DIMINISHING QUALITY OF FISCAL INSTITUTIONS IN THE UNITED STATES AND EUROPEAN UNION

Thomas Grennes

The value of government debt relative to the size of the economy has become a serious problem, and the problem is likely to grow in the future. Total debt of the U.S. government relative to gross domestic product increased substantially since the financial crisis and the Great Recession that began in 2007, but the debt ratio has been increasing since 2001. Gross debt relative to GDP increased from 55 percent in 2001 to 67 percent in 2007 to 107 percent in 2012 Comparable figures for debt held by the public (net debt or gross debt minus debt held by various government agencies) were 80 percent in 2011 and 84 percent in May 2012 (IMF 2012). As a result, the debt ratio is now the highest in U.S. history, except for World War II, when it reached 125 percent of GDP (Bohn 2010). U.S. debt is also high relative to the debt of other high-income countries, and projections of future debt place the U.S. government among the world's largest debtors (IMF 2011, 2012; Evans et al. 2012). Gross debt consists of all the bonds issued by the U.S. Treasury, but a broader measure that includes contingent debt results in a much larger debt (Cochrane 2011). Contingent debt includes unfunded obligations related to Social Security, Medicare, Medicaid, and loan guarantees to agencies such as Fannie Mae and Freddie Mac, and

Cato Journal, Vol. 33, No. 1 (Winter 2013). Copyright © Cato Institute. All rights reserved.

Thomas Grennes is Professor of Economics and Professor of Agricultural and Resource Economics at North Carolina State University. His blog (with Andris Strazds), "Thoughts from across the Atlantic," appears at www.EconoMonitor.com.

these obligations are so large that they have been described as a "debt explosion" (Evans et al. 2012). The sovereign debt crisis of the European Union has similarities to the U.S. debt problem, but it also has significant differences, as will be shown below. Interestingly, the poorer countries of the world that have frequently experienced debt problems in the past, have avoided major debt problems so far.

There is increasing recognition of the severity of the current and future U.S. debt problem, but the authorities responsible for fiscal policy have steadfastly refused to commit to reform. Various experts on sovereign debt have expressed the opinion that current U.S. debt is excessive, and that it is not on a sustainable path for the future. In an unprecedented act, Standard and Poor's downgraded U.S. government bonds in 2011, and fiscal authorities at the International Monetary Fund have repeatedly criticized the United States for excessive debt (Financial Times 2011, IMF 2011). The Simpson-Bowles Commission, appointed by President Obama, recognized the large U.S. debt to be a fundamental problem, and they offered detailed proposals that would first stabilize the debt ratio and eventually reduce it toward its historical level. Federal Reserve Chairman Ben Bernanke, in discussions of the interdependence of fiscal and monetary policy, has frequently advocated reform that would effectively limit federal debt. This article focuses on the adverse effect of government debt on economic growth when debt relative to the size of the economy exceeds a threshold. The possibility of default on government bonds is a more extreme problem that has been discussed elsewhere (Bi and Traum 2012). Other possible adverse effects of excessive debt include reducing the effectiveness of foreign policy (Zoellick 2012).

Adverse Impact of Excessive Government Debt on Economic Growth

Not all government borrowing is harmful, but there is increasing evidence that excessive government debt can decrease the rate of economic growth. Reinhart and Rogoff (2010) have assembled and analyzed extensive data across countries and over long periods that demonstrate the negative economic effects of excessive debt. They find that economic growth diminishes when government debt exceeds 90 percent of GDP. Several econometric studies (Caner et al. 2010, Kumar and Woo 2010, Cecchetti et al. 2011b, Checherita

and Rother 2012, Furceri and Zdzienicka 2012, Baum et al. 2012, Greenridge et al. 2012) have estimated threshold levels for debt in the range of 70–90 percent of GDP. Beginning at debt levels below the threshold, small increases in debt have no negative effects on the rate of growth, but when debt ratios exceed the threshold and remain above it, the economy suffers from a lower growth rate. Furthermore, the reduction in the growth rate increases the farther a country is above the threshold. To isolate the effect of debt on growth, studies have controlled for other variables affecting growth, such as openness, investment, and the level of government spending (Gwartney et al. 1998). The studies have used samples from different countries and time periods and different estimation techniques, but a common result is that debt in excess of a threshold is harmful to economic growth.

An alternative approach to estimating sustainable levels of debt employs the concept of fiscal space (Ghosh et al. 2011a, 2011b). Estimates of fiscal space for a sample of 23 high income countries vary by country, but when debt ratios reach the neighborhood of 100 percent of GDP, it becomes increasingly difficult to generate primary budget surpluses to keep pace with higher interest payments on rising debt. In addition to the negative effect of excessive debt on long-term growth, there is also evidence that increased uncertainty about future fiscal policy (fiscal volatility) has an adverse effect on short-run output and employment (Baker et al. 2011, Fernandez-Villaverde et al. 2012, Taylor 2011a). A growing body of evidence using data from many countries indicates that excessive government debt can be harmful to growth.

If empirical evidence demonstrates that excessive debt reduces growth, what are the channels through which debt affects growth? Government debt could crowd out private investment by increasing interest rates. However, excessive government debt may also reduce growth without raising interest rates. In their study of debt overhang episodes over the last two centuries, Reinhart et al. (2012) found that in most cases real interest rates on government bonds were above their long-run average, but in nearly 40 percent of the episodes, real interest rates on government debt were below average. When debt is above a threshold level, interest payments on servicing the large debt may crowd out productive government investments that would otherwise contribute to growth. According to Evans et al. (2012), the underfunding of Social Security has reduced saving in the United

States. The possibility of default on government bonds is a more extreme negative effect of excessive debt (Bi and Traum 2012) that Greece and other Eurozone countries have already experienced.

What Has Led to Excessive U.S. Debt?

Since the United States became an independent country, the interaction between Congress and presidents has produced spending and tax policies that limited the size of debt relative to the size of the economy. For more than two centuries of U.S. economic history prior to 2001, the ratio of federal government debt to GDP has fluctuated without a trend (Bohn 2005). Debt increased during wartime and diminished during peacetime. The debt also fluctuated with business cycles, expanding during recessions and decreasing during booms. There was a presumption that higher than average debt during wars and recessions would be offset by lower than average debt during peacetime and business expansions. Fiscal institutions of the government provided an implicit "fiscal anchor" that limited sovereign debt and influenced private investors for most of U.S. history. The fiscal anchor operated through the political process and did not include an explicit legislative limit, except for a congressional limit on the nominal debt that was increased so frequently that it was hardly binding. Econometric evidence supports the hypothesis that fiscal authorities responded to excessive debt by increasing primary (net of interest payments) budget surpluses (Bohn 2010, Ghosh et al. 2011b). The recent decline in discipline on spending, taxation, and borrowing represents a decline in the quality of fiscal institutions in the United States, and it threatens to undermine economic growth.

In a given year, changes in government debt relative to GDP depend on the primary budget deficit (excluding interest payments), the real interest rate paid on outstanding government debt, and the growth rate of real GDP (Ghosh et al. 2011b). A combination of bigger budget deficits and slower economic growth has contributed to increases in the debt ratio since 2001. However, extraordinarily low interest rates on government bonds have kept the debt ratio lower than it would otherwise be. The recent departure from traditional debt policy follows three shocks to the U.S. economy since 2001: (1) increases in spending to counter perceived terrorist threats, (2) the Great Recession/financial crisis, and (3) demographic changes that increase government spending related to retirement and health.

Following the terrorist attack of September 11, 2001, on New York and Washington, there was an increase in spending on national security, including wars in Afghanistan and Iraq that persisted for more than 10 years. Instead of raising taxes to pay for the additional spending, taxes were lowered. Washington's response to the financial crisis and the Great Recession contributed to acceleration in the growth of debt in 2007. Also the aging of the U.S. population has increased current and expected future government spending on pensions and agerelated medical expenses. The fact that the aging of Baby Boomers would have fiscal consequences has been known for many years, but the fiscal authorities have refused to prepare for them. The response to these shocks by Congress and presidents has contributed to increasing the debt to excessive levels. Recent levels of indebtedness represent a significant departure from the fiscal discipline that prevailed for more than two centuries.

Research on the history of economic growth has demonstrated the significance of economic institutions (Acemoglu and Robinson 2012). In the United States, fiscal institutions include the interactions among Congress, the executive branch, state governments, and private lobbyists. From the time of the Revolutionary War, the new federal government established an outstanding reputation for creditworthiness (Sargent 2012). The federal government accepted the responsibility to pay the inherited Revolutionary War debt of the states, but when states faced a crisis in the 1830s related to newly issued debt, the federal government refused requests to bail out the states. As a result of the de facto, no bailout policy by the federal government, states imposed their own fiscal discipline in the form of balanced budget amendments to state constitutions. Freed from its obligation for state debt, the federal government effectively limited its long-term debt ratio for over two centuries. However, in the last decade, the traditional implicit limit on the debt ratio has been abandoned by the federal fiscal authorities. A long-run fiscal anchor has been removed, and the resulting debt increase threatens to reduce the growth rate of the U.S. economy. Eric Leeper (2010) has described the recent chaotic fiscal policy as "fiscal alchemy." The public has an extremely low opinion of Congress, and disagreement within Congress about possible reform has resulted in an impasse. Congressional gridlock has prevented fiscal reform, and it has created greater uncertainty about future fiscal policy. Fiscal uncertainty in 2011 was substantially greater than it was in 2006 according to an

index calculated by Baker et al. (2011), and greater uncertainty exacerbates the time inconsistency problem associated with multi-year fiscal or monetary policy (Nason and Plosser 2012).

Declining Quality of U.S. Fiscal Institutions

Prudential fiscal policy has contributed to the long-run growth of the U.S. economy. For over 200 years the U.S. government has avoided defaulting on its debt and U.S. government bonds have been considered the prototypical riskless asset. Debt ratios increased temporarily during wars and recessions, but subsequent primary budget deficits were reduced and economic growth was responsible for reducing debt ratios. However, in the last decade the quality of U.S. fiscal institutions has diminished. The Congress and presidents responded to shocks by increasing spending and reducing taxes. The resulting budget deficits resulted in extraordinary levels of borrowing, but policymakers acted as if they were no longer subject to the traditional implicit limit on the debt ratio. Instead of acknowledging and acting on the rising long-term debt problem, recent fiscal policy has had an exclusive short-term orientation. However, short-run stabilization policy has also deteriorated in quality. Traditionally U.S. fiscal policy had been countercyclical, in the sense of reducing aggregate demand during business expansions and increasing demand during recessions. However the economic effects of fiscal policy have been reversed, and recently fiscal actions have magnified business cycles (Frankel 2012).

Recent fiscal action and inaction have contributed to greater uncertainty in the economy. Frequently crucial taxation and spending decisions have been deferred until expiration of a temporary tax or spending authorization brings on a crisis. When extensions of authorization for spending and taxation have been approved, they have been extended for shorter periods, often months instead of years. As a result, crucial tax and spending authorizations expire more frequently than in the past. The percentage of tax provisions that expired in 2010 was 10 times the percentage that expired in 1999 (Taylor 2011a), and the result is a more volatile fiscal policy (Baker et al. 2011). Since Congress has been unwilling to make credible multiyear commitments about

budget policy, future debt is very uncertain and many possible debt paths are plausible. As a result of delaying crucial fiscal decisions, Congress created the "fiscal cliff" problem. Uncertainty about how the government will resolve the problem contributes to the volatility of fiscal policy that private investors face. The fiscal cliff is a problem, but it can also be interpreted as an opportunity to carry out fundamental fiscal reform.

Most presidents and members of Congress admit that a debt problem exists and that it must be faced and acted on sometime in the future. However, promises to reduce the debt in the future have regularly been broken. This is the "time-inconsistency problem" (Nason and Plosser 2012), and reneging on earlier fiscal promises has reduced the credibility of Congress and presidents. In recognition of the debt problem and congressional inaction, President Obama appointed the Simpson-Bowles Commission in 2011 to study longterm debt issues. The Commission recommended committing to a specific 10-year fiscal reform policy that combined lower spending and higher tax revenue that would eventually stabilize the debt/GDP ratio. However, in his proposed budget, President Obama ignored the bold recommendations of the Commission. After Congress could not agree on a budget, a supercommittee they appointed was also unable to agree on a budget. The result is an increase in the current budget deficit and an automatic decrease in spending and increase in taxes in January 2013 (the fiscal cliff problem). Concern about the high unemployment rate and slow recovery from the Great Recession has resulted in short-term fiscal issues dominating longterm debt issues. There is no longer an effective anchor on debt relative to GDP.

The existence of excessive debt also reduces the effectiveness of fiscal policy in dimensions other than growth and stabilization. It reduces the flexibility of the government to react to emergencies, such as economic crises, natural disasters, or security threats. (Macguineas 2011). The literature on fiscal space deals with quantifying fiscal capability and limits on debt (Ghosh et al. 2011b). Excessive debt makes it more difficult for the federal government to deal with state and local governments. There are numerous jointly funded programs, such as Medicaid, and when the federal government has fiscal problems, it attempts to shift more of the costs onto state governments. Similarly state and local governments with large

unfunded pension liabilities and other debts have sought fiscal assistance from the federal government (Novy-Marx and Rauh 2012). Issues of fiscal federalism remain important in the United States, but they have become more contentious in the eurozone once countries abandoned the "no bailout" principle.

Proposal for Fiscal Reform: Move the Debt Ratio Back to a Sustainable Range

The process of formulating and implementing fiscal policy is so out of control that critics have characterized it as "government failure," "alchemy," and a "Ponzi scheme" (Leeper 2010, Evans et al. 2012). The most fundamental reform would be to restore a kind of anchor for debt that would limit total government debt relative to GDP. To allow flexibility to deal with emergencies, it would be advisable to express that limit as an average over five years, to approximate a business cycle. For example, during recessions the debt ratio would be allowed to exceed the target ratio temporarily as long as the debt ratio is below the target ratio in other years. An effective target debt ratio would restore a fiscal anchor, and it would contribute to more informed investment decisions by the private sector by reducing uncertainty about future taxes and government spending. There is room for some disagreement about the exact debt limit, but a strong case can be made for setting it near the range of 70–90 percent. This is in the neighborhood of estimated debt thresholds, and it is consistent with the long-term average debt ratio for the United States. In 2011 the U.S. debt ratio was 103 percent and in May 2012 it reached 107 percent (Ceccetti et al. 2011a, IMF 2012). A debt target rule would have to express how fast an excessive debt ratio would have to be moved to the debt limit. Since the actual debt ratio is currently far above the likely target and the current unemployment rate is high, the adjustment process could be gradual. A first step toward fiscal reform would be to adopt a credible multiyear budget that would stabilize the debt ratio in the future (see, for example, Peterson-Pew Trust 2011, Committee for a Responsible Federal Budget 2012). Agreement on fiscal consolidation is no simple task, since Congress has found it difficult to agree on any fiscal matters of substance. Furthermore, even if the Congress agreed on a multiyear budget, a skeptical public need not interpret the commitment as credible. Whatever Congress does today, it can undo

tomorrow, and the credibility of that institution is at its lowest point in history.

The size of the government and the size of the debt ratio are separable issues. Adopting a target for the government debt ratio does not necessarily restrict the size of government. A target debt ratio limits the size of future budget deficits, but it does not restrict total government spending. For example, a budget deficit of 10 percent of GDP could occur with government spending of 60 percent of GDP and tax revenue 50 percent of GDP. An equivalent budget deficit of 10 percent could occur with a smaller government with spending 20 percent of GDP and tax revenue of 10 percent. Defenders of both large and small government could agree on the need for a debt limit, even if they disagree on whether a binding debt limit should be reached primarily by lower spending or by higher tax revenue. The question of whether to have a debt limit that acts as a fiscal anchor is separable from the issue of how large total spending or taxation should be. The case for a debt limit need not be a partisan issue. There exist many specific proposals with different combinations of lower spending and larger revenue for a given value of debt. Whether deficit reduction of a given size should be accomplished by 70 percent reduction in spending and 30 percent increase in revenue (Simpson-Bowles) or any other combination is inherently partisan. Alesina et al. (2012) present empirical evidence that fiscal consolidations have been more successful when they emphasized spending reduction rather than tax

If Congress would broaden the tax base by closing tax loopholes, it could achieve both higher tax revenue and lower tax rates. Of course, decisions about which specific spending programs to reduce and which taxes should be adjusted to raise more revenue are even more partisan. Also, committing to a multiyear plan to limit debt need not imply extreme austerity in the present (Reinhart et al. 2012). A 10-year plan for fiscal consolidation could concentrate much of the austerity in the future, although the credibility of such a backloaded plan would not be easy to establish. Reform of entitlements would facilitate achieving credibility (Corsetti 2012).

A limit on the debt ratio is more flexible than a balanced budget rule. A debt ratio limit would not restrict current budget deficits if the debt is below the threshold. A balanced budget rule is more restrictive than a debt ratio because it would prohibit budget deficits

even at arbitrarily low levels of debt. Annual balanced budgets have some political support in the United States and Europe, but a common academic criticism is that an annually balanced budget would not allow automatic fiscal stabilizers over the business cycle. It would magnify recessions by requiring tax increases or spending cuts in response to decreases in aggregate demand. A balanced budget has support among current Republican senators, and it was nearly passed by the Congress in 1997. There is also support for various types of balanced budget rules in eurozone countries in response to the EMU debt crisis. A debt limit averaged over five years might get support from people who favor the discipline of balanced budgets but consider an annually balanced budget too rigid. The congressional debt limit expressed in dollars ignores inflation and the growing size of the economy, and it has been increased so often that it has not functioned as a long-term constraint on debt.

A debt limit, a balanced budget rule, a limit on government spending (Taylor 2012), and all other fiscal rules have some common weaknesses. They would encourage creative accounting that would place certain types of spending off the budget. An example is government investment spending that is sometimes placed in a separate capital budget. Whether a particular type of government spending is investment or consumption is disputable, and one might expect many disputes about debt rules to be taken to court. The dominant practical issue is that all rules face enforcement problems, and the EMU rules limiting budget deficits to no more than 3 percent of GDP and government debt to no more than 60 percent of GDP are prominent examples of rules that have not been enforced. At the same time Germany and France are pointing accusing fingers at Greece for excessive debt, the governments of the accusers are also violating the debt ratios. Without enforcement, the rules lack credibility.

The problems of implementing and enforcing fiscal rules have led Alesina and Perotti (1999) and others to reject quantitative fiscal rules in favor of greater transparency as the best way to improve fiscal policy. In making the case for monetary reform, Nason and Plosser (2012) advocate rules with some flexibility that would mitigate the time-inconsistency problem facing elected officials. Governments could be subjected to the same accounting and reporting standards as the private sector. The state of New Jersey was recently sanctioned for understating its underfunded pension liabilities to investors (Novy-Marx and Rauh 2012).

Candidates could be expected to present 10-year budgets in sufficient detail so they could be scored by the Congressional Budget Office (Marcus 2011). Congress has resorted to accounting gimmicks to make the apparent projected debt look smaller than it is likely to be. One example is passing tax cuts that expire in one year, and extending them at the end of the year. This requires the CBO to use one year of low taxes and nine years of higher taxes in their 10-year projections, which biases debt projections downward if tax cuts are extended. Many other procedural reforms have been offered that would enhance fiscal transparency (Macguineas 2011). Sweden and other European countries have had some success in restraining fiscal policy by the use of fiscal councils (Calmfors and Wren-Lewis 2011).

Is the U.S. Debt Problem Different from That of Other Countries?

The Great Recession and financial crisis increased the debt of nearly all high-income countries. To what extent is the debt problem in the United States different from that in other rich countries? The U.S. debt problem is more severe because projections show the U.S. gross debt ratio increasing from 94 percent in 2010 to 115 percent in 2016, whereas the debt of most Europeans countries, including Greece and Italy, is projected to decrease by 2016 (IMF 2011). U. S. fiscal authorities have refused to commit to multiyear reform. All the rich countries face increases in age-related government expenditures, and when they are included the required adjustment in the U.S. primary budget is bigger than the adjustment for all high income countries except Greece (IMF 2011). Evans et al. (2012) estimated that the excess of the net present value of spending over taxes for the United States is greater than for any other developed country. Analysis by the Congressional Budget Office on structural deficits also shows a bigger fiscal problem than for Europe (Dolan 2012).

Europe's debt problem is also different because the EMU members have a common currency without a common fiscal policy. Debt ratios and budget deficits vary substantially across EMU countries despite restrictions contained in the Maastricht Treaty. Bonds issued by EMU members are all denominated in euros, but a series of untidy bailouts has made the extent to which individual members are responsible for the debts of other members increasingly unclear. A euro-denominated bond for which all members

would be responsible has been proposed, but it is opposed by Germany and countries with higher credit ratings. Interest rate spreads and bond ratings vary across EMU countries, and Spain and Greece have paid interest rate premiums as much as 6 percentage points over Germany. Europe has committed to more government deleveraging, but the United States has experienced more private deleveraging, especially in housing (Ceccetti et al. 2011b). The United States has a fiscal union among the states, and a clearer relationship between the federal government and state governments.

Extreme procrastination has caused U.S. policymakers to lose credibility for their long-run fiscal policy. Eurozone policymakers have also lost credibility for the promises they have made relative to fiscal policy when the euro was introduced in 1999. The Maastricht Treaty stated that no member would be responsible for the debts of other members, which made it resemble the no-bailout relationship between the U.S. federal government and the states. It also restricted the size of budget deficits and sovereign debt relative to GDP, although those provisions were not important in absence of bailouts. Why should Germans care about the size of Greek debt, as long as only Greeks were responsible for it? The new European Central Bank was assigned an anti-inflation goal that was intended to protect it from pressure to monetize fiscal deficits of member countries. However, in response to the eurozone sovereign debt crisis, all the initial rules have been violated. The no-bailout provision has been violated, and de facto collective liability for debts of members continues to increase. Most members have exceeded the budget deficit and debt limits with impunity. The ECB has purchased bonds of troubled debtor countries, and it is under pressure from member governments and outsiders to subordinate its inflation target to the credit needs of debtor countries. The ECB had earned credibility for its inflation target by successfully keeping the eurozone inflation rate very close to the target of 2 percent since 1999. However, if the ECB subordinates the inflation target to bailing out members, all fiscal and monetary institutions in the eurozone will have lost their credibility. Thus, achieving credibility for future macro policies will be difficult to achieve in both the United States and the eurozone.

Fiscal reform is difficult to achieve, but some countries have successfully implemented major reforms in the past. Sweden is a prominent example of earlier successful reform that followed a banking crisis. After experiencing large and persistent budget deficits in the early 1990s, Sweden adopted a goal of a small budget surplus over the business cycle, and it has been successful in achieving that goal in the last decade. When the recession arrived in 2007, Sweden had a budget surplus of 3.6 percent, which contributed to a less severe recession and a faster recovery. Their reform has been assisted by a Fiscal Council of advisors outside the government (Calmfors and Wren-Lewis 2011). Other examples of successful reform are OECD countries that once lost their S&P AAA bond ratings but regained them after significant fiscal reform (Klein 2011). Canada lost its AAA rating in 1993 but regained it in 2002. Sweden lost its AAA rating in 1993 but regained it in 2004. Moderate fiscal reform was achieved in the United States when it reduced the debt ratio from 72 percent in 1993 to 55 percent in 2001, and it achieved a budget surplus as late as 2001.

How Can Debt Be Excessive If Interest Rates on Government Bonds Are So Low?

Nominal interest rates on U.S. government bonds have been extremely low in spite of extraordinarily high debt. Short-term rates targeted by the Fed have been close to zero, and 10-year bond rates were below 2 percent in October 2012. These rates are very low relative to U.S. average historical rates, and they have been among the lowest in the world for comparable sovereign debt. If U.S. government debt is already excessive and projected to get larger, why do bondholders not insist on a risk premium in terms of a higher money interest rate (IMF 2011)? Where are the "bond vigilantes" that refuse to hold Greek or Italian bonds without receiving a risk premium? Risk is relative, and the riskiness of one asset must be compared with the riskiness of a competing asset. Consequently, risks are often expressed as an interest rate spread relative to a comparable bond. If all bonds have become riskier, U.S. government bonds may still be the relatively safest haven for bond investors. During crises, when investors seek safer havens, rates on 10-year U.S. bonds have fallen well below 2 percent. Among the safer governments with competing bonds, Switzerland and Norway are too small to satisfy large investors, and Germany has taken on large implicit liabilities related to bailouts of Greece other EMU partners.

Interest rates on U.S. government bonds have also been kept low by the Fed and other agencies as part of financial repression.

(Reinhart and Sbrancia 2011, Warsh 2011). In September 2012, Ben Bernanke announced a third round of quantitative easing (QE3) that included keeping short-term interest rates near zero until at least 2015. With short-term interest rates near zero and 2 percent annual inflation, real interest rates have been negative for many U.S. government bonds, and negative real rates on government bonds have occurred for many countries and time periods under financial repression (Reinhart et al. 2012). Governments can keep interest on their bonds artificially low through various directed lending programs. Recently an unusually high percentage of bonds issued by the Treasury were purchased by the Fed, and the income or seigniorage of the Fed was unusually high in 2011. The result, whether intended or not, is a reduction in the debt burden of the government. However, the appearance that private bondholders are not concerned about the government's debt ratio is misleading. If interest rates rise to their historical average levels, the debt ratio will increase substantially.

Reinhart and Sbrancia (2011) have shown how debt/GDP ratios have been decreased during extensive periods of negative real rates on government debt. They point out that the widespread system of financial repression that prevailed for several decades (1945–80) worldwide played an instrumental role in reducing or "liquidating" the massive stocks of debt accumulated during World War II in many of the advanced countries, including the United States. Monetary policy that keeps interest rates low relative to inflation is one way to reduce debt ratios. When the Fed fixes the interest rate on government debt, monetary policy becomes subordinate to fiscal policy, as it was prior to the famous Fed-Treasury Accord of 1951. Financial repression will contribute to debt liquidation, even if the intent of the Fed is to use low interest rates to deal with high unemployment (Warsh 2011). By committing to buy large quantities of government debt, the Fed risks losing control over the inflation rate. The history of financial repression indicates that low interest rates on government debt can be misleading about the public's willingness to hold debt.

Low nominal interest rates on German government bonds have also reflected the "flight to safety" seen for U.S. government bonds. Interest rate spreads for eurozone countries relative to Germany have changed dramatically to reflect changes in perceived default risk. For example, on July 23, 2012, 10-year

government bonds denominated in euros paid interest rates of 7.5 percent for Spanish government bonds, but only 1.25 percent for comparable German bonds. Even though Germany's debt relative to GDP was high relative to its historical value, it was judged to be a relatively safe borrower within the eurozone. Its relative safety allowed Germany to borrow at negative real interest rates. Conversely, countries like Spain and Greece that paid higher interest rates than their growth rates experienced an increase in their debt relative to GDP and a decrease in their ability to repay debt.

Conclusion

The quality of fiscal institutions and fiscal policy in the United States has declined in the last decade. The government debt ratio is now extraordinarily high relative to its historical mean, and it has risen to a point where it is no longer sustainable. By exceeding estimated debt/growth thresholds, the debt ratio threatens to reduce the rate of economic growth. The implicit limit on the debt ratio that Congress and presidents followed in the past, no longer serves as an anchor. Failure to address the long-run debt issue has led to a diminution of credibility that fiscal institutions had built up over a period of more than 200 years. Attempting to stabilize the debt ratio by adopting a debt target relative to the size of the economy has merit, but it will be difficult to achieve credibility after such a long period of delaying fiscal reform. Short-run fiscal policy that had been countercyclical has deteriorated to where it is now pro-cyclical. Procrastination about crucial spending, taxation, and debt issues has also increased uncertainty faced by private investors.

The European Union also faces a fundamental fiscal problem, but its origin is different. The United States has recently deviated from a fiscal policy that had been successful for a long period. The current European fiscal problem is related to violating more recent rules. The adoption of the euro in 1999 was accompanied by some rules that seemed clear at the time. Members accepted limits on budget deficits and debt, but they were not obliged to bail out member countries. At its inception, the new European Central Bank was given a clear inflation target that protected it from pressure to buy bonds that would finance fiscal deficits. Now as a result of the European sovereign debt crisis, the meaning of membership in the

eurozone has changed completely. Nearly all the old rules have been violated, and they have been replaced by ad hoc responses to a series of debt crises. Fundamental reform of fiscal relationships is essential for the eurozone, but whatever form new fiscal rules take, failure to enforce old rules will make it difficult to achieve credibility for new ones.

References

- Acemoglu, D., and Robinson, J. (2012) Why Do Nations Fail? New York: Crown Business.
- Alesina, A.; Favero, C.; and Giavazzi, F. (2012) "The Output Effect of Fiscal Consolidations." Harvard University, Department of Economics, Working Paper (August).
- Alesina, A., and Perotti, R. (1999) "Budget Deficits and Budget Institutions." In J. Poterba and J. von Hagen (eds.) Fiscal Institutions and Fiscal Performance. Chicago: University of Chicago Press.
- Baum, A.; Checherita-Westphal, C.; and Rother, P. (2012) "Debt and Growth: New Evidence for the Euro Area." European Central Bank, Working Paper No. 1450 (July).
- Baker, S.; Bloom, N.; and Davis, S. (2011) "Measuring Economic Policy Uncertainty." Stanford University, Department of Economics, Working Paper (October).
- Bernanke, B. (2011) "Fiscal Sustainability." Presentation to Annual Conference of the Committee for a Responsible Federal Budget, Washington (14 June).
- Bi, H., and Traum, N. (2012) "Estimating Sovereign Default Risk." *American Economic Review* 102 (3): 161–66.
- Bohn, H. (2005) "The Sustainability of Fiscal Policy in the U.S." University of California, Santa Barbara, Department of Economics, Working Paper.
- ————— (2010) "The Economic Consequences of Rising U.S. Government Debt: Privileges at Risk." University of California, Santa Barbara, Department of Economics, Working Paper (April).
- Caner, M.; Grennes, T.; and Koehler-Geib, F. (2010) "Tipping Point: When Sovereign Debt Turns Bad." In C. P. Braga and G. A. Vincelette (eds.) Sovereign Debt and the Financial Crisis. Washington: World Bank.

- Calmfors, L., and Wren-Lewis, S. (2011) "What Should Fiscal Councils Do?" University of Oxford, Department of Economics Working Paper Series, No. 537 (February).
- Ceccetti, S.; Mohanty, M. S.; and Zampolli. F. (2011a) "The Future of Public Debt: Prospects and Implications." BIS Working Paper No. 300 (March).
- (2011b) "The Real Effects of Public Debt." In *Achieving Maximum Long-Run Growth*. Kansas City, Mo.: Federal Reserve Bank of Kansas City.
- Checherita, C., and Rother, P. (2012) "The Impact of High Government Debt on Economic Growth and Its Channels: An Empirical Investigation for the Euro Area." *European Economic Review* 56 (7): 1392–1405.
- Cochrane, J. H. (2011) "Understanding Policy in the Great Recession: Some Unpleasant Fiscal Arithmetic." European Economic Review 55 (1): 2–30.
- Committee for a Responsible Federal Budget (2012) "Between a Mountain of Debt and a Fiscal Cliff" (29 March).
- Corsetti, G. (2012) "Has Austerity Gone Too Far?" Available at www.voxeu.org.
- Dolan, E. (2012) "By One Indicator, the Structural Primary Balance, Greece Is Doing Better Than the United States." *EconoMonitor* (8 October). Available at www.econoMonitor.
- Evans, R.; Kotlikoff, L.; and Phillips, K. L. (2012) "Shattering the American Dream: The U.S. Government's Ponzi Scheme." Available at www.voxeu.org.
- Fernandez-Villaverde, J.; Guerron-Quintana, P.; Kuester, K.; and Rubio-Ramirez, J. (2012) "Fiscal Volatility Shocks and Economic Activity." NBER Working Paper No. 17317 (January).
- Financial Times (2011) "U.S. Lacks Credibility on Debt Says IMF" (12 April).
- Frankel, J. (2012) "The Procyclicalists: Fiscal Austerity vs. Stimulus." Available at www.voxeu.org.
- Furceri, D., and Zdzienicka, A. (2012) "How Costly Are Debt Crises?" *Journal of International Money and Finance* 31 (2): 726–42.
- Ghosh, A.; Mendoza, E.; and Ostry, J. (2011a) "Fiscal Space in Advanced Countries." Available at www.voxeu.org.
- Ghosh, A. R.; Kim, J. I.; Mendoza, E. G.; Ostry, J. D.; and Qureshi, M. S. (2011b) "Fiscal Fatigue, Fiscal Space and Debt

- Sustainability in Advanced Economies." NBER Working Paper No. 16782.
- Greenridge, K.; Craigwell R.; Thomas, C.; and Drakes, L. (2012) "Threshold Effects of Sovereign Debt: Evidence from the Caribbean." IMF Working Paper WP/12/157 (June).
- Gwartney, J.; Holcombe, R.; and Lawson, R. (1998) "The Scope of Government and the Wealth of Nations." *Cato Journal* 18 (2): 163–90.
- IMF (2011) "The Dog That Didn't Bark So Far: Low Interest Rates in the United States and Japan." *IMF Fiscal Monitor* (September).
- _____ (2012) World Economic Outlook, Database (www.imf.org).
- Klein, E. (2011) "Debt Crises and Fiscal Reform." Washington Post (8 August).
- Kumar, M., and Woo, J. (2010) "Public Debt and Growth." IMF Working Paper WP/10/174 (July).
- Leeper, E. (2010) "Monetary Science, Fiscal Alchemy." Federal Reserve Bank of Kansas City, Jackson Hole Symposium (August).
- Maguineas, M. (2011) "Debt Reduction Done Right." Ripon Forum 45 (4).
- Marcus, R. (2011) "Show Us Your Plans." Washington Post (4 August 4)
- Nason, J., and Plosser, C. (2012) "Time Consistency and Credible Monetary Policy after the Crisis." Federal Reserve Bank of Philadelphia *Business Review* (Second Quarter).
- Novy-Marx, R., and J. Rauh. (2012) "Public Pension Promises: How Big Are They and What Are They Worth?" *Journal of Finance* (forthcoming).
- Peterson-Pew Trust (2011) "Tied to the Mast: Fiscal Rules and their Uses." (13 December).
- Reinhart, C.; Reinhart, V.; and Rogoff, K. (2012) "Debt Overhangs: Past and Present." *Journal of Economic Perspectives* 26 (3): 69–86.
- Reinhart, C., and Rogoff, K. (2010) "Growth in a Time of Debt." *American Economic Review* 100 (2): 573–78.
- Reinhart, C., and Sbrancia, M. B. (2011) "The Liquidation of Government Debt." NBER Working Paper No. 16893 (March).
- Sargent, T. (2012) "Nobel Lecture: United States Then, Europe Now." *Journal of Political Economy* 120 (1): 1–40.

- Taylor, John B. (2011a) "Want Growth? Try Stable Tax Policy." Wall Street Journal (22 December).
 - _____ (2011b) "A Two-Track Plan to Restore Growth." Wall Street Journal (28 January).
- _____ (2012) First Principles: Five Keys to Restoring America's Prosperity. New York: Norton.
- Warsh, K. (2011) "The Financial Repression Trap." Wall Street Journal (6 December).
- Zoellick, R. (2012) "The Currency of Power." Foreign Policy (14 October). Available at www.foreignpolicy.com.