

Chapter 3

Public Debt, Economic Freedom, and Growth

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The *Index of Economic Freedom* includes this year, for the first time, data on public debt in the economies under consideration. While the data on debt do not figure in the numerical economic freedom scores or rankings, they do provide additional information relevant to the mechanisms through which policies that restrict economic freedom limit economic growth. The strong relationship between economic freedom and sustainable growth has been well documented over the 18-year history of the *Index*. Today, as many governments struggle to cope with higher levels of public debt, the concepts of economic freedom offer important insights into the complex relationship between a government's debt and a country's economic growth.

DOES DEBT MATTER?

The sovereign debt crisis in Europe and the explosive growth of public debt in the United States have focused the attention of researchers and the general public on the impact of public debt on economic growth as never before. The issue is

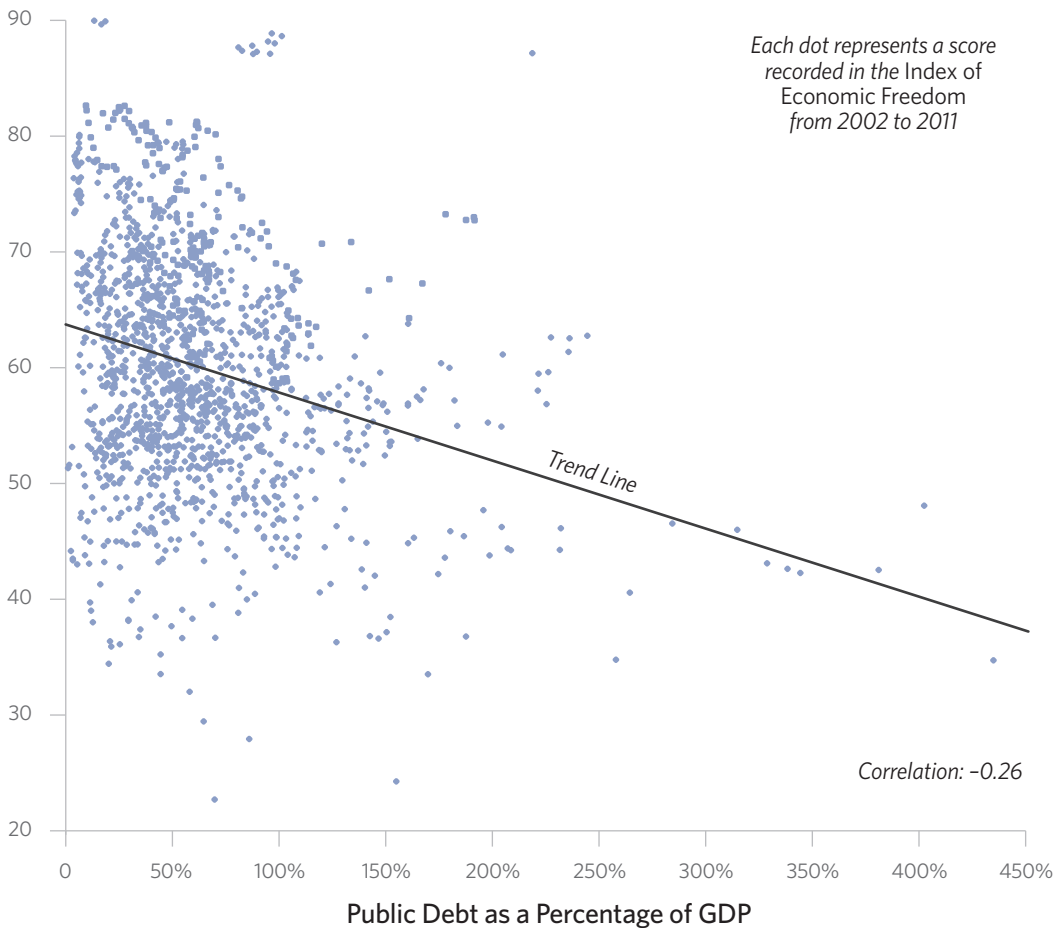
complex, and the diversity of situations that must be considered is as wide as the range of countries whose economies are studied in the *Index*.

In theory, debt financing of public spending could make a positive contribution to productive investment and ultimately to economic growth. Debt could also be a mechanism for positive macroeconomic countercyclical interventions or even long-term growth policies such as marginal tax rate reductions. On the other hand, high levels of public debt may have numerous negative impacts such as raising interest rates, crowding out private investment, and limiting the flexibility of government to respond to future economic or national security crises. Mounting public debt, particularly debt that merely boosts government consumption or transfer payments, is likely to undermine overall productivity growth and lead ultimately to economic stagnation rather than growth.

The size of debt relative to GDP is a crucial element in assessing the overall impact of debt on an economy, and a country's level of economic development is an important variable in this

Economic Freedom and Debt

Economic Freedom



Sources: Terry Miller, Kim R. Holmes, and Edwin J. Feulner, 2012 *Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2012), at www.heritage.org/index; International Monetary Fund, World Economic Outlook Databases, at <http://www.imf.org/external/ns/cs.aspx?id=28> (November 16, 2011); and International Monetary Fund, "A Historical Public Debt Database," at <http://www.imf.org/external/pubs/cat/longres.cfm?sk=24332.0> (November 16, 2011).

Chart 1  heritage.org

context. It is the policy environment, however, that ultimately determines whether a given level of public debt is sustainable and likely to make a positive contribution to economic growth and development. Policies that favor economic freedom are highly likely to increase growth. They are also likely to create an environment that reduces the risks of debt.

DEBT AND ECONOMIC FREEDOM

Throughout the history of the *Index of Eco-*

nomie Freedom, one question has always been at the center of the analysis: "What makes an economy grow?" In assessing countries' entrepreneurial and macroeconomic environments, the *Index* has focused on government policies and actions that can profoundly affect economic growth for good or ill. In defining economic freedom, the *Index* points out that:

Any discussion of economic freedom has at its heart consideration of the relationship

between individuals and governments or other organized groups. ... In general, state action or government control that interferes with individual autonomy limits economic freedom.¹

While state actions that limit economic freedom can be and sometimes are financed with current revenue, the reality is that new government actions are rationalized most easily when times are hard. These are precisely the times when tax revenues tend to be at their lowest, and the incursion of public debt may seem justified based on a perceived need for quick action.

Lost in the shuffle may be the most important question of all: Will the government action being contemplated truly improve the economic situation? If it does, tax revenues are likely to recover along with gross domestic product (GDP), and debt is less likely to accumulate. On the other hand, if the government action fails to boost recovery (or even makes it worse), tax revenues will be stagnant or will fall, and debt will inevitably rise. The permanent increase in the ratio of public debt to GDP in such circumstance is *prima facie* evidence of policy failure. The high levels of public debt accrued in many countries thus reflect years of bad public financial management and the cumulative impact of poor policy choices. Such poor policy choices are highly likely to have restrained economic freedom as well.

The formulas used to estimate economic freedom in the *Index of Economic Freedom* capture potential debt impacts in a variety of ways.

- **Monetary freedom** provides an explicit measure of inflation,
- Increases in **government spending** financed by debt will lower freedom scores in that category,
- **Fiscal freedom** may be reduced if taxes are

increased to finance debt service payments,

- **Financial freedom** can be harmed if public debt crowds out private-sector access to credit and raises interest rates, and
- The potential positive effects of high levels of **investment freedom** can be undercut if government borrowing is siphoning away external financial flows that would otherwise find their way into productive private-sector enterprises.

Historical data from the *Index of Economic Freedom* show a clear negative relationship between the accumulation of debt and economic freedom. In general, countries with lower levels of public debt as a percentage of GDP tend to enjoy high levels of economic freedom. Based on 1,530 data points from the *Index* database reflecting economic freedom scores and debt-to-GDP ratios over the past decade, the coefficient of correlation for debt and economic freedom is a negative 0.26. (See Chart 1.)

There is an even stronger negative relationship between debt-to-GDP ratios and economic freedom for advanced economies than there is for developing economies.² (See Chart 2.)

Based on 10-year average *Index* scores and debt data, countries with debt-to-GDP ratios below 70 percent enjoy, on average, economic freedom rankings categorized as moderately free or better. Countries with debt-to-GDP ratios higher than 70 percent are, on average, likely to be considered mostly unfree or repressed. (See Chart 3.)

RISING GOVERNMENT DEBT: SHACKLING FUTURE GENERATIONS

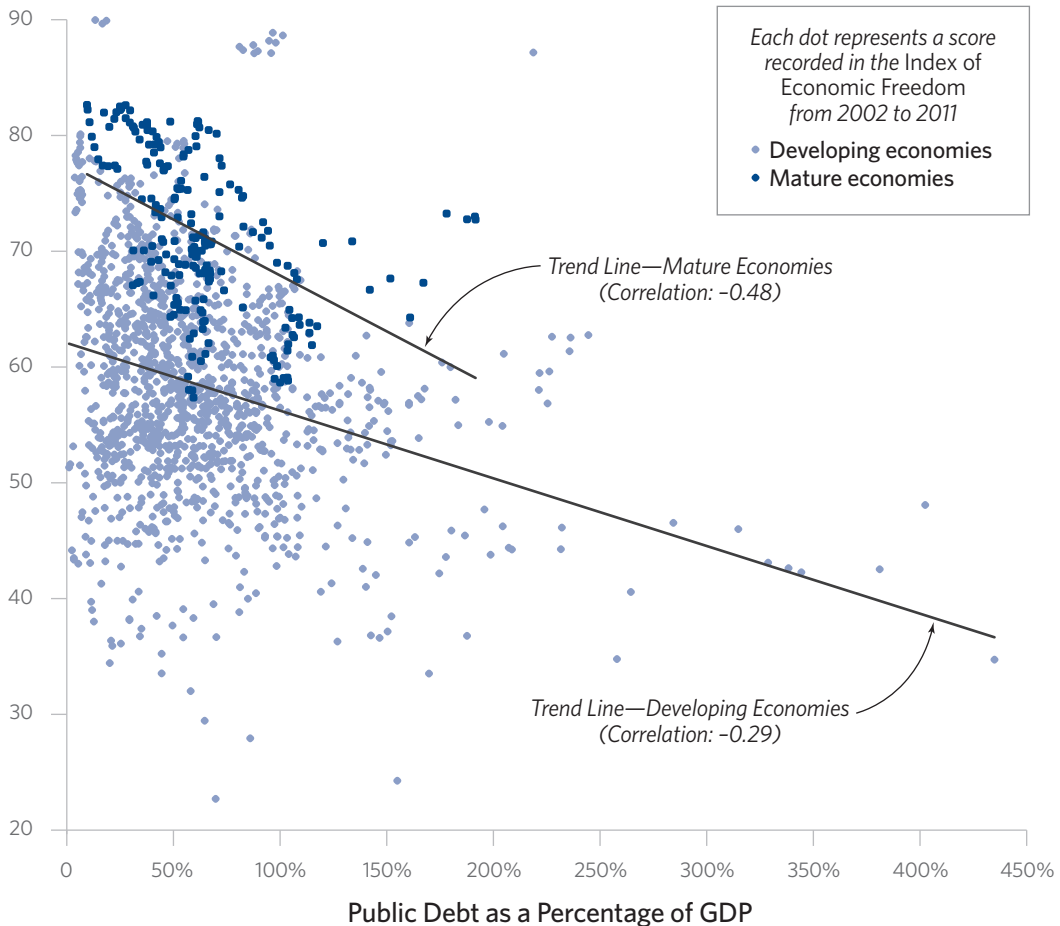
Through the *Index of Economic Freedom* database, it is possible not only to compare countries' economic policy environments at a single point in time, but also to track the evolution of policies

2. In this study, 22 countries are categorized as advanced or mature economies: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Switzerland, the United Kingdom, and the United States. Developing economies include all other countries for which data on public debt and economic freedom are available.

1. Terry Miller and Anthony B. Kim, "Defining Economic Freedom," chap. 1, in Terry Miller, Kim R. Holmes, and Edwin J. Feulner, *2012 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2012), at www.heritage.org/Index.

Economic Freedom and Debt—Developing and Mature Economies

Economic Freedom



Sources: Terry Miller, Kim R. Holmes, and Edwin J. Feulner, 2012 *Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2012), at www.heritage.org/index; International Monetary Fund, World Economic Outlook Databases, at <http://www.imf.org/external/ns/cs.aspx?id=28> (November 16, 2011); and International Monetary Fund, "A Historical Public Debt Database," at <http://www.imf.org/external/pubs/cat/longres.cfm?sk=24332.0> (November 16, 2011).

Chart 2  heritage.org

over almost two decades. Such temporal analysis is particularly interesting when looking at the question of public debt.

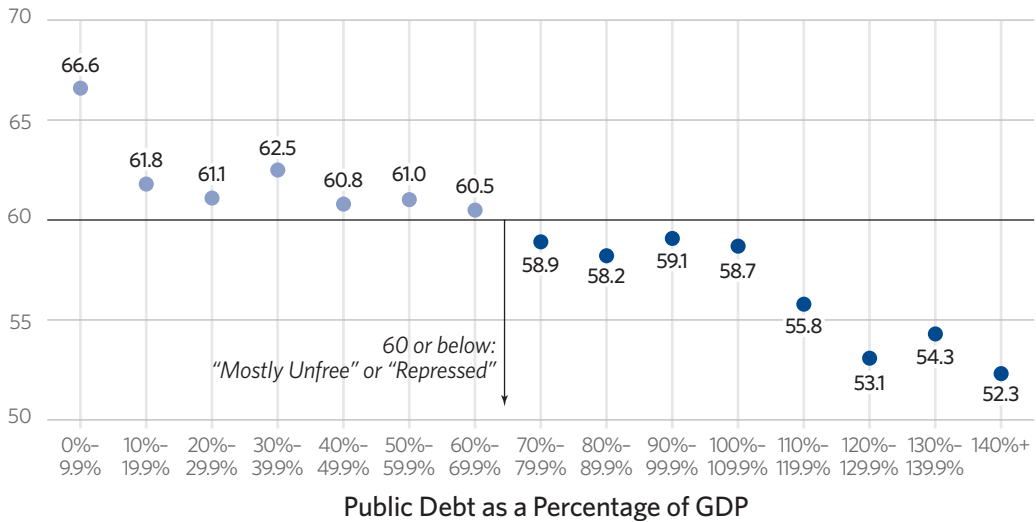
By incurring public debt, a government can be thought to be shifting its consumption or investment expenditures from the future to the present, or the tax burden necessary to pay for government spending from the present to the future. The absolute level of debt is thus a direct measure of the extent to which generations, both present and past, have exerted a claim on the wealth and

income of future generations. When debt levels are rising, the claims on the future are rising. When debt is being reduced, future generations become freer to spend their resources and wealth on goods and services of their own choosing.


The accumulation of debt may also be seen as shifting economic freedom from generation to generation. The direction of the shift depends in part on how the resources gained from the issuance of debt are used and in part on whether and how the debt is retired in the future. If debt is used

Countries With More Debt Are More Likely to Be Unfree or Repressed

Economic Freedom, 2002-2011



Sources: Terry Miller, Kim R. Holmes, and Edwin J. Feulner, 2012 *Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2012), at www.heritage.org/index; International Monetary Fund, World Economic Outlook Databases, at <http://www.imf.org/external/ns/cs.aspx?id=28> (November 16, 2011); and International Monetary Fund, "A Historical Public Debt Database," at <http://www.imf.org/external/pubs/cat/longres.cfm?sk=24332.0> (November 16, 2011).

Chart 3  heritage.org

to increase government spending in the present, the ratio of government spending to GDP will rise and economic freedom, as measured in the *Index*, will fall. If debt were instead used productively to reduce tax rates or the overall tax burden, economic freedom in the present could rise.

From the point of view of future generations, however, the accumulation of past debt is a considerable threat to their economic freedom. The future generation is obligated to pay off past debts, and as that occurs, the ratio of government spending (of which debt service is a part) to GDP rises, thus reducing economic freedom and growth dynamism. If taxes must be raised to get the revenue with which to pay off the debt, that also undermines economic freedom by taking away taxpayers' precious financial resources. Even if all of the proceeds from current debt were invested for future benefit—a circumstance not likely to occur in the real world—there is an opportunity cost imposed on future generations. That opportunity cost is the loss of freedom to

use their own resources for goods and services of their own choosing. Instead, they have to pay for the choices of their forebears.

Perhaps more important, the accumulation of debt tends to undermine growth in economic freedom. As shown in Chart 4, changes in debt are negatively associated with changes in economic freedom. As in the previous level-to-level analysis, the correlation between changes in debt levels and changes in economic freedom scores over the past decade is much more negative for advanced economies than for developing economies. Clearly, greater debt accumulation results in a greater erosion of economic freedom.

Faced with such a loss of economic freedom and the negative economic impacts likely to accompany it, the temptation for future generations may be to borrow even more themselves to pay off past debts. While this may seem a cost-free answer to public debt problems, there is still an opportunity cost, as such borrowing could be used for productive investments rather than the

recycling of old debts. The unavoidable result is a decline in economic growth.

HIGH PUBLIC DEBT HURTS GROWTH

The strong positive relationship between economic freedom and growth is one of the most enduring conclusions of the *Index of Economic Freedom*, confirmed in the data year after year.³ Similarly, the impact of public debt on growth has been widely studied over the years. Several recent studies have explored the relationship between public debt and growth from different angles using different data sets. Taken together, these studies provide valuable insights and provide a compelling view of the dangers of excessive public debt.

One pioneering study by Carmen Reinhart and Ken Rogoff looked at 44 advanced and emerging countries with data spanning about 200 years.⁴ Reinhart and Rogoff found little relationship between overall government debt and real GDP growth for debt-to-GDP ratios below 90 percent of GDP. Above that debt level, however, they found that median growth rates fell by 1 percent and that average growth fell even more. They also looked at the impact of debt on inflation and found no apparent link between debt levels and inflation for advanced countries as a group but sharp rises in inflation for emerging markets as their debt increases.

A similar study by scholars at the World Bank and North Carolina State University used a large sample of industrialized and developing countries over a shorter time frame (1980–2008) and found negative growth impacts for debt-to-GDP ratios exceeding 77 percent.⁵

Another study, by Manmohan Kumar and Jaejoon Woo of the Fiscal Affairs Department of the International Monetary Fund (IMF), included 38 advanced and emerging countries with populations of over 5 million, using data spanning four decades.⁶ Like Reinhart and Rogoff, Kumar and Woo found insignificant and inconsistent impacts for low and moderate levels of debt but a significant and negative impact on growth for debt levels exceeding 90 percent of GDP. They found the negative impact of debt on growth to be less in advanced economies and greater in emerging economies. A 10 percentage point increment in debt-to-GDP ratio was associated with a 0.15 percent–0.20 percent negative impact on annual growth rates in advanced economies and a 0.30 percent–0.40 percent negative impact in emerging economies.

Kumar and Woo also found that countries with higher levels of initial debt suffered more from subsequent increases in debt. For countries with debt ratios above 90 percent, a 10 percent increase in debt was associated with a 0.19 percent decline in growth; for countries with initial debt ratios of 30 percent–60 percent, a 10 percent increase in debt reduced growth by around 0.11 percent.

The two IMF economists extended their models to be able to examine the various channels through which the negative impacts for debt might be transmitted. They concluded that higher levels of debt caused reduced investment and slower growth in capital per worker, resulting in a slowdown in the growth of labor productivity.

DEBT: MORE THAN A LITTLE HURTS THE POOR

For developing countries, the impact of debt is generally worse than it is for developed countries. A recent paper by S. M. Ali Abbas and Jakob E. Christensen found that modest levels of external debt (up to 35 percent of bank deposits) could make a positive contribution to GDP growth by

3. Miller, Holmes, and Feulner, 2012 *Index of Economic Freedom*.

4. Carmen M. Reinhart and Kenneth S. Rogoff, "Growth in a Time of Debt," *American Economic Review*, Vol. 100, No. 2 (May 2010), pp. 573–578.

5. Mehmet Caner, Thomas Grennes, and Fritz Koehler-Geib, "Finding the Tipping Point—When Sovereign Debt Turns Bad," World Bank, Latin America and the Caribbean Region, Economic Policy Sector, *Policy Research Working Paper* No. 5391, July 2010, at <http://ts-si.org/files/WPS5391.pdf>.

6. Manmohan S. Kumar and Jaejoon Woo, "Public Debt and Growth," International Monetary Fund, *IMF Working Paper* No. WP/10/174, July 2010, at <http://www.imf.org/external/pubs/ft/wp/2010/wp10174.pdf>.

Improving Economic Freedom Lowers Debt Levels

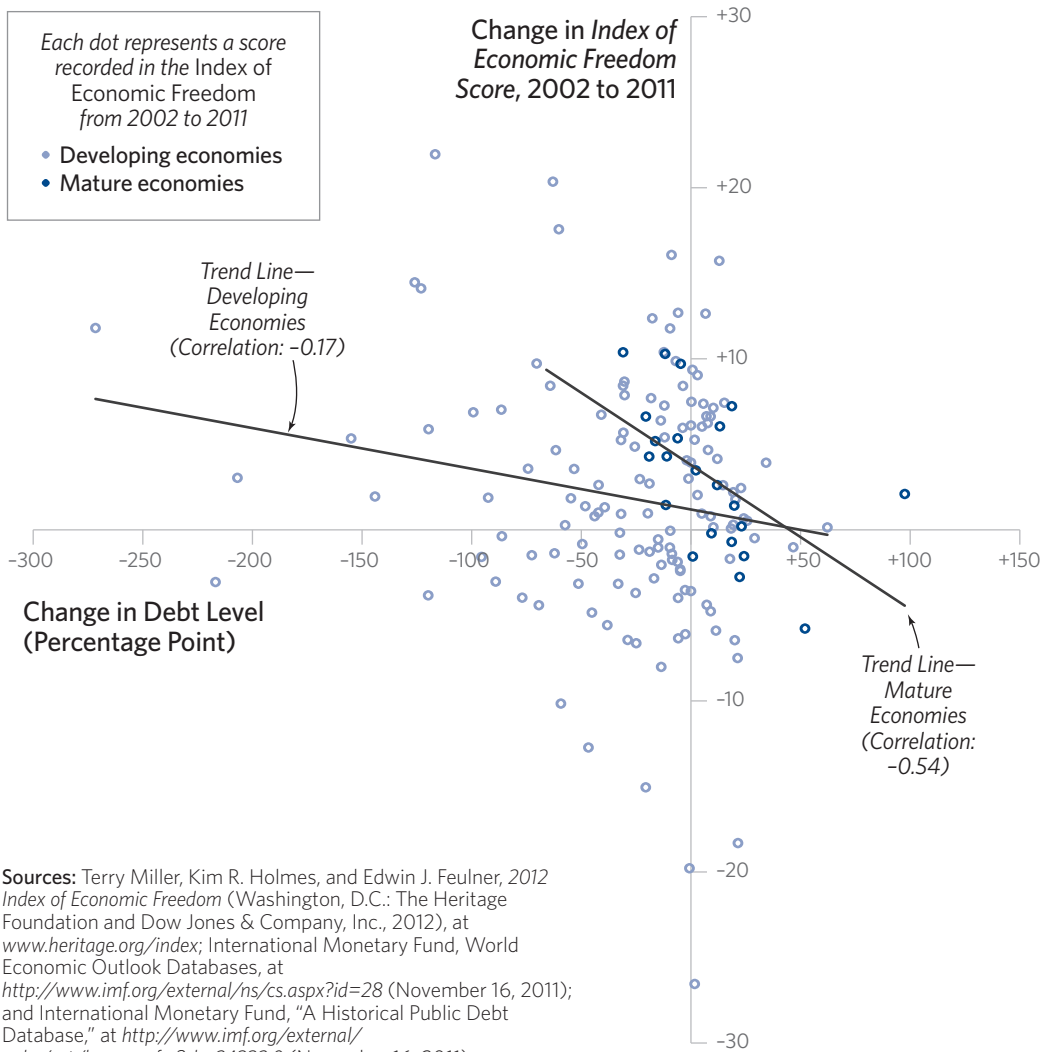


Chart 4  heritage.org

promoting domestic savings, the development of financial markets, better financial institutions, and improved monetary policy.⁷ However, the authors found that higher levels of public debt had a negative effect.

7. S. M. Ali Abbas and Jakob E. Christensen, "The Role of Domestic Debt Markets in Economic Growth: An Empirical Investigation for Low-income Countries and Emerging Markets," International Monetary Fund, *IMF Working Paper No. WP/07/127*, June 2007, at <http://www.imf.org/external/pubs/ft/wp/2007/wp07127.pdf>.

Reinhart and Rogoff found that for emerging markets with external debt denominated in foreign currencies, the threshold at which debt caused problems was significantly lower than it was for their overall sample and that the negative effects were more pronounced. External debt levels of 60 percent or more reduced growth rates by about 2 percent. Higher external debt levels cut growth roughly in half.

A 2010 study, "Total Public Debt and Growth in Developing Countries," by European scholar Andrea Presbitero looked at total public debt in

92 low- and middle-income countries over the period 1990–2007.⁸ This study found negative growth effects from all debt levels up to around 90 percent of GDP. Above that level, the substantial negative effects on growth from poor economic management and bad institutions appeared to overwhelm any further significant identifiable impacts from debt.

Putting this all together, one can conclude, as did Presbitero, that:

[I]ndustrialized countries are better able than developing ones to borrow and use domestic and foreign financing in a productive way without paying the costs in terms of disincentive to investment, capital flight, policy volatility and crowding out, that generally goes hand in hand with large debts. By contrast, in developing countries the negative consequences of debt overhang are likely to offset the possible benefits deriving from the availability of additional resources.⁹

On the positive side, however, another conclusion that emerges from these studies is that *low* and *moderate* levels of debt do not appear to hurt growth in countries with sound macroeconomic and policy environments. By contrast, there is a strongly negative impact on growth from very high levels of debt even in otherwise well-managed advanced economies such as Japan, some European countries, and the United States.

To summarize, the recent studies identified for different groups of countries the specific levels of debt beyond which the impact on growth became negative. Those levels ranged from 60 percent to 90 percent of GDP. Those levels are highly consistent with the economic freedom data contained in the *Index of Economic Freedom*. (See Table 1.)

8. Andrea Filippo Presbitero, “Total Public Debt and Growth in Developing Countries,” Money and Finance Research Group *Working Paper No. 44*, November 12, 2010, at <http://www.csae.ox.ac.uk/conferences/2011-EDiA/papers/608-Presbitero.pdf>.

9. *Ibid.*

Two complementary conclusions that can be derived from the *Index of Economic Freedom* analysis are supported by the close correlation with the results of the debt/growth studies.

First, the accumulation of debt appears to have a negative impact on economic freedom. Countries with higher levels of debt tend to have lower levels of economic freedom, and it is very hard for countries with debt levels of 70 percent or higher as a percentage of GDP to be considered even moderately free.

Second, the level of economic freedom appears to play a critical role in determining the economic impact of debt. Where economic freedom is high, debt may be sustainable even at higher levels. Where economic freedom is low, the impact of even moderate levels of debt is likely to be negative.

CASE STUDY: CRISIS IN EUROPE


The sovereign debt crisis that exploded in Europe during 2011 is an important case study, both for the world financial system and for all countries integrated into the globalized system of trade and economic exchange. By 2009, debt levels for the euro currency zone as a whole approached 80 percent of GDP, and with levels in Greece and Italy well over 100 percent of GDP, confidence began to erode in the ability of governments, especially the government of Greece, to continue to be able to roll over their large stock of debts at affordable rates.

The triggering event occurred when, in a sign of stunning mismanagement, Greece announced that its deficits were and had been much larger in recent years than the official statistics had indicated. (See Chart 5.) The possibility of default, once considered unthinkable for a euro-zone government, began to affect credit costs, which in turn increased the doubts about the country’s solvency and the euro monetary system’s survivability.

As the crisis deepened, European banks and other financial institutions experienced increasing difficulty accessing short-term credit, and depositors’ anxieties grew sharply. Banks in other countries that had lent money to European banks became similarly concerned and moved

Tipping-Point Debt Levels Identified in Leading Empirical Studies

| | Reinhart and Rogoff <i>(advanced and emerging economies)</i> | Reinhart and Rogoff <i>(emerging economies only)</i> | Caner, Geenes, and Koehler- Gelb <i>(industrialized and developing countries)</i> | Kumar and Wood <i>(advanced and emerging economies)</i> | Presbitero <i>(low- and middle-income countries)</i> | <i>Index of Economic Freedom</i> <i>(advanced and developing economies)</i> |
|--|--|--|---|---|---|--|
| Linkages | Debt and growth | Debt and growth | Debt and growth | Debt and growth | Debt and growth | Debt and economic freedom |
| Tipping-Point Debt Levels (% of GDP) | 90% | 60% | 77% | 90% | 90% | 70% |

Table 1  heritage.org

to reduce their own exposure to dodgy European assets, exacerbating the banks' liquidity problem. Even companies began to withdraw deposits from suspect banks, preferring to hold cash or non-cash assets like gold rather than risk holding financial instruments previously thought to be rock-solid.

As bank deposits fell, banks' need for additional capital ballooned. By the end of September 2011, IMF Managing Director Christine Lagarde quantified the bank solvency problem by reporting that European banks needed a "whopping \$273.2 billion" in recapitalization to remain afloat.¹⁰

The bank solvency problem traced directly to the sovereign debt problem. Governments in countries like Greece had issued debt and run budget deficits to unsustainable levels. Debt levels were unsustainable not only because of their sheer magnitude, but also because the countries were suffering from ongoing growth problems, with economies contracting in the worst cases. This just made the debt problem worse. Even maintaining static levels of debt

became increasingly hard as overall economic activity declined. Attempts to address the debt problem through fiscal measures such as tax hikes, for example, made the growth problem worse and the debt even less sustainable. Issuing more debt in an attempt to buy time to deal with the sovereign debt problem made the bank solvency problem worse by driving down the value of the debt.

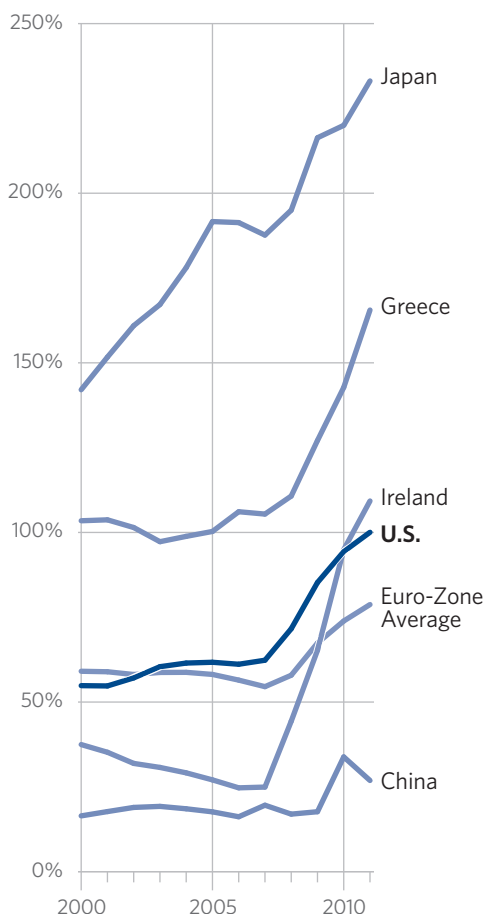
For many countries in the past, the time-honored reaction when caught in a debt/growth trap of this type has been to erode the value of the debt through some combination of inflation and currency devaluation. The ultimate pain to citizens is no less harsh from this strategy than it is from default, but the immediate impacts can sometimes be disguised or softened and thus made more palatable politically. Because Greece is a member of the euro zone, with the value of its currency set by factors that are mostly external to its own borders, this strategy is unavailable unless and until Greece leaves the euro zone in favor of its own currency.

Greece was thus left with two very unpalatable options. One was to let a deep, prolonged depression drive down wages and prices to the point where Greece's workers and companies could generate a trade surplus with which to service the debt. The other was to break with the

10. Andrew Ross Sorkin, "I.M.F. Chief's Change of Tune on Bank Capital," Deal Book, *The New York Times*, September 12, 2011, at <http://dealbook.nytimes.com/2011/09/12/i-m-f-chiefs-change-of-tune-on-bank-capital/>.

Rising Debt Levels

Public Debt as a Percentage of GDP



Sources: Terry Miller, Kim R. Holmes, and Edwin J. Feulner, *2012 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2012), at www.heritage.org/index, and International Monetary Fund, *World Economic Outlook Databases*, at <http://www.imf.org/external/ns/cs.aspx?id=28> (November 16, 2011).

Chart 5 heritage.org

euro zone to achieve the same wage-depressing effect quickly through devaluation, after which the Greek economy would have some hope of recovering.

DEBT: A CONTAGIOUS MALADY

The European crisis shows clearly how the negative impacts of high levels of debt may extend far beyond the borders of the country

incurring the debt. In today's globally interconnected financial world, problems in one country spread quickly throughout the system. At one time, a European financial crisis of this sort affecting Greece and even a few other countries might have posed an existential threat to some European institutions and markets, but in overall impact it would surely have been a localized affair. No more. Today, banks in the United States and elsewhere are exposed to the risks of European debt, even in some of their "super-safe" money markets.

Confidence is the lifeblood of any economic system. Lenders need to know that their loans will be repaid, and those who in turn depend on the solvency of the lenders' assets for security in their own investments suffer as well when doubts emerge. Efforts to shore up confidence in one area may expose risk in another. With massive and intricate linkages built into the modern international banking and financial system, risk can move and multiply with the speed of light through the electronic channels that form the arteries of the system.

In reality, no one—including the bankers themselves and their financial regulators—really knows or understands all of the connections or weaknesses in the system. Loans and the risks they entail are packaged and repackaged in myriad swaps and other instruments that disperse risk throughout the system. The flexibility from such complexity, especially in good times, can increase the availability of capital for investment and improve growth.

The problem is that while such complex instruments disperse risk, they do not make it go away. In bad times, someone still has to pay, and with such complexity, it may be difficult to know in advance who that someone is.

For the financial system, the solution is almost certainly some combination of mechanisms, rules, and prudent business practices aimed at increasing the level of reserves, and thus the level of resiliency, in the system. For countries, however, the best answer to excessive sovereign debt is to speed up growth, and that in turn requires committed attention to improving economic freedom.

PRUDENCE, NOT AUSTERITY

In world economic fora and within domestic policy circles, the debt problem has tended in recent years to be argued in terms of measures to promote austerity versus those that might promote growth. It is clear from the data, however, that a country need not be austere in its approach to debt unless its situation is completely out of control. In most cases, simple yet determined prudence will suffice.

The econometric studies highlighted in this chapter show little if any negative impact for countries at any level of development from debt-to-GDP ratios lower than 35 percent. For advanced economies, debt levels as high as 90 percent of GDP may be sustainable, although levels that high would certainly not seem to be

desirable. Our own studies show that debt-to-GDP ratios as high as 70 percent are consistent with levels of economic freedom that can still support vibrant economic growth.

For countries where prudence has failed, however, and where debt levels are exploding, the consequences can be severe. High levels of debt are bad for growth, and the austere policies required to bring high levels of debt under control are also bad for growth. Economic stagnation or even collapse can result, as real-world examples indicate. So far, only a few countries appear to have crossed this threshold. For the rest, there is time to readjust, and the key to lasting long-term growth and secure future prosperity remains what it has always been: a continued commitment to economic freedom.