statutory Base	Time Frame	Other Features of Rules
			cyclically adjusted GDP in 2015. RR: Direct and indirect taxes cannot be raised. Supranational rules: EU.
France	International Treaty; Statutory; Political Commitment.	Expenditure rule (multiyear).	National rules: Expenditure rule: Targeted increase of Central government (CG) expenditure in real terms. RR: CG to define the allocation of higher than expected tax revenues ex ante. DR: Each increase in the Social Security debt has to be matched by an increase in revenues. Supranational rules: Euro area
Finland	International Treaty; Political Commitment.	Expenditure rule (multiyear).	National rules: Expenditure rule: Spending limits in the Spending Limits Decision 2010-2013 from March 2009. Unemployment-related appropriations and similar automatic stabilizers are outside the spending limits (about one-fourth of total spending). BBR: Target of structural surplus of 1 % of potential GDP. Cyclical or other short-term deviations allowed, if they do not jeopardize the reduction of the CG debt ratio. CG deficit must not exceed 2.5 % of GDP. The government decided in Feb. 2009 that it can temporarily deviate from the CG deficit target if structural reforms are undertaken to improve general government finances (in the medium or longer term). Supranational rules: Euro area.
Germany	International Treaty; Constitutional.	Expenditure rule (multiyear).	National rules: Balanced budget rule: "Golden rule" which limits net borrowing to the level of investment except in times of a "disturbance of the overall economic equilibrium." A new structural balance rule was enshrined in the constitution in June 2009. After a transition period, starting in 2011, it will take full effect in 2016 for the Federal government and 2020 for the states. The rule calls for a structural deficit of no more than 0.35% of GDP for the Federal government and structurally balanced budgets for the Laender (States). Supranational rule: Euro area.
Greece	International Treaty.	General government (annual).	Euro area
Hungary	International Treaty;	Annual.	National: balanced budget rule. Primary budget surplus balance target. Balanced budget rule, Debt rule: In November 2008, Hungary adopted a primary budget balance rule and a real debt rule. which will take effect in 2012. Transition rules call for a reduction of the budget deficit (in percent of GDP) and limit real expenditure growth in 2010 and 2011.

Country	Statutory Base	Time Frame	Other Features of Rules
			Supranational: EU.
Iceland	Political commitment.	Expenditure rule (multiyear).	De facto fiscal rule comprising three-year spending targets and countercyclical adjustments to public investment.
Ireland	International Treaty.	Annual.	Euro area
Italy	International Treaty.	Annual.	Euro area.
Japan	Statutory.	Multiyear expenditure Ceiling.	There has been a golden rule under which current expenditure shall not exceed domestic revenues (Public Finance Law, Article 4). Since 1975, except the period of 1990-1993, the government has requested a waiver of this rule every year.
Latvia	International Treaty.	Annual.	EU
Lithuania	International Treaty, Statutory.	Annual.	National rules: Expenditure rule: If the general government budgets recorded a deficit on average over the past 5 years, the annual growth of the budget appropriations may not exceed 0.5 % of the average growth rate of the budget revenue of those 5 years. Revenue rule: The deficit of the budget shall be reduced by excess revenue of the current year. Debt rule: Limits set on central government net borrowing. Supranational rules: EU.
Luxembourg	Political Commitment, International Treaty.	CG Multiyear expenditure ceiling.	National rules: Expenditure rule: In the course of the legislative period, public expenditure growth is maintained at a rate compatible with the medium-term economic growth prospects (quantified). Independent body sets budget assumptions. Some rules exclude public investment or other priority items from ceiling. Major changes to Debt rule in 2004. Supranational rules: Euro area
Netherlands	International Treaty; Coalition Agreement.	GG Multiyear Expenditure Ceiling.	National rule: Expenditure rule: Real expenditure ceilings are fixed for total and sectoral expenditure for each year of government's four-year office term. Expenditure includes interest payments. If overruns are forecast, the Minister of Finance proposes corrective action. Revenue rule: At the beginning of the electoral period, the coalition agrees on the desired development of the tax base, and this multi-year path needs to be adhered to during the period. Additional tax increases are compensated through tax relief and vice

Country	Statutory Base	Time Frame	Other Features of Rules
			<p>versa. Independent body sets budget assumptions. Some rules exclude public investment or other priority items from the ceiling.</p> <p>Supranational rule: Euro area.</p>
Norway	Political commitment.	Cyclical adjustment or Multiyear.	<p>Non-oil structural deficit of the central government should equal the long-run real return of the Government Pension Fund - Global (GPF) assumed to be 4 percent. The fiscal guidelines, which also govern the GPF, allow temporary deviations from the rule over the business cycle and in the event of extraordinary changes in the value of the GPF.</p>
Poland	International Treaty; Constitutional.	Annual.	<p>National rules: Debt rule: Debt ceiling of 60% of GDP. The Public Finance Act includes triggers for corrective actions when the debt ratio reaches thresholds of 50, 55, and 60 % of GDP. Rules exclude public investment or other priority items from ceiling at subnational levels.</p> <p>Supranational rules: EU.</p>
Portugal	International Treaty; Statutory.	Annual.	<p>National rules: Balanced budget rule for Central government. Rules exclude public investment or other priority items from ceiling at subnational levels.</p> <p>Supranational rules: Euro area.</p>
Romania	International Treaty.	Annual.	Supranational rules: EU.
Slovak Republic	International Treaty.	Annual.	EU.
Slovenia	International Treaty; Statutory.	Annual.	<p>National rules: Balanced budget rule for the pension fund.</p> <p>Supranational rules: Euro area</p>
Spain	International Treaty; Statutory.	Cyclical adjustment or Multiyear.	<p>National rules: In "normal" economic conditions, General government and its sub-sectors must show a balanced budget or a surplus. In downturns, the overall deficit must not exceed 1% of GDP. In addition, a deficit of up to 0.5% of GDP is allowed to finance public investment under certain conditions.</p> <p>Spain also has a FRL to support its rules. The "exceptional circumstances" and "special conditions" clauses have been activated during the current downturn and the provision to presenting plans to correct within 3 years have been put on hold without a specific time frame.</p> <p>Supranational rules: Euro area.</p>

Country	Statutory Base	Time Frame	Other Features of Rules
Sweden	International Treaty; Political Commitment.	Multiyear for expenditure rule; target Government saving over the cycles.	National rules: Balanced budget rule: A surplus of 2% of GDP for the general government over the cycle targeted. Expenditure rule: Nominal expenditure ceiling for central government and extra-budgetary old-age pension system targeted. Some rules exclude public investment or other priority items from the ceiling. Supranational rules: EU
Switzerland	Constitutional	Cyclical adjustment or Multiyear.	Structural balance rule: One-year-ahead ex ante ceiling on central government expenditures equal to predicted revenues, adjusted by a factor reflecting the cyclical position of the economy. Any deviations of actual spending from the ex post spending ceiling, independent of their cause, are accumulated in a notional compensation account. If the negative balance in that account exceeds 6 percent of expenditures (about 0.6% of GDP) the authorities are required by law to take measures sufficient to reduce the balance below this level within three years
United Kingdom	International Treaty; Political Commitment.	Cyclical adjustment or Multiyear.	National rules: Balanced budget rule: Golden rule: General government borrowing only allowed for investment, not to fund current spending. Performance against the rule is measured by the average surplus on the current budget in percent of GDP over the economic cycle. Debt rule: Sustainable investment rule: public sector net debt as a proportion of GDP should be held at a stable and prudent level over the economic cycle. Other things equal, net debt will be maintained below 40% of GDP over the economic cycle. There is a Fiscal Responsibility Law (FRL) to support these rules. Rules exclude public investment or other priority items from ceiling. Government will depart “temporarily” from the fiscal rules “until the global shocks have worked their way through the economy in full.” Authorities have adopted a temporary operating rule: “to set policies to improve the cyclically adjusted current budget each year, once the economy emerges from the downturn, so it reaches balance and debt is falling as a proportion of GDP once the global shocks have worked their way through the economy in full. Supranational rule: EU

Source: *Fiscal Rules – Anchoring Expectations for Sustainable Public Finances*, International Monetary Fund, December 16, 2009.

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