A SYMPOSIUM OF VIEWS

DOES DEBT MATTER?

The global consensus on debt is in disarray. The recent scrutiny of the popularized version of the Rogoff-Reinhart thesis (that growth plummets when debt exceeds 90 percent of GDP) makes clear there are no simple formulas for determining the risks in the level of a nation's debt. Nevertheless, there still seems to be a consensus that high levels of debt can, in many but certainly not all cases, lead to underperforming economies (no financial crisis but a lot of jobless heartache). But there is also a consensus that austerity policies to deal with debt can often be counterproductive, producing their own heartache.

Can a realistic guide be fashioned for determining whether a nation's debt has reached a danger zone? Or are countries from here on expected to pursue fiscal reforms only if and when a crisis sets in? What are the factors—exchange rate regimes, macroeconomic conditions, level of real interest rates, direction and level of capital flows, and so on—that might provide clues as to whether an economy is approaching a point of concern over debt? Or does the level of debt even matter in today's climate of huge excess capacity and historically generous central bank liquidity?

The views of more than twenty experts.

Debt matters a lot—but our approach should not be rigid.

JÖRG ASMUSSEN
Member of the Executive Board, European Central Bank, and former Deputy Finance Minister, Germany

This question has recently gained prominence following the controversy over the Reinhart and Rogoff findings but, in my view, it is a short-sighted debate. The argument in favor of fiscal consolidation to stabilize public debt levels has never been based exclusively on the existence of a "cliff effect" for economic growth when borrowing exceeds 90 percent of GDP. It is based on the long-term consequences of letting public debt rise to unprecedentedly high levels—consequences that are especially serious for countries in the euro area.

First, we have had a clear empirical test in the euro area that, at high and rising debt levels, market reactions become unpredictable. There can be no guarantee that if countries delay fiscal consolidation and allow debt to keep increasing, markets will continue to finance it at affordable rates. We should not forget that in the euro area, markets create a *de facto* "debt ceiling" for member countries, and several are already pressing up against it.

Second, very high debt levels will reduce our ability to fight future crises and to invest in future growth. As we do not have a federal budget in the euro area, national budgets play an essential stabilizing role which will be heavily diminished if debt rises too high today. Moreover, that debt will have to be serviced, which will lead to ever more revenue being diverted from growth-enhancing investment. In Italy, for instance, around €80 billion a year goes on debt service—this is more than 10 percent of the total public expenditure that is not being spent on education or infrastructure.

Third, high debt levels in the euro area have important inter-generational consequences. Under the new EU debt rule, all euro area countries are legally bound to start reducing their public debts below 60 percent of GDP. This means that the more debt rises today, the more it will have to be brought down by the next generation—and average public debt in the euro area already exceeds 90 percent of GDP. On top of this, the next generation will have to deal with the fiscal consequences of aging populations. To give a sense of that challenge, the working age population in Germany is projected to fall by more than 30 percent by 2060 while age-related expenditure will continue to rise. In other words, fewer taxpayers will be carrying an ever greater burden.

In sum, debt clearly does matter in the euro area—and reducing it is essential for long-term growth, stability, and inter-generational fairness. But it is also important to stress that the euro area's approach is not rigid. The Stability and Growth Pact ensures that fiscal consolidation can be both credible and flexible: if a country sticks to its commitments but short-term growth turns out lower than forecast, its fiscal targets can be adjusted.

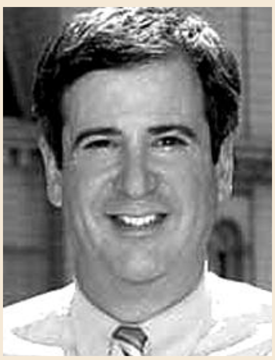
The impact of debt on growth is case-specific and might change rapidly.

JENS WEIDMANN
President, Deutsche Bundesbank

In the wake of the financial crisis and the ensuing recession, public (and private) debt in many advanced economies has soared to unprecedented peacetime levels. The current debate strongly focuses on the effects of fiscal consolidation in the immediate future. Usually, consolidation is expected to have a negative impact on growth in the short run, although the size of the effect is controversial and depends on the instrument and the countries' specific situation. However, there is more consensus on the long-run detrimental effects of high public debt for growth. In more closed economies, high public debt crowds out private investment as interest rates tend to increase. The resulting lower capital stock implies lower labor productivity and wages and has a negative effect on GDP. In more open economies, a comparable mechanism depresses the net foreign asset position and capital income. The pressure on monetary policy increases, potentially resulting in a de-anchoring of inflation expectations. Once debt ratios are regarded as a potential threat to fiscal sustainability, these effects are exacerbated by rising risk premia on interest rates and can have a disruptive impact on growth even in the short run.

Although many empirical studies point to a negative and often non-linear relation between public debt ratios and growth, the precise impact has proven difficult to determine. The negative impact on productivity may be less important (or might even be positive) if the debt is used to finance productive public investment instead of current consumption. The long-term outlook for growth also plays a role, as well as the structure of debt (for example, shares held domestically, currency of denomination, maturity), the implicit liabilities due to aging societies, and many other factors. Moreover, there may be considerable uncertainty about future political developments in a given country and overall risk appetite might change suddenly. Therefore, there is not one unique threshold above which debt ratios become dangerous. Instead, the impact of debt on growth is case-specific and might change rapidly.

Given that the debt ratio is very difficult to influence in the short term, and given the large volatility and uncertainty surrounding the level of debt that can still be regarded as growth-friendly and safe, there is a strong case to be made for erring on the side of caution. We tend to complain about the burden of the existing debt and the failure to control it in the past; we promise to reduce debt in the medium term (at least the next government should do this)—but at the same time we always tend to find good reasons why "not just now." There is a real risk that recognition of the longer-term benefits of sound public finances is "crowded out" by short-term political considerations, thereby making consolidation a moving target.



In the 19th century, Britain's public debt of 250 percent of GDP did not derail the Industrial Revolution.

ROBERT SHAPIRO
Chairman and Chief Executive, Sonecon, and former U.S. Under Secretary of Commerce for Economic Affairs

There is no economic law dictating that government debt will slow growth in a predictable way, or at a predetermined point, because the connections between a nation's public debt and its growth rate are complex and sensitive to many conditions. The basic notion underlying the search for a direct relationship is that a nation's supply of savings is limited. Therefore, savings that go to finance its public debt will limit the private investments that underlie long-term growth. Yet Japan and a few other countries with very high levels of public debt also have very high savings to provide the capital required for both public debt and normal levels of private investment. And while Japan also suffers from substandard growth, its slowdown began in the early 1990s, considerably before its government debt rose so sharply.

In America's case, our deficits and demands for private investment would outstrip our private savings, but the conflict is resolved by attracting foreign savings. The reason, again, lies in our particular economic conditions: Investments produce higher returns here than in most other advanced economies, and for more than twenty-five years, the dollar has held its value better than the currencies of Europe and Japan. Britain provided an even more vivid example through much of the nineteenth century, when public debt as high as 250 percent of GDP did not derail the Industrial Revolution that produced strong growth.

The telling signal that high government debt is impinging on private investment and growth, of course, is rising real interest rates as scarcity of capital drives up its price. The negative real interest rates that have prevailed here for years are strong evidence that a strategy of reducing government debt to spur stronger growth has no sound economic basis. It was the misfortune of Carmen Reinhardt and Kenneth Rogoff that their flawed economic analysis, which never focused on current conditions in the United States, was ultimately hijacked by partisan advocates of smaller government.

The debate over debt and growth suffers from another incoherency. The current case for austerity—as well as the case for stimulus—has been framed by a traditional view of what drives growth in an industrial economy. To go beyond those flawed alternatives, we have to consider what can drive higher growth in a post-industrial economy, beyond the traditional model. Higher growth in such an economy comes not simply or mainly from expanding the purchases and use of physical assets—plant and equipment—and applying excess labor to those assets. Those factors still matter in a post-industrial economy. But in achieving higher growth, they don't matter as much as the development, diffusion, and efficient use of technological and organizational innovations. In fact, more than a half-century ago, Robert Solow won the Nobel Prize for establishing the preeminent role of innovation in driving a modern economy's gains in growth and productivity.

For a variety of reasons, the United States has been of late the world's leading economy in the development, spread, and effective application of new technologies and new ways of organizing and operating a business. Policies intended to restore strong growth, therefore, should begin with the factors and conditions which support those strengths. We could start by focusing on the quantity and quality of our investments in higher education and research and development, both public and private. Policymakers also need to think seriously about other ways to promote the development and application of new ideas. That leads to an agenda quite different from either austerity or stimulus—namely, one that would maintain modest regulatory burdens in most areas, provide more access to financing for new businesses, and sustain strong competition to drive the adoption of innovations. These challenges are more difficult than simply maintaining faith in lower (or higher) government spending. But addressing them could actually lead to higher growth.

High debt-to-GDP ratios create serious problems.

MARTIN FELDSTEIN

Professor of Economics, Harvard University, and President Emeritus, National Bureau for Economic Research

The publicly held debt of the U.S. government rose from 36 percent of GDP five years ago to more than 73 percent now. The Congressional Budget Office forecasts that the relative size of the debt will be higher a decade from now even if the economy is back at full employment and the interest rate on government debt has returned to normal levels. The debt will grow even more rapidly after that, driven by the benefits paid to middle-class seniors in the pension and health programs. The government debt levels of other major industrial countries are even higher now and could rise more rapidly.

Such high ratios of government debt to GDP create five serious problems for any economy. I will focus on the case for the United States, but the effects are similar for other countries.

The most obvious of the adverse effects is that paying interest on a large debt requires higher taxes that hurt incentives and weaken growth.

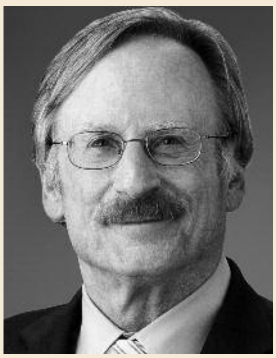
Second, since more than half of the U.S. national debt is now held by foreign investors, paying interest on that debt requires shipping more U.S. product to the rest of the world and receiving less, and that means lowering the prices of our exports and paying more for our imports. That lowers our standard of living by the net shipment of output to the rest of the world and by the higher cost of what we consume.

A third adverse effect of a large debt is that it causes a decline in business investment and therefore in productivity and growth. This usually occurs because a large debt raises interest rates and the cost of investing. While that will happen in the future if our deficits persist, business investment is depressed today by the fear of higher taxes and of economic weakness.

Fourth, a large national debt reduces the government's room for maneuver. The United States may want to increase government spending in the future for any of a variety of reasons, including countercyclical policy and national security. The ability to do so at that time could be constrained by the size of the national debt.

Finally, a large national debt increases our economic vulnerability, particularly to upward shocks in interest rates. It also makes such shocks more likely, as European experience demonstrates, when foreign debt holders lose confidence in the government's ability to control its fiscal deficits or to continue financing its debt in international markets.

The projected fiscal deficit and the ratio of debt to GDP can be reduced without pushing the economy into recession. The key to doing so is a credible commitment to reductions in future outlays and increases in tax revenue. For the United States, reducing future outlays requires changing the rules of Social Security and the federal government health programs. Tax revenue can be raised without increasing marginal tax rates by limiting government spending in the form of the tax subsidies that are in the tax code.



The entitlement cost-driven rise in U.S. debt could slash living standards 20 percent in a generation.

MICHAEL J. BOSKIN

Tully M. Friedman Professor of Economics and Hoover Institution Senior Fellow, Stanford University, and former Chair, President's Council of Economic Advisors

Economists use different methods to study fiscal policy: stylized analytical or macroeconometric models; empirical estimation of spending multipliers; vector autoregressions, and historical studies. Each has its strengths and weaknesses. Many studies from these complementary bodies of evidence conclude that high debt levels are economically dangerous.

Deficits can be benign, or even desirable, in recession, wartime, or to finance productive public investment. But large deficits and debt in normal times at least partly crowd out private investment, and hence reduce future growth. In a deep, long-lived recession, with the central bank at the zero lower bound on interest rates, a well-timed, sensible fiscal response can theoretically be helpful. But the political process often generates responses that are late and/or focused on transfers, inframarginal tax rebates, and spending that fails cost-benefit tests, and hence do little good in the short run but substantial harm later. America's 2008 stimulus barely budged consumption and the 2009 stimulus cost hundreds of thousands of dollars per temporary job, many times median pay.

While spending "multipliers" may be above one at the zero lower bound, and are likely largest for military purchases, they shrink rapidly and may even be negative in economic expansions or when consumers expect higher taxes after the zero lower bound period.

Permanent marginal rate cuts are likely to have a larger effect than temporary, inframarginal rebates. In post-World War II OECD countries, tax cuts were more likely than spending increases to increase growth; successful fiscal consolidations had five or six times the effect as tax hikes, and spending cuts were less likely to cause recessions than tax increases.

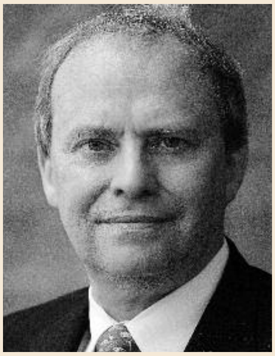
Fiscal consolidation has sometimes been expansionary for high-debt countries. But many countries are consolidating simultaneously, interest rates are already low, the United States is over 20 percent of the global economy, and the dollar is the global reserve currency, so generalizing from other episodes may be unwarranted.

I recently analyzed the long-run implications of the Congressional Budget Office's Alternative Fiscal Scenario, using four alternative estimates of the effects of debt on growth: (1) an International Monetary Fund study which dealt with the reverse causality effect (the economy affects the budget balance); (2) a different, smaller Reinhart and Rogoff estimate (not the larger incorrect one); (3) a related CBO study; and (4) a traditional production function with government debt crowding out tangible capital. The results were quite similar: the entitlement cost-driven rise in debt, if not controlled, will cut future standards of living about 20 percent in a generation.

Corroboration comes from many studies showing that high deficits and debt eventually increase long-run interest rates (for example, the 2013 study "Crunch Time" by Greenlaw, Hamilton, Cooper, and Mishkin). The effect is larger above modest deficit and debt levels and when there is a sizeable current account deficit. The increased interest rates retard private investment, which lowers future wages.

We should adopt policies that benefit the economy in the short run at reasonable long-run cost, but reject policies that are costly in the long run unless they have even larger short-run benefits. That is a much higher hurdle than has been used by politicians in Europe and the United States during the last several years.

In conclusion: (1) high debt ratios eventually damage long-run growth; (2) fiscal consolidation should be phased in gradually as economies recover; (3) longer-run fiscal balance requires slowing the growth of entitlement spending, best started soon; (4) the consolidation needs to be primarily on the spending side of the budget; (5) waiting ten or fifteen years to start dealing with deficits and debt is beyond irresponsible; (6) pro-growth tax reform (also trade liberalization) can helpfully complement consolidation; (7) none of these conclusions has been altered by the correction of the Reinhart and Rogoff mistake.



A modest mistake by Reinhart and Rogoff has led to absurd claims.

ANDERS ÅSLUND
Senior Fellow, Peterson Institute for International Economics

A modest mistake in an econometric paper by Carmen Reinhardt and Kenneth Rogoff has led to absurd claims that responsible fiscal policies are harmful and that the size of public debt does not matter.

Many economists have studied the impact of high public debt on subsequent economic growth and found a growth deceleration. One useful study is an IMF Working Paper from 2010 by Manmohan Kumar and Jaejoon Woo, "Public Debt and Growth." It concludes that, "On average, a 10 percentage point increase in the initial debt-to-GDP ratio is associated with a slowdown of around 0.2 percentage points per year." That sounds about right. In fact, the University of Massachusetts critics of Reinhardt and Rogoff suggest something similar.

The logic is simple. In all but exceptional cases, a large debt burden is likely to reduce growth for many years because of elevated bond yields and interest rates. Moreover, a country with irresponsible fiscal policies is also likely to pursue poor economic policies in other areas.

The next question is whether any threshold effects exist. For a country in financial crisis, two natural thresholds of public debt are apparent. The first occurs when a country loses access to the international credit market, and the second threshold arises if a country were to default. In both cases, massive fiscal cuts become inevitable, and output is bound to plummet. Kumar and Woo found "some evidence of nonlinearity" with higher levels of initial debt impacting growth negatively.

However, these thresholds vary enormously with country and period and nobody can predict them with any certainty. Japan has eminent market access at a public debt of 237 percent of GDP, while Latvia and Romania lost market access with a public debt of less than 20 percent of GDP in late 2008, and Argentina defaulted in 2001 with a public debt of only 50 percent of GDP.

Many factors matter, notably the size of the economy, its level of development, financial depth, currency, budget balance, history of default, and the international financial situation. It would be strange if these thresholds would be similar for all countries, but some categorization might be possible, as Reinhardt and Rogoff attempted. It is evident that emerging economies have much less ability to sustain large public debt than large, developed economies.

At present, Japan and the United States appear to be free riders on the global bond markets with minimal bond yields, as was true of Britain in its days of imperial glory. They benefit from being large economies with great financial depth and reserve currencies. Small and semi-developed countries can hardly manage more than 60 percent of GDP in public debt and sometimes not even that.

Today, the average public debt of eurozone countries is 91 percent of GDP. Therefore, the big question is how much such large debts will destabilize or slow the growth of small- and medium-sized developed economies now and in the future.

The higher the debt level (and fiscal deficit), the greater the vulnerability.

ANNE O. KRUEGER
Research Professor of International Economics, SAIS-Johns Hopkins, Senior Fellow, Center for International Development at Stanford University, and former First Deputy Managing Director, International Monetary Fund

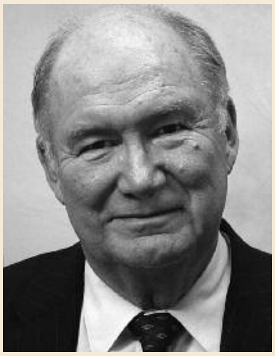
I shall confine my response to sovereign debt, although the recent euro crisis has clearly demonstrated that difficulties in the banking sector can lead to large increases in sovereign debt in crisis situations and that banks holding large amounts of sovereign debt can greatly increase the damage if sovereign debt becomes unsustainable.

Debt levels as a percentage of GDP and changes in them matter. First, high debt levels, or prospects that fiscal deficits will result in unsustainable debt, can negatively affect growth rates. The level or rate of change at which this happens depends on several factors such as the rate of growth and the past track record in honoring sovereign obligations, but no one can argue with the proposition that all else being equal, a higher level of debt or rate of change in sovereign debt is more likely to affect growth prospects.

When there are high rates of return on investments (that will, by definition, raise growth rates), borrowing can safely increase to finance them. It seems to be forgotten that South Korea borrowed an average of around 10 percent of GDP during the high-growth years early after policy reforms with almost no increase in the debt level. It is, of course, important that the budget not be crammed with current expenditures (such as subsidies) and the investment argument then be used for more spending.

Second, high debt levels and fiscal deficits in good times reduce fiscal space in times of recession. The appropriate policy is to have structural fiscal balance, with deficits in bad times and surpluses in good times. This enables fiscal space for negative shocks, including structural changes that affect growth prospects.

Third, the higher the debt level, and the poorer the prospects for adjustments that will reduce future increases in it, the more vulnerable a country is to financial (or balance of payments) attacks. The cost of fighting off such an attack is high, if it is feasible at all. A full-blown crisis is exceptionally costly, and the higher the debt level (and fiscal deficit), the greater the vulnerability.



It may take a while to fall into a sovereign debt crisis, but it will eventually happen.

RUDOLPH G. PENNER
Institute Fellow, Urban Institute, and former Director, Congressional Budget Office

It is obvious that our current fiscal policy path, which implies a constantly rising debt-to-GDP ratio from about 2019 onward, is unsustainable. Much less obvious, however, is precisely when rapidly rising debt causes a sovereign debt crisis. Crises cannot be forecast; they have occurred through history at various debt-to-GDP ratios, including some lower than ours. As Niall Ferguson has noted, they can be set off by a bit of bad news on an otherwise slow news day. Once crises start, interest rates can jump 300 to 400 basis points in a matter of days.

How do we get off this path? First, we must understand that only two program areas are responsible for our budget problems: Social Security and health. Spending growth in the two largest health programs—Medicare and Medicaid—is propelled by an aging population and rapidly rising health costs. The growth in health costs has abated recently, but no one knows for how long. The retiring baby boomers and the slow growth in the tax-paying population are driving Social Security's financial problems. These demographic shifts make Social Security and health programs unsustainable in their current form.

Second, we must understand that it is politically implausible to solve the entire budget problem on the spending side. Taxes will have to increase as well.

In designing a fiscal consolidation, some considerations are complementary, and some are in conflict. At a time of less-than-full employment, it is unwise to impose a significant negative fiscal shock that could slow recovery or, even worse, cause a new recession. However, Social Security and Medicare are primarily retirement programs. A large portion of Medicaid spending also goes to acute and long-term care for the elderly. Reforming programs for the elderly abruptly is unfair, because it ruins retirement plans that have been many years in the making. If reforms are phased in slowly, macro and equity goals can coincide.

However, as we wait to reform Social Security and Medicare, the changes necessary to achieve sustainability become ever larger and more painful. Consequently, there is a conflict between imposing macro pain and micro pain.

Long before the United States faces a sovereign debt crisis, large deficits will draw down national saving and erode the growth in national wealth, because physical investment is either crowded out or prevented by borrowing from abroad. If we borrow abroad, we have to devote more domestic production to paying foreigners interest and dividends, rather than to improving domestic living standards. Economist Charles Schultze once compared this effect to termites eating away at the woodwork. It may take a while for the house to fall down into a sovereign debt crisis, but it will inevitably happen. This too suggests that we should not wait too long before beginning the march to sustainability.

Our fiscal problems clearly cannot be solved without imposing some pain on somebody. That is why we haven't done it.

In some cases, debt doesn't matter.

JAMES K. GALBRAITH

Lloyd M. Bentsen, Jr., Chair in Government/Business Relations and Professor of Government, Lyndon B. Johnson School of Public Affairs, University of Texas at Austin, and author,* Inequality and Instability: A Study of the World Economy Just Before the Great Crisis *(Oxford University Press, 2012)

"My first argument, then, is that even for the purpose of systematic and large-scale observation of such a many-sided phenomenon, theoretical preconceptions about its nature cannot be dispensed with, and the authors do so only to the detriment of the analysis" (Koopmans, 1947).

Nobel laureate Tjalling Koopmans long ago warned against "measurement without theory." Economists Kenneth Rogoff and Carmen Reinhart ignored the warning. That was their central mistake.

Of course, debt matters if you are a family, a firm, or a small country that must borrow in someone else's money and earn outside income to cover your debt service. Debt also matters if you are locked into a fixed exchange rate or a common currency controlled by someone else.

Debt doesn't matter if you are a large country that can borrow in its own money, set its own interest rates, and toward which investors flee in times of trouble—especially if you enjoy a floating exchange rate.

In the first case, you risk default, bankruptcy, seizure of collateral, liquidity crisis, and collapse. In the second, your risks are depreciation and inflation and that's all. So long as the state is sovereign, in this sense, the state can always pay its own debt.

And among high-debt countries, how can we tell who is sovereign and who is not? Simple. Check the currency in which bonds are issued. Check the exchange rate regime. Check out the interest rates in real terms. Some are high. Others are low. The markets know, and you can look it up.

Bereft of theory, Reinhart and Rogoff neglected these vital distinctions. In addition, they violated a most basic neoclassical precept: *natura non facit saltum.* (That's Latin for "ain't no thresholds.") Given their own beliefs, they should have inspected that 90 percent tipping point like hawks. They would have seen that it depended on one very bad year—minus 7.6 percent growth—in one very small country, New Zealand. In 1951! A year when there were over 150 days of strikes! But they forgot their own theory, let alone the theory about money that speaks to the larger issue.

What is that theory? You might call it "modern monetary theory," by which John Maynard Keynes meant, when he used the term "modern," the structure and rules of every money-of-account that has existed in the world, "for some four thousand years at least."

Krugman has been correct in identifying the weakness in aggregate demand. Nevertheless, debt and deficits do matter.

MARTIN N. BAILY
Senior Fellow, Economics Studies, Bernard L. Schwartz Chair in Economic Policy Development, and Director of the Business and Public Policy Initiative, Brookings Institution

Reinhart and Rogoff deserve credit for their analysis of financial crises, but when they said that growth is strongly negatively impacted by government debt levels above 90 percent of GDP, that conclusion was suspect even before a spreadsheet error emerged. They had concluded that when the U.S. debt level went over 90 percent this had triggered slow growth, but this finding came only because of a few short years right after World War II. Growth was weak in these years, not because of the high debt level, but because of demobilization and cuts in defense spending.

Setting aside his political rhetoric, Paul Krugman has been correct in saying that the biggest economic problem today is the weakness in aggregate demand, a self-perpetuating cycle of low job growth, low income growth, and sluggish spending. He is correct in drawing a lesson from Europe, where policymakers claimed that fiscal consolidation would lead to economic growth, but the reality has been a double-dip recession. And U.S. growth now is being slowed by the sequester and the increase in payroll taxes.

Nevertheless, debt and deficits do matter. There should be a much greater sense of urgency around a plan to stabilize the debt-to-GDP ratio, already at 73 percent, and then start bringing it down year by year, as long as the economy can sustain solid economic growth. The aging of the population threatens to overwhelm the budget and place too large a burden on the workers of the future. Federal spending on health care is much the biggest problem, where the prices paid for medical services are too high and there is a lot of ineffective care. Vital government programs are being driven out of the budget by overspending on entitlements and by keeping taxes too low to support the services Americans say they want.

Chronic budget deficits have created a gap between national saving and investment, funded by foreign capital and resulting in chronic trade deficits. If you support manufacturing jobs and American competitiveness, you should support balancing the budget. This strategy would also provide the fiscal ammunition to deal with the next recession, whenever that happens. There is no magic point at which debt stifles growth, but as the level increases the burden of debt service rises, especially once interest rates move to more normal levels of 4 percent to 6 percent.

The budget deficit is coming down much faster than expected, which may ease the political pressure to deal with it. That would be a mistake, because the structural problems in the federal budget only get harder to solve the longer the solution is postponed. Scare tactics about imminent financial collapse are not called for; good policies to raise revenues and deal with entitlements are called for.

Excessive public debt acts as a deadweight on economies.

JULIAN CALLOW
Chief European Economist, Barclays Capital

It is ironic that exactly at the time the Reinhart-Rogoff thesis was coming under scrutiny, the International Monetary Fund staff published a summary of four recent empirical studies, all of which concluded that a rise in a country's debt-to-GDP ratio (above a certain threshold) was associated with an adverse impact on economic growth (*Fiscal Monitor,* April 2013). Besides, the real value of the Reinhart-Rogoff work was demonstrating—from a very comprehensive historic database developed by the authors—that the unwinding of high public debt ratios has generally not been a happy experience, and has usually been associated with inflation and/or restructuring.

Excessive public debt acts as a deadweight on economies: under normal conditions government debt servicing costs will be a higher share of GDP, which requires a higher ratio of government revenues, which in turn can choke off productive growth. However, the biggest danger from excessive debt is if it is accompanied by large budget deficits, for then holders of that debt will need to consider if the position amounts to fiscal insolvency.

It is hard to be too prescriptive about the conditions that constitute fiscal insolvency, since this depends upon a judgement that includes an assessment of future borrowing costs, GDP growth, and the willingness and ability of the government to achieve the requisite deficit reduction.

Nonetheless, the Greek debt restructuring, and other moves that have linked public sector bailouts to private sector bail-ins (such as for Cyprus), are potent reminders that fiscal insolvency is not a theoretical concept. These experiences also provide some additional clues about risk factors. In particular, the proportion of a country's debt in foreign hands is an important factor for assessing risk for non-residents (who, in the eyes of the issuer, can count for less than domestic voters—for example, in Greece before the restructuring, two-thirds of the debt was held externally).

Risks are also magnified further if a fixed currency regime is in place, for this raises the risk of whether the country will be able to set appropriately low interest rates for fiscal consolidation. As well, fixed currency arrangements tend to be associated with excessive external capital inflows, which drives up debt ratios while at the same time causing a country to lose competitiveness (through a combination of higher domestically generated inflation and switching of resources to meet domestic demand). In turn, at a time when fiscal austerity is required, this is then conducted from an adverse competitive position which makes it harder for the country to achieve externally driven growth.

While the risks of debt restructuring are much higher when a country has large external liabilities, they are not entirely absent even if the debt is domestically owned. History shows, however, that a form of financial repression, even if only achieved through a combination of inflation and debt monetization, is a tempting avenue for governments.

Further research is necessary to understand and define more clearly threshold values for public debt and deficits, particularly in the context of other factors such as growth and external balance. Nonetheless, the lesson of the past five years has been that the original authors of the Maastricht Treaty were not so wide of the mark in prescribing a public debt-to-GDP ratio of 60 percent and a deficit-to-GDP ratio of 3 percent, even if these trigger points were so routinely ignored—at great subsequent cost—during the first ten years of the euro.

Reinhart and Rogoff sold us a bill of goods.

THOMAS FERGUSON

Professor of Political Science, University of Massachusetts Boston, Director of Research, Institute for New Economic Thinking, and Senior Fellow, Roosevelt Institute

Long before word of their spreadsheet's problems seeped out, anyone who wanted to know realized that Reinhart and Rogoff had sold us a bill of goods. As the 90 percent solution began to seize policymakers' imaginations, Robert Johnson and I plotted British debt-to-GDP ratios and growth rates since 1692 in an essay for the *International Journal of Political Economy.* The figure revealed a stark fact: that for decades the industrial revolution had plowed ahead at levels of debt to GDP way over the magic number of 90 percent. Like others, we also noticed how Reinhart and Rogoff's analysis brushed past the key question of cause and effect, well before Greece, Spain, Portugal, and other countries reminded everyone of what U.S. President Herbert Hoover and German Chancellor Heinrich Brüning learned to their horror in the Great Depression: almost nothing piles up public debts faster than no growth.

That lesson remains the most important takeaway from recent history. If you want to pay down debt, it is virtually impossible to do it once the deadly spiral of austerity takes hold. By contrast, if, as in the United States and the United Kingdom after World War II, you do not allow fiscal conservatives to totally dominate policymaking, you have a reasonable chance of squaring the circle—of shrinking public debt while growing the economy.

That, of course, raises large questions about the current obsession with public debt. As Oscar Jorda, Moritz Schularick, and Alan Taylor are now demonstrating, the latest round of financial crises are heavily conditioned by the explosive growth of private credit—something that very few analysts even paid attention to until recently as they fixated on the supply of money. As Taylor notes, runaway growth in public debt or even international imbalances were not the chief culprits.

For analysts looking for early warnings of the next financial crisis, their work and similar studies by other researchers highlight the importance of monitoring private sector credit, leverage, and shadow banking. If you allow big banks and their financial rivals to keep piling on leverage and tying themselves up in ever more complex webs of derivatives, you are just asking for trouble. You will get one, two, three many London Whales, followed by yet another round of bailouts and explosive growth in *public* debt.

Here, alas, is another place where Reinhart and Rogoff let us down. Their celebrated finding that recoveries after financial crises take a lot longer than other downturns did not examine the role policy and politics play in those episodes. They just treated the data as natural facts.

But they aren't. Once you pile on public debt to save banks, persisting with austerity takes you straight to the gates of Hell. You demoralize populations and dismay investors. The only way out, as Keynes famously observed in his discussion of German reparations, is to find some decorous way of writing off the debts. If you don't, then you just blunder through ugly political contests over who will end up taking losses, until society explodes or comes to a complete halt.

The more interesting question is whether governments should be increasing or reducing their debt.

JOSEPH E. GAGNON
Senior Fellow, Peterson Institute for International Economics

Of course debt matters. The more interesting question is whether governments should be increasing or reducing their debt. To answer this question, it may be useful to separate economics from politics.

The economics are straightforward. When an economy is operating above the level of long-run potential output and the real interest rate on debt is greater than society's discount rate, governments should pay down debt. These conditions are fairly common, but they do not hold right now, at least not in the major advanced economies of the United States, Europe, and Japan.

Currently, there is considerable excess capacity in the major advanced economies, which means that tax cuts or higher government spending will increase total output without raising interest rates or creating excess inflation. Thus, no investment will be crowded out, which would reduce potential output in future years. Rather, higher deficits now are likely to crowd in investment and raise potential output in the future. Also, reducing the number of workers who have been unemployed for more than six months will generate long-lasting increases in future output by preventing their skills from atrophying and making them more attractive to employers in the future. Brad DeLong and Larry Summers have argued persuasively that under current circumstances, budget deficits are likely to be self-financing; in other words, the extra future output they enable will yield enough tax revenue to service the extra debt without raising tax rates. Societal benefits would be enhanced further if the deficits were used to repair and build infrastructure that would make economies more productive in the future.

The politics are less clear, but still favorable to higher deficits now. The main issue in the United States is whether we have the political will to pay down debt when the economy returns to normal. The experiences under the Ronald Reagan and George W. Bush administrations suggest not. But the experiences under every other president since World War II—and indeed throughout previous American history—provide greater room for optimism. Moreover, the latest report of the Congressional Budget Office projects that the ratio of federal debt to GDP is already set to decline starting in 2015, which is too soon in my view. The same projections show a rising debt ratio in the distant future, entirely due to rising health care costs. But even on health costs, there are grounds for optimism. A major report this year by eighteen bipartisan experts on health care and fiscal issues identifies reforms in our health system that could both improve the quality of care and save the federal government $1 trillion over the next twenty years ("Bending the Curve," Brookings Institution, April 2013).

Overall, there is a strong case for reversing the harmful fiscal cuts in Europe and the United States this year. Japan, under Prime Minister Abe, is moving in a better direction.

There is an easily quantified rule for when sovereign debt is quite productive.

ANDREW FIELDHOUSE
Federal Budget Policy Analyst, Economic Policy Institute and The Century Foundation

Economic context is too important and widely varied between countries to universally quantify when public debt will prove harmful or likely spark a sovereign debt crisis. Differences in denomination of sovereign debt, ratios of domestic versus foreign holdings of debt, distinctions between countries with independent central banks versus those belonging to currency unions, reasons why debt has been incurred, and underlying economic health must be considered.

There is, however, an easily quantified rule for when sovereign debt accumulation is not harmful and, contrary to public perception, is instead quite productive. When a country with an independent central bank is in a liquidity trap, and that central bank's policy rate is effectively maxed out at the zero lower bound of nominal interest rates, accumulating public debt is economically beneficial.

The United States has been in such a situation since 2008 and is currently in a depression, with economic output running $953 billion (5.6 percent) below noninflationary potential. Monetary policy has not and will not be capable of ameliorating this stark aggregate demand shortfall. In this context, the accumulation of public debt since 2008 has acted as a shock absorber for aggregate demand, preventing a much deeper depression. This benefit was underscored last year by concerns about the "fiscal cliff," which reflected the reality that deficits shrinking too quickly, meaning public debt rising too slowly, would counterproductively push the economy back into recession.

Congress should not be prioritizing deficit reduction until the Federal Reserve starts raising interest rates to cool demand-side inflationary pressure, which will signal emergence from this liquidity trap. The Federal Open Market Committee has explicitly stated that rate tightening will not occur before unemployment falls below 6.5 percent or inflation expectations push above 2.5 percent, likely years away. Upon eventual return to normalcy, deficit reduction will lower market interest rates and thus "crowd in" private investment—a channel that has been totally blocked for years—offsetting decreased government demand. Similarly, fiscal multipliers are currently elevated but will shrink when full employment is restored, thus decreasing deficit reduction headwinds, and monetary policy loosening could once again offset fiscal tightening.

Conversely, if such a liquidity-trapped country undertakes austerity purportedly for debt reduction, they will effectively swap smaller structural budget deficits for larger cyclical budget deficits, and likely push near-term debt ratios higher. This has been the United Kingdom's experience with the Cameron austerity budget. Best estimates suggest austerity in the United Kingdom and major eurozone economies has, on average, counterproductively increased public debt ratios by roughly 5 percentage points as of 2013.

The housing bubble's implosion was bound to markedly increase public debt—the appropriate policy question was how to revive the economy to best sustain this debt. Additional debt accumulated to rapidly restore full employment would also hedge against substantial, widely ignored downside economic and fiscal risks, notably economic scarring and persistent cyclical budget deficits. This U.S. economic outlook remains unchanged, and more public debt should be incurred to fill the aggregate demand shortfall until the economy emerges from the liquidity trap.

Debt is a two-edged sword and matters a great deal.

STEPHEN G. CECCHETTI

Economic Adviser and Head of the Monetary and Economic Department, Bank for International Settlements

Yes, whether governmental, household, or corporate, debt matters. Kept to moderate low levels, debt is an engine for growth. At high levels, it drags growth down.

The theory and the evidence are clear. Financial development and economic development go hand in hand. For emerging market economies to emerge and for frontier economies to break through, they must create financial intermediaries and markets that allow resources to flow from savers to investors, from lenders to borrowers. That is the way to improve the efficiency of capital allocation across its various possible uses in the economy.

In moderation, debt is clearly a good thing. Through borrowing, individuals can smooth their consumption in the face of variable income, corporations can smooth investment and production in the face of variable sales, and governments can smooth taxes in the face of variable expenditures.

But as with many good things, there can be too much of it. High debts come with large interest payments. And large interest payments raise the chance that the debtor will not be able to pay. As the likelihood of nonpayment rises, lenders will require higher and higher interest rates. This alone can drive borrowers into default. But even if it doesn't, the higher chance of default means that the system is fragile and prone to collapse.

What is true for corporations and households is true for governments as well. Repaying the debt requires taxation, and a government simply can't raise taxes without limit. So as the level of government debt rises, investors will require higher interest rates to hold it. At some point, the perverse dynamics will kick in—the higher interest rates required by investors will make repayment less likely, interest rates in response will rise even further, making repayment even less likely, and so forth.

Debt is thus a two-edged sword. But when does it turn from good to bad? For most types of debt, the answer seems to be that the effect on growth is neutral for a debt-to-GDP ratio of up to about 80 percent. For government debt, the data indicate that it becomes a drag on trend growth at some point beyond 80 percent. Estimates using various methods for different countries and time periods all conclude that an increase of that ratio from 80 percent to 100 percent reduces trend growth by around 30 basis points per year. For the many economies growing no more than 3 percent per year, that means the loss of at least one year's growth every decade.

But there is no magic number. Over the past five years, public debt has risen above 100 percent of GDP in nearly all advanced economies. For some, this seems tolerable, at least for now. But for emerging market economies, even 80 percent would be completely unaffordable. One size does not fit all.

So, yes, debt matters. It matters a great deal.

Debt matters, but the time to fix the hole in the roof is when the sun is shining.

JEFFREY FRANKEL
Harpel Professor of Capital Formation and Growth, Harvard University

Yes, debt matters. I don't know anyone who believes that a high level of debt is without adverse consequences for a country. There is no magic threshold in the ratio of debt to GDP, 90 percent or otherwise, above which the economy falls off a cliff. But if the debt-to-GDP ratio is high, and especially if the country's expected future growth rate is also low relative to its interest rate, then the economy is at risk. The risk is that it will slip onto an explosive debt path, where the debt-to-GDP ratio rises without limit. In the event of such a debt trap, the government may have no choice but to undertake a painful fiscal contraction, even though that will worsen the recession. (Indeed, the resulting fall in output can even cause a further jump in the debt-to-GDP ratio, as it has in the periphery members of the eurozone over the last few years.)

None of that means that austerity in the midst of a recession is a good idea. Reinhart and Rogoff never said that, either in their research or in their policy advice. Rather, as Keynes said, the time for fiscal austerity is during the boom, not during the recession.

No, countries should not be told "to pursue fiscal reforms only if and when a crisis sets in." Rather, high-debt countries should take advantage of periods of growth to eliminate budget deficits before a crisis sets in, so that they do not find themselves in a debt trap. The time to fix the hole in the roof is when the sun is shining. Most European countries failed to take advantage of the growth years 2002–2007 to strengthen their budgets, and are now paying the price. The Greeks spectacularly failed to do so, with the result that they have had to go up on the roof to attempt to fix the hole during a thunderstorm, a task that is unpleasant, difficult, dangerous—and probably impossible.

If you want to identify some research that has misled politicians, go for the papers suggesting that fiscal contraction is not contractionary and that it may even be expansionary. It is true that sometimes a country may have no alternative to fiscal contraction, but that does not mean it is expansionary, especially if the currency cannot be devalued to stimulate exports.

The United States also failed to take advantage of the growth years 2002–2007 to run budget surpluses. But fortunately our situation is completely different from that of Greece. Our creditors are happy to hold dollar bonds, even at rock-bottom interest rates. They are not imposing on us short-term recession-inducing fiscal austerity. We should not impose it on ourselves while the economy is still weak. Instead, we should take steps now that will restore fiscal discipline in the future.

A large and rising national debt raises the risk of higher taxes.

ALAN REYNOLDS
Senior Fellow, Cato Institute

It makes sense for households or governments to borrow in hard times and to finance long-lived capital assets. How much they can afford to borrow does not depend on the ratio of stock of debt to the flow of current income, but on the future cost of debt service relative to future income.

If households or governments keep borrowing against the future to "stimulate demand," they end up consuming less, not more, thanks to interest expense. Borrowing against the future is no fun when the future arrives.

Japan proves governments can sometimes get away with taxpayer debt far larger than GDP. Unfortunately, the prospect of rising tax rates (to pay for rising debt service) discourages efforts and investments to increase future income. Without growing income, good debts can turn sour with little warning, adding a default or inflation premium to borrowing costs.

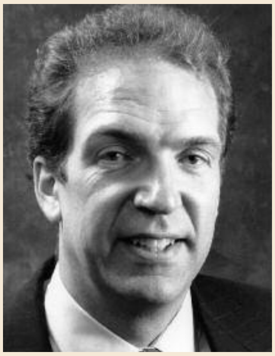
In 2008, *The Economist* juxtaposed the booming BRICs (Brazil, Russia, India, and China) against the struggling PIGS (Portugal, Italy, Greece, and Spain). Bank bailouts in 2008–2010 pushed Ireland and Great Britain into the pig pen, transforming PIGS into PIIGGS. And Jim O'Neill of Goldman Sachs, who coined the BRIC acronym, recently added "MIST" economies—Mexico, Indonesia, South Korea, and Turkey.

Paul Krugman attributes the PIIGGS' distress to "austerity," implying deep government spending cuts of the sort the United States experienced (with salutary effects) from 1992 to 2000. What happened among the PIIGGS, by contrast, is that government spending exploded from an average of 43.2 percent of GDP in 2007 to 52.6 percent by 2010. Even in 2012, after bank bailouts ended, the ratio of spending to GDP among PIIGGS remained 3–6 percentage points higher in 2012 than in 2007.

To describe that spending spree as "austerity" begs the key question: Austerity for whom? There was no discernible austerity among the PIIGGS for government bailouts, subsidies, or entitlements. Austerity was aimed at the private sector: The highest income tax rate was increased by 4–10 percentage points in all but one of the PIIGGS (Italy).

By contrast, all but one of the BRIC and MIST countries (China) cut their highest tax rates in half, with top tax rates now ranging from 13 to 38 percent. Revenue keeps pace with a growing economy, and government spending can too. Yet government spending averages just 32.1 percent of GDP in the BRICs and 27.4 percent for the MIST group.

A large and rising national debt is problematic precisely because it raises the risk of higher taxes. Turning risk into reality by raising marginal tax rates is not a solution, but the problem. Countries with elevated debts and depressed incomes do not need larger public debts or lower private incomes. They need to lift the market economy's share of GDP over time by holding down government consumption, transfers, and taxes.



Debt matters a lot to a country's growth.

DAVID MALPASS

President, Encima Global, and former Deputy Assistant Treasury Secretary for Developing Nations

Government debt matters a lot to a country's growth prospects. High levels usually reflect a history of rapid growth in government spending and difficulty restraining it. This implies future taxes, which reduces private sector investment and hiring.

The United States should have lowered its spending and debt levels in anticipation of the retirement of the postwar baby boom—but didn't. The result is too much government debt at a time when government spending on the elderly will be increasing fast.

The political challenge is to make it work. Millions of people will be retiring and drawing government benefits but no longer paying as much income and payroll taxes. The risk is an epic battle between retirees, taxpayers, government services, and creditors. The sooner we make these contentious decisions, the better our growth prospects.

Success with spending and debt restraint will have a substantial impact on economic growth and even population growth. A challenge for heavily indebted governments is to attract and retain younger workers and talented immigrants. Another challenge is to incentivize baby boomers to work longer. Perhaps they should be exempt from payroll taxes, or pay a lower rate.

The legal and political restraints on spending and debt vary widely across countries and present a key variable in growth prospects. The United States urgently needs to replace the current debt limit (which illogically allows spending but prohibits debt) with one that forces the political system to restrain spending and allocate it more efficiently.

Instead, an increasing portion of U.S. federal spending is provided through "mandatory appropriations," meaning no one votes on it or is accountable for its effectiveness. This technique allows unlimited spending without the need for new laws, putting spending growth on autopilot.

The U.S. outlook would be better if the government had made explicit choices about spending rather than using the sequester. Even so, the clumsy U.S. spending restraint is more encouraging to the private sector than Europe's recent decisions to leave spending unchecked.

Europe is swinging from poorly chosen austerity based on tax increases to an equally harmful policy of deficit spending. The better choice for Europe would be government spending restraint, asset sales, and structural reforms. In the 2000s, Europe's tolerance for sovereign debt narrowed the growth differentials, but different fiscal circumstances now will accelerate them as capital and populations flow across borders.

U.S. states are challenging each other to reduce debt, lower their tax rates and provide better, more efficient government services. Washington and Europe's capitals are making less progress, yet have much more debt. The outcome is very important to growth.

While too much debt is dangerous, not all debt is bad.

DAVID M. WALKER

Founder and CEO, Comeback America Initiative, and former Comptroller General of the United States

Yes, the level of debt does matter, and while too much debt is dangerous, not all debt is bad. The nature of a country's debt is important because debt taken on to fund critical investments is different than debt issued to fund current operating expenses or excessive consumption. For example, properly designed and effectively implemented investments in key infrastructure programs can help grow the economy and benefit future generations, so it can be both necessary and appropriate to take on debt to fund such programs. Critical investments in other key areas such as scientific research and higher education can also increase a country's economic competitiveness. Meanwhile, spending on consumption and interest decreases a country's economic competitiveness because it reduces available funding for valuable investments and other important items.

The United States is experiencing historically low interest rates, which strengthens the argument for targeted investments. However, today's low rates and relatively short debt duration levels mean there is significant interest rate risk. For example, the Congressional Budget Office estimates that net interest costs will be $857 billion in 2023, up from about $220 billion in fiscal 2012. Unfortunately, most of these additional interest costs do not relate to investments that increase economic growth and enhance competitiveness.

The United States should focus at the moment on reducing the debt-to-GDP ratio to a sustainable level over the next ten to fifteen years. This should include pursuing targeted investments and pro-growth policies coupled with restructuring social insurance programs, constraining other spending, and engaging in comprehensive tax reform. Waiting until a debt crisis occurs would be irresponsible and could have catastrophic global consequences. Political leaders should be proactive rather than reactive. Our collective future depends on it.

The economics profession has failed to make the distinction between those budget deficits caused by public sector mismanagement and those caused by private sector mismanagement.

RICHARD C. KOO

Chief Economist, Nomura Research Institute

The global consensus on debt is in disarray because the economics profession has failed to make the distinction between those budget deficits caused by public sector mismanagement and those caused by private sector mismanagement. In the former case, which is typically caused by profligate government spending while the private sector has ample appetite for funds in order to maximize profits, the market will respond by sending bond yields higher. The negative impact of the deficit caused by public sector mismanagement, therefore, will be felt soon enough via crowding out and misallocation of resources.

Once in several decades, however, the private sector loses its discipline in a bubble and leverages itself to the hilt. When the bubble bursts, the private sector realizes its balance sheets are underwater and that it must minimize debt in order to regain financial health. With everybody saving and nobody borrowing, even with record-low interest rates, the economy enters a deflationary spiral now known as balance sheet recession as it continuously loses aggregate demand equivalent to the unborrowed savings. Today, in spite of record low interest rates, the private sector as a group is not only not borrowing money, but is actually saving a whopping 7 percent of GDP in the United States and Portugal, 9 percent in Japan and Ireland, and 8 percent in Spain. These are shocking numbers and indicate the seriousness of the damage sustained by private sector balance sheets.

The only way to stop this type of deflationary spiral is for the government to borrow and spend the unborrowed private sector savings. By keeping the economy and money supply from shrinking, this also provides income to the private sector so that it can pay down debt. Since the government is the last borrower standing, its bond yield will also fall to unusually low levels as unborrowed savings languishing in the domestic financial market rush toward the government bond market in those countries that are not in the eurozone.

In the eurozone, where numerous government bond markets exist within the same currency zone, funds have been fleeing from government bond markets of those countries in balance sheet recessions to those that are not in such recessions, resulting in alarmingly high bond yields for those governments that need to implement fiscal stimulus, and ridiculously low bond yields for those who have no need for such stimulus. These destabilizing capital flights must be addressed with offsetting fiscal transfers or introduction of different risk weights for holdings of domestic as opposed to foreign bonds.

When a large number of balance sheets are in distress at the same time, there are no short cuts as households and businesses must use their flow of savings to reduce their stock of debt overhang, which is necessarily a long process. This repair process will take even longer and be more costly if the policymakers overlook the importance of government as the borrower of last resort when the private sector is still financially sick and push the economy over its fiscal cliff as happened in the United States in 1937, in Japan in 1997, and in many European countries since 2010.

It all comes down to the credibility of a central bank.

TADASHI NAKAMAE

President, Nakamae International Economic Research

How and when debt levels spark economic crises can only be judged on a country-by-country basis. In place of a universal guide, however, one common and crucial element can at least be discerned—and used as a gauge in determining the degree and timing of economic repercussions (and the fiscal reforms that follow them) from growing levels of debt.

It all comes down to the credibility of a central bank. Over the past decade (or longer, depending on the country), central banks have lost discipline, and bond markets are following suit. Credibility has become a matter of degrees and conditions, such as whether a country holds the position of a reserve currency or the state of its current account or balance of payments. The loss of credibility comes as central banks continue to finance bigger budget deficits (including private-sector debt) even as interest rates drop to unprecedented levels as debt levels rise. This is in contrast to tradition in which interest rates rose in tandem with rising debt.

It could be argued that the two countries whose central banks have lost the most discipline over past years, the United States and Japan, may actually be able to hang on to their "credibility" the longest. Although the United States is the world's biggest debtor, it is also the reserve currency country. Japan has the world's largest government debt but is also the biggest creditor. This should not be confused with blanket optimism, however, especially for Japan. That it has managed to survive twenty years of crippling debt and near-zero interest rates is a feat—its current account surplus is unlikely to keep going for much longer.

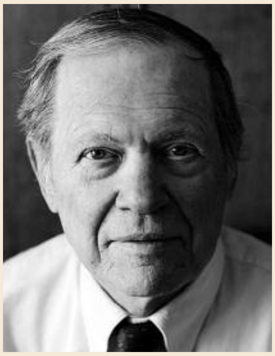
So first look at central banks' reaction to surges in debt and how this has weakened the fundamental health of economies. At practically zero, interest rates fail to weed out inefficient companies that eventually choke overcrowded industries. As good, potentially innovative companies are forced to compete with them, productivity falls, or at least, fails to rise. Near-zero interest rates also stifle risk capital. This means fewer start-ups—curbing potential growth industries. Deregulation, another important factor, tends to fall by the wayside.

Japan in the 1960s is a prime example of why productivity is essential for growth. Its economy grew at roughly 10 percent a year. Most of this growth came from productivity gains: Japan's labor force grew 1.5 percent a year during this period while productivity grew by 8.5 percent. But between 2007 and 2012, Japan's labor force shrank 0.5 percent a year, while its productivity was flat. This could be improved by efficient and sustainable capital expenditure.

Second, keep in mind that central banks have to be "credible" to a wide audience: depositors, government-bond holders, other central banks, and so on. Of these, credibility among local depositors is particularly important. There comes a point when central banks print too much money to keep interest rates low amidst ballooning budget deficits that people question the reliability of bank deposits and fixed income products and start shifting to assets that hedge against inflation, such as property, equities, precious commodities, and stronger currencies (capital flight). Long-term bond yields rise sharply as local banks face runs, creating a vicious cycle for both.

This is when markets are forced back into the traditional model of high interest rates tied to high levels of debt. In this system, governments have to abandon expansionary fiscal policies and are forced to cut spending and raise taxes. This enforced austerity is not pretty, but this is also a necessary and transitional phase, as these and other related reforms will strengthen the underlying economy.

In this respect, it is unfortunate that comprehensive fiscal reforms might as well be considered "market events" in the age of ultra-easy monetary policy. The countries which are able to survive the current model the longest will also postpone vital reforms the longest, thus weakening their economies in the long run. Not such good news for those polishing up their "credibility" after all.



It is highly doubtful that a common threshold applies in all or even most cases.

RICHARD N. COOPER

Maurits C. Boas Professor of International Economics, Harvard University

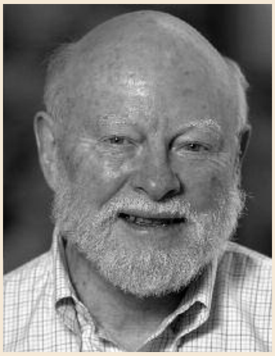
A certain amount of debt is no bad thing. It permits the costs of long-term projects, such as ports and highways, to be spread over time, reflecting their use value in subsequent years. In the case of wars, some historians have claimed the advantage of Britain over France over their many centuries of conflict was Britain's capital market and the ability of a trustworthy government to float bonds. Public debt creates potentially high-quality assets for purchase by financial institutions with long-term obligations, such as life insurance companies and pension funds. And it creates the potential for a high-quality, liquid capital market that provides benchmarks against which more risky securities can be assessed.

But as always, there can be too much of a good thing. Undisciplined governments can take the easy path of borrowing rather than raising taxes or cutting expenditures. Even when accumulated debt is due to worthy causes, it can become troublesome and burdensome. The debt must be serviced, in principle out of revenues, something that is less burdensome at low interest rates than at high interest rates. And it can become so high that prospective lenders worry about the government's future capacity to service the debt, leading to higher interest rates to cover that risk. Such a situation obviously constrains the constructive use of fiscal policy for macroeconomic stabilization, as well as borrowing for long-term projects.

But how high is too high? This will vary from circumstance to circumstance, from country to country. It is highly doubtful, either in theory or in experience, that a common threshold—whether it be 60 percent of GDP or 90 percent of GDP—applies in all or even in most cases. Japan is running a test at present of whether a country with a gross debt in excess of 200 percent of GDP (net debt at over 140 percent) can finance at low cost the enlarged deficits called for by Prime Minister Abe's expansionary fiscal policy. Japan's success is not assured. But even if successful, it does not necessarily carry strong lessons for other countries whose institutional framework, public habits, and interest rates are different. But it would demonstrate that a 90 percent threshold is not universally valid even in peacetime.

Policy usually involves choices among unpalatable alternatives. Each government should weight the advantages and disadvantages of actions that enlarge—or attempt to diminish—its outstanding debt. Actions by individual governments will of course affect the economies of their trading partners. The International Monetary Fund and the G-20 are therefore important and these days have a lively agenda, as does the European Commission, when it comes to framing fiscal policy.

At present the United States is foolish, in my judgment, not to be floating thirty-year or even fifty-year bonds at the unprecedentedly low long-term interest rates to finance expenditures whose returns will last for many years, despite its high debt.



Across diverse countries, there exists no single number beyond which growth is likely to be predictably curtailed.

RONALD MCKINNON

Professor Emeritus of International Economics, Stanford University, and author,* The Unloved Dollar Standard: From Bretton Woods to the Rise of China *(2012)

Public sector debt certainly does matter, but the danger can only be properly understood in the context of how the debt arose, the currency in which it is denominated, and the structure of interest rates. Across diverse countries, there exists no single number—such as 90 percent of GNP—beyond which growth is likely to be predictably curtailed.

During the Napoleonic wars, Britain built up huge debts—variously estimated to be more than 200 percent of GNP (the national income accounts had yet to be constructed) in 1817. But, in the following century of rapid industrialization, the ratio had shrunk to less than 30 percent on the eve of World War I. By 1913, the British reputation of not inflating and remaining at the center of the world gold standard kept interest rates on British consols down to just 2.5 percent.

In 1945, the United States had a debt-to-GNP ratio of about 113 percent. But rapid postwar growth in the 1950s and 1960s with unexpected inflation in the 1970s caused it to bottom out in 1974 at 24 percent of GNP.

However, if high government debts come from out-of-control "civilian" fiscal deficits—welfare state spending or an impasse in tax collecting—future growth could be greatly slowed. Threatened debt default forcing sudden government "austerity" will occur sooner if debts are mainly in a foreign currency. There are many such examples: Argentina in 2002 with debt denominated in U.S. dollars, and in southern European countries—Greece, Spain, Italy, and Portugal—in 2013 with debts in euros.

But a country that goes heavily into debt largely in its own currency and retains control over its own central bank can defer a crisis more easily by "printing" money to make debt repayments. In 2013, Britain has an ongoing large fiscal deficit and debt overhang similar to Spain's—but unlike Spain, it has no immediate crisis provoking increases in interest rates.

By 2013, Japan's gross government debt in yen reached 240 percent of GDP. But debt-servicing costs were kept manageable by a "lucky" accident where, since 1997, Japan has been in a liquidity trap with short-term interest rates near zero and long rates less than 1 percent. Even more amazing is the markets' optimistic response to the re-election of Shinzo Abe in December promising both huge new fiscal expenditures and further massive monetary expansion. The stock market rose as the yen fell, but it is too early to predict the ultimate effect on GDP.

Finally, we come to the United States, where the 2013 fiscal deficit is 5.7 percent of GNP, and combined state and federal debt is over 100 percent of GDP. But unlike Japan, foreigners hold a high proportion of the debt. Because of the way that the world dollar standard works, more than 50 percent of U.S. Treasury bonds held outside of the Federal Reserve itself are in foreign central banks. Thus unlike crisis economies with large foreign indebtedness in foreign currencies, the low-saving United States has large foreign debts in its own currency. Like Japan or the United Kingdom, it can run with ultra-low interest rates without provoking a crisis in the foreign exchanges.

However, this doesn't mean that running with near-zero interest rates and massive central bank quantitative easing is a good idea. Normal domestic bank intermediation serving small- and medium-sized enterprises is undermined, and ever-greening loans to support zombie corporations become commonplace. Indeed, Japan's long stagnation since the mid 1990s with near-zero interest rates may well have forced the economy's natural rate of interest—the real return on capital—to fall. And once nominal interest rates are held down for a long time, it becomes politically impossible to raise them. Japanese banks, which are stuffed full of long-term Japanese government bonds, would go bust—and the government could not service its debt in a higher interest rate environment.

Are the United Kingdom and United States following Japan's road to permanent low-interest stagnation? ◆