The Inevitability of a U.S. Government Default

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Countries don't go bankrupt.
>—Walter Wriston, former head of Citibank, quoted in Benn Steil and Robert Litan, *Financial Statecraft*

There is a myth that floated around the banking community not many years ago that governments do not go bankrupt. I cannot imagine who dreamed that one up.
>—Gordon Tullock, "Thoughts on the National Debt"

There is a ticking time bomb in the U.S. government's fiscal structure: growing government spending, which, if unchanged by policy, will result in growing government debt. This is not the short-run problem that we hear so much about in the news when Congress gets to vote on increasing the ceiling for the U.S. federal debt. It is the long-run problem that economists such as Laurence Kotlikoff (Kotlikoff and Burns 2004; Kotlikoff 2011; Jagadeesh Gokhale and Kent Smetters 2006), among others, have been writing about for years.

The problem is this. Three components of the federal government budget— Social Security, Medicare, and Medicaid—are highly likely to take an increasing

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share of gross domestic product (GDP). Overall federal government spending, including interest on the debt, could exceed 40 percent of GDP by 2050. For more than sixty years, overall federal revenues as a percentage of GDP have almost always been within a narrow range. They have never gone over 21 percent of GDP and have almost never gone below 17 percent. Even during the crisis years of World War II, they never exceeded 22 percent of GDP (White House 2013).[1] The result, if the government does not change policy, will be annual deficits of approximately 20 percent of GDP. This is unsustainable.

The question then becomes: What will change? This is difficult to predict. But we give the following predictions in decreasing order of certainty.

First, federal government revenues are unlikely to be more than 22 percent of GDP for more than a few years.

Second, well before spending reaches 30 percent of GDP, the federal government will face a renewed, more serious fiscal crisis.

Third, likely cuts in the growth of Medicare and Medicaid spending would at best delay, but not prevent, this crisis.

Fourth, the probability is therefore fairly high that the federal government will be forced to default on some or all of its debt.

Fifth, outright default on the federal debt will occur despite any increasing inflation.

How We Got Where We Got on Spending

Federal government spending has been within a few percentage points of 20 percent of GDP since about the start of the Korean War in 1950. What has changed dramatically, though, is the composition of federal spending. To put it succinctly, federal government spending has moved dramatically away from guns toward "entitlements" and transfers.

In 1954, the first full year after the Korean War truce, defense spending was 13.89 percent of GDP, which made it 68 percent of all federal government spending. Defense spending as a percentage of GDP did not go under 10 percent until 1964 and then briefly went back above 10 percent in 1967 and 1968, the two most intense years of the Vietnam War. Defense spending then fell throughout the 1970s to a low of 5.61 percent of GDP in 1979. Then, in 1980, President Carter, competing with a fairly hawkish Republican field of candidates, raised defense spending to 6.02 percent of GDP in 1980, and in 1986 Ronald Reagan raised defense spending to a high of 7.06 percent of GDP. From then until 2001, defense spending as a percentage of GDP fell, reaching a low of 3.58 percent in 2001. By 2010, it was back up to 5.82 percent. Although defense spending

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1. See also the Federal Reserve Economic Data (FRED) website for the Federal Reserve Bank of St. Louis at http://research.stlouisfed.org/fred/.

has risen in real terms since 1950, it has declined substantially as a percentage of GDP.[2]

Instead, two other programs that began under President Johnson have accounted for a large part of the budget growth since his time in office. Those programs are Medicare and Medicaid. In fiscal year 2011, federal government spending on Medicare and Medicaid totaled $835 billion, which was 5.6 percent of fiscal year GDP.

Also, both President Johnson and President Nixon added substantially to Social Security spending by raising Social Security benefits. Between 1967 and 1972, Congress and the president raised Social Security benefits by 72 percent (37 percent after adjusting for inflation). When Wilbur Cohen, Johnson's secretary of health, education, and welfare, proposed a 10 percent hike in Social Security benefits, Johnson replied, "Come on, Wilbur, you can do better than that!"[3] President Nixon added to the problem by getting into a bidding war with Wilbur Mills, a powerful congressman who was jockeying for the 1972 Democratic presidential nomination. The net result under Nixon was a 20 percent increase in benefits.

Social Security spending as a percentage of GDP is rising due to demographics (the elderly are living longer, and the Baby Boomers are retiring) and to the fact that it has never been fully funded but instead is run on a pay-as-go basis. Rising Medicare spending is driven by one other factor: improved medical technology. We often hear it said that medical costs are rising. It is true that some medical costs are rising, but many medical costs are falling. The problem is not costs, but expenditures. The higher expenditures come about because medical professionals are able to do so much more to keep people alive, to cure or alleviate diseases, and to improve people's quality of life.

Health economist Burton Weisbrod puts it well: "Fifty years ago, physicians were little more than diagnosticians" (1991, 526). Now they can actually *do* something. Weisbrod cites many effective medical procedures, including kidney dialysis, organ transplants, arthroscopic surgical techniques, CT scanning, and nuclear magnetic resonator imaging. Projections of medical spending in the future are based, quite reasonably in our opinion, on the assumption that medical technology will improve and make many procedures and cures possible that are not possible today.[4]

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2. Estimates of the real increase in defense expenditures vary widely. According to the U.S. Office of the Undersecretary of Defense, the increase has been only 20 percent (2013, 249–51). According to Todd Harrison, however, the real increase has been 90 percent (2012, 71). This enormous discrepancy arises entirely from the use of different price deflators for the two estimates.

3. This story is told in Peterson (1996, 93–99).

4. It is true, though, that spending on medical care in the United States has grown slowly for three years in a row (see Holahan and McMorrow 2013). If this slower growth were to persist, U.S. federal spending would grow more slowly. It is too early to tell whether the past three years represent a permanent break from the trend of the previous decades. Making prediction even more difficult is the entrance of the Affordable Care Act (a.k.a. ObamaCare), most of which will not be implemented until 2014.

Of course, the mere fact that improved medical care is possible does not mean that people will buy it. But Medicare is structured so that people bear very little of the cost of various procedures, so many people will opt for expensive treatments: to put it bluntly, they are spending other people's money.

Medicaid spending is rising for the same reason: improved technology and an increased number of things that medical care can accomplish. What brought this spending to such a high level in the 1980s and 1990s is that, in various budget deals from the mid- to late 1980s, President Reagan's staff, negotiating with southern California Democratic congressman Henry Waxman, accepted expanded eligibility for Medicaid in the future in return for modest tightening in the present. This reflected White House budget director David Stockman's desire for achieving short-run spending restraint at the expense of long-run profligacy.

Dan Morgan, writing about this negotiation for the *Washington Post,* states: "A former Republican staffer recalled a 1984 meeting when 'Stockman came into a room with Waxman and agreed to give him stuff in the out [later] years' if Waxman would ease up on his demands for the year just ahead" (1994). The net effect was a massive increase in Medicaid spending. Morgan writes:
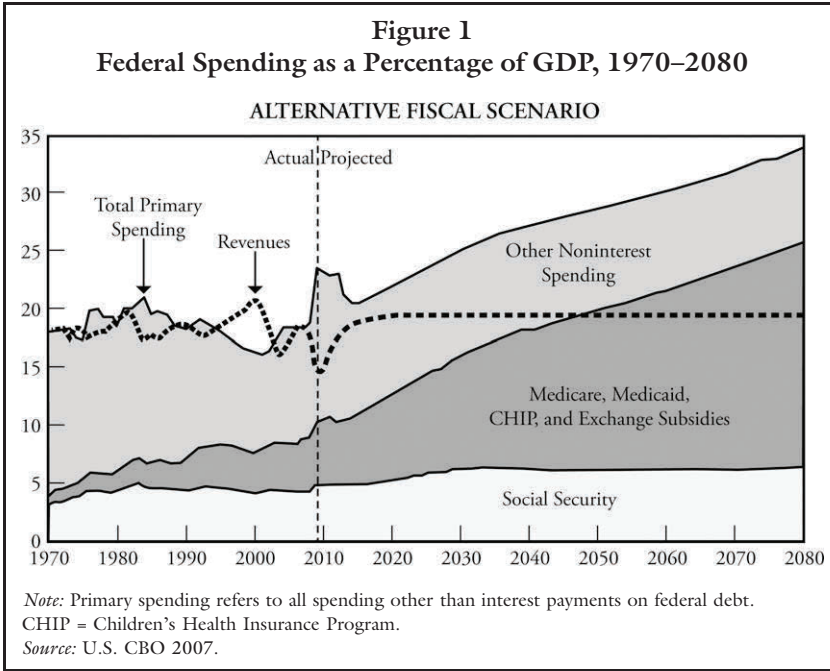
> At the beginning of the 1980s, Medicaid was a no-frills government insurance program that mainly covered one-parent families and their children receiving Aid to Families with Dependent Children—welfare—and Supplemental Security Income (SSI) for the elderly and disabled. Those with a Medicaid card still had to find a doctor, health maintenance organization, hospital or pharmacy to serve them—not always easy because Medicaid generally paid less than private insurers or Medicare, the federal program that insured the non-poor elderly and the disabled.
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> Today, Medicaid pays the medical bills of millions of children and women in working families, illegal immigrants seeking care in emergency rooms, single mothers making the transition from welfare rolls to work, AIDS sufferers and some elderly nursing home patients with middle-class spouses or children. It pays for more than four of 10 U.S. births, compared with one in six in 1981. In one state, Minnesota, the Medicaid program is so generous that it will pay the medical bills of young children in a family of four with an income of $39,462—almost three times the federal poverty ceiling.

To put the $39,462 income figure in perspective, it was *higher than* the median income of $32,264 in 1994.

Projected Spending

The numbers in the future are positively scary. In June 2012, the Congressional Budget Office (CBO), a relatively nonpartisan scorer of government

Figure 1
Federal Spending as a Percentage of GDP, 1970–2080

ALTERNATIVE FISCAL SCENARIO

Note: Primary spending refers to all spending other than interest payments on federal debt.
CHIP = Children's Health Insurance Program.
Source: U.S. CBO 2007.

budgets,[5] projected in its slightly less optimistic but more realistic alternative scenario that Social Security spending in twenty-five years (2037) will be 6.2 percent of GDP, up from 5.0 percent in 2012; that Medicare spending in 2037 will be 6.7 percent of GDP, up from 3.7 percent in 2012; and that federal spending on Medicaid will be 3.7 percent of GDP in 2037, up from 1.7 percent in 2012. In other words, the CBO projected that these three programs alone—Social Security, Medicare, and the federal portion of Medicaid—will take 16.6 percent of GDP, up by more than 50 percent from "only" 10.4 percent of GDP in 2012. Longer-term projections offered by the CBO in 2007 are even scarier: the three programs were expected to take a total of 25.0 percent of GDP by 2082, seventy-five years down the road. Although the CBO has not reported these estimates in numerical form again, all its subsequent long-term, alternative budget outlooks up through the estimate released in 2012 (U.S. CBO 2012) contain graphs that depict roughly the same explosion of entitlement expenditures (see figure 1).[6] There is no point in dwelling on 2082, however, because what is projected for 2037 will not occur, for reasons that will become clear.
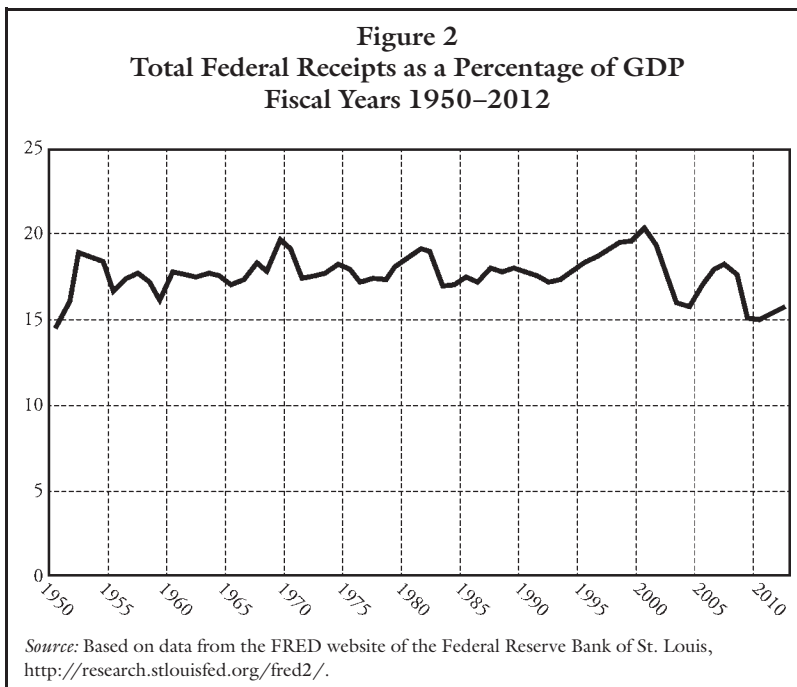
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5. To say that the CBO is relatively nonpartisan is not to say that it is accurate. Indeed, it has systematically underpredicted future budget deficits (see Kliesen and Thornton 2012). That fact suggests that our gloomy scenario, based as it is on CBO data, is actually slightly optimistic.

6. The 2007 percentages are from U.S. CBO (2007).

Taxes

The most striking fact about federal government revenues of all kinds since 1950 is that, except in one year, they have never exceeded 20 percent of GDP (see figure 2). In that one year, 2000, revenues were 20.4 percent of GDP. In the sixty-three years from 1950 to 2012, federal revenues have averaged 17.6 percent of GDP. In recession years, revenues tend to be lower as a percentage of GDP, mainly because a given percentage decline in real GDP causes a greater percentage decline in tax revenues. The other reason is that the federal government usually cuts taxes during recessions. In 2010, for example, not literally a recession year but definitely a low-growth year, federal revenues were 14.9 percent of GDP, which is the lowest they had been in more than sixty years. Even at the height of World War II, federal tax revenue never quite reached 22 percent of GDP. That percentage represents the all-time high in U.S. history should the 20-percent-of-GDP postwar barrier prove breachable.

Other welfare states have higher taxes as a proportion of GDP, with Sweden and Denmark in the lead at nearly 50 percent. Can we really be confident that the United States will never follow their example? Let us ignore for the moment all the cultural, political, and economic differences between small European states and the United States. We still must factor in the take of state and local governments, which, together with the federal government, raised the tax bite in the United States to a peak of 28 percent of GDP in 2006, only five percentage points

Figure 2
Total Federal Receipts as a Percentage of GDP
Fiscal Years 1950–2012

Source: Based on data from the FRED website of the Federal Reserve Bank of St. Louis, http://research.stlouisfed.org/fred2/.

below that of Canada. The CBO projects that federal spending alone for 2080 will reach almost 35 percent of GDP, excluding rising interest on the national debt. Thus, if taxes were to rise pari passu with spending, the United States *might* be able to forestall bankruptcy with a total tax burden, counting federal, state, and local taxes, of around 45 percent of GDP—15 percentage points higher than their *combined* total at the tax burden's World War II height, higher than in the United Kingdom and Germany today, and nearly dead even with Norway and France. However, if there is any significant lag between expenditure and tax increases, the increased debt would cause the proportion to rise even more. Furthermore, this estimate relies on the CBO's economic and demographic assumptions about the future, along with the assumption of absolutely no increase in state and local taxation as a percentage of GDP. More-pessimistic assumptions also drive the percentage up. In short, even if U.S. governments—federal, state, and local—could, by some unimaginable stretch, raise their total tax revenues to European levels, that still would not close the fiscal gap (Organisation for Economic Co-operation and Development 2012).

Why, given all the tax-rate cuts and increases, have federal government revenues in the United States been within a relatively narrow range? One might think that an iron law of economics says that it's economically impossible for the federal government to take much more than 20 percent of GDP in revenues. Indeed, W. Kurt Hauser formulated such a law and called it, appropriately enough, "Hauser's Law." Hauser explains:

> Over this period there have been more than 30 major changes in the tax code including personal income tax rates, corporate tax rates, capital gains taxes, dividend taxes, investment tax credits, depreciation schedules, Social Security taxes, and the number of tax brackets among others. Yet during this period, federal government tax collections as a share of GDP have moved within a narrow band of just under 19% of GDP.
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> Why? Higher taxes discourage the "animal spirits" of entrepreneurship. When tax rates are raised, taxpayers are encouraged to shift, hide and underreport income. Taxpayers divert their effort from pro-growth productive investments to seeking tax shelters, tax havens and tax exempt investments. This behavior tends to dampen economic growth and job creation. Lower taxes increase the incentives to work, produce, save and invest, thereby encouraging capital formation and jobs. Taxpayers have less incentive to shelter and shift income. (2010)

But Hauser's explanation is inadequate. It is true that higher marginal tax rates cause people to shelter and shift income. But for this effect to be strong enough to account for the near constancy of taxes as a share of GDP, the revenues from

increased tax rates would actually have to be lower than the revenues from lower tax rates—and not just lower, but much lower. The reason is that higher marginal tax rates discourage growth (Koester and Kormendi 1989), making the denominator, GDP, lower than otherwise. So, to keep the ratio relatively constant, the numerator must fall also. This would happen only if the U.S. economy were in the so-called prohibitive region of the Laffer Curve (the prohibitive region of the Laffer Curve is the region within which an increase in tax rates leads to a reduction in tax revenues), which is highly unlikely.[7]

Moreover, if there were such an iron economic law, why would it apply only to the United States? Central governments in western Europe routinely take 30 and even 40 percent of GDP.

There probably *is* an iron law that says that the U.S. federal government will not be able to take much more than 20 percent of GDP and is unlikely to take much less than 17 percent. But the place to look for this law is not in economics, but in political economy.

Just as there is an economic equilibrium in any economy, there is also a political equilibrium. Various forces are arrayed in favor of higher taxes as a percentage of GDP and various forces are arrayed against. In the short run, one force will get more of its way for a while and push tax revenues below 17.6 percent of GDP. Then the other force will get its way and push revenues above 17.6 percent of GDP. We can see this pattern going on in one particular administration—ironically, one that economists and historians still talk about as if it were entirely a tax-cutting regime. We refer, of course, to Ronald Reagan's administration.

When Ronald Reagan came into office in January 1981, high inflation had been combining with tax brackets that were not indexed to inflation to drive federal government revenues to higher than normal levels. In 1981, for example, federal government revenues were at a relatively high 19.2 percent of GDP. In response, Reagan introduced his tax bill to cut marginal tax rates starting in late 1981 and continuing in stages until 1984. But as early as the summer of 1982, Reagan reversed course and "successfully" pushed Congress to moderate and even reverse some of the tax cuts. He also increased taxes substantially in 1983 and 1984.[8]

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7. Note, though, that in his excellent book *The Growth Experiment* (1990), Lawrence Lindsey did show that the highest-income U.S. taxpayers in 1980 and 1981 were in the prohibitive region of the Laffer Curve. Recall that their marginal income tax rates before the cut in tax rates were between 50 and 70 percent. But their income was not big enough as a percentage of total income to put the whole economy in the prohibitive region. Moreover, since 1981 the highest marginal tax rates have typically been well under 50 percent, which makes it unlikely that the highest-income taxpayers are in the prohibitive region today.

8. The 1982 tax increase was the Tax Equity and Fiscal Responsibility Act; the 1983 tax increase was in the Social Security Amendments of 1983; and the 1984 tax increase was the Deficit Reduction Act of 1984. Reagan also signed small tax-increase bills in 1985, 1986, 1987, and 1988. The tax bills and their amounts are listed in U.S. Office of Management and Budget 1989, as reported in Bartlett (2009, 153).

Similarly, on the other end, a president who tries to increase taxes, as President Clinton did in 1993, sets in motion forces on the other side that try to moderate the tax increase. And, as with Reagan, we can see these forces at work over Clinton's eight years in office. A tax increase in 1993 was followed by a tax cut in 1997.

Why would this equilibrium percentage be so much lower in the United States than in Europe? We do not know. One possible reason is that it reflects the antitax, pro-freedom feeling that, although less and less articulated over time, is still strong in the American body politic. But whether this is the right explanation or not, we do not need to know exactly why an equilibrium exists to be fairly confident that it *does* exist.

The Likely Future

For reasons given in the previous discussion, the relevant future political/economic fact that we are surest of is that tax revenues are unlikely to go above 22 percent of GDP. But, as noted, the CBO projects that by 2037 three programs alone will take 16.6 percent of GDP. The CBO also projects that by 2037 other noninterest federal programs will take 9.6 percent of GDP. Under the CBO's "Alternate Fiscal Scenario" in which tax revenues are projected to reach 18.5 percent of GDP by 2037, interest on the federal debt alone is projected to reach 9.5 percent of GDP. The result: by 2037, under this scenario, federal spending is projected to reach 35.7 percent of GDP, which is roughly 75 percent higher than the average of the past sixty years.

But couldn't the federal government turn things around by cutting discretionary spending substantially now and implementing changes in Social Security, Medicare, and Medicaid that would substantially reduce their rate of growth? It *could*. And the recent attempts by Republicans in Congress are a step in the right direction. Moreover, two prime ministers in Canada, Jean Chrétien and Paul Martin, both of the welfare-statist Liberal Party, did just that between 1994 and 2006. They brought Canada's debt/GDP ratio down from almost 70 percent of GDP to below 30 percent.[9] Chrétien and Martin did have the advantage, though, of working in a parliamentary system in which the executive and legislative branches are the same, so that what the prime minister and his majority party say goes. However, this advantage should not be overstated. Although parliamentary systems make it easier to implement budget cuts, they also make it easier to implement budget increases.[10]

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9. For more details on this decrease in Canada, see Henderson (2010).

10. We are indebted to an anonymous referee for emphasizing this point. Torsten Persson and Guido Tabellini (2003) find that, all else equal, presidential regimes have lower tax revenue, lower government spending, and lower deficits than parliamentary regimes. However, using a larger data set, Lorenz Blume and his colleagues (2009) find that the difference between presidential and parliamentary regimes is nonexistent.

Besides the absence of a parliamentary system, the other main factor making budget reform unlikely is politicians' incentives. Politicians tend to want to kick the can down the road because their time horizons are so short. So they like promising largesse to current constituents and passing the costs on to future taxpayers.

Nevertheless, the spending increases in the three federal programs highlighted—Medicare, Medicaid, and Social Security—cannot go on forever. As one of author Henderson's previous bosses, Herb Stein, put it, "If something cannot go on forever, it will stop."[11]

Because these spending increases won't go on forever, they will stop. How will they stop? Of the answer to that, we are less sure. A reasonable guess is that eligibility for Medicaid will be tightened, and Medicare and Social Security will be means tested, all well before 2050.

But if these reforms are not made well before 2050, then a very likely outcome is a government default on the federal debt. The default could range from outright repudiation to partial repudiation.

Why High Inflation Will Not Do It

Many people who might accept our argument so far will conclude that the government will "solve" the problem with high inflation. We do not claim that this looming fiscal crisis might not result in inflation. What we argue, though, is that high inflation will not free the government from its fiscal bind.

To understand why, we must look at U.S. fiscal and monetary history. Economists refer to the revenue that government or its central bank generates through monetary expansion as *seigniorage*. Outside of America's two hyperinflations (during the revolution and under the Confederacy during the Civil War), seigniorage in this country peaked during the Civil War under the Union, when it covered about 15 percent of the war's cost. By World War II, seigniorage financed only a little more than 6 percent of government outlays, amounting to about 3 percent of GDP. By the Great Inflation of the 1970s, seigniorage was below 2 percent of federal expenditures or less than half of one percent of GDP.[12] This was partly a result of globalization, in which international competition disciplines central banks. It also was the result of sophisticated financial systems with fractional reserve banking, in which most of the money that people actually held was created privately by

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11. Herb Stein was the chairman of President Nixon's Council of Economic Advisers when Henderson was a summer intern and, for one month in the summer of 1973, an acting senior economist at the council.

12. See Higgs (2007) and Hummel (2007). Hummel (2009) reports that seigniorage covered nearly a quarter of World War II's cost and amounted to about 12 percent of GDP. This estimate comes from Walton and Rockoff (2005, 500). Subsequent correspondence with Scott Sumner made us realize that Gary Walton and Hugh Rockoff mistakenly included bank-created money as contributing to government seigniorage and that their estimate needed to be revised downward. A more accurate estimate is in Friedman and Schwartz (1963, 571).

banks and other financial institutions rather than by government. Consider how little of the typical person's cash balances are in the form of government-issued Federal Reserve notes and Treasury coin rather than in the form of privately created bank deposits and money-market funds. Privately created money, even when its quantity expands, provides no income to government.

As a consequence, seigniorage has become a trivial source of revenue, not just in the United States, but also throughout the developed world. Reid Click (1998), in a study of ninety countries between 1971 and 1990, found that average annual seigniorage exceeded 5 percent of GDP in only eight countries: Egypt, Poland, Malta, Nicaragua, Argentina, Chile, Yugoslavia, and Israel. Almost none of the developed countries could boast seigniorage amounting to more than 1 percent of GDP, despite the fact that the study incorporated the inflationary years of the 1970s. Joseph Haslag's (1998) smaller sample of sixty-seven countries over a longer period, 1965 to 1994, found that seigniorage averaged about 2.0 percent of total output for the entire sample, ranging from as low as 0.25 percent to as high as 9.98 percent (for Ghana). And Stanley Fischer (1998) puts the average seigniorage of industrial countries between 1973 and 1978, a period of high inflation, at 1.1 percent of gross national product. Only in poor countries, such as Zimbabwe, with their primitive financial sectors, does inflation remain lucrative for governments (Click 1998; Fischer 1998; Haslag 1998).

The recent financial crisis, moreover, has reinforced the trend toward lower seigniorage. Buried within the October 3, 2008, bailout bill, which set up the Troubled Asset Relief Program, was a provision permitting the Federal Reserve to pay interest on bank reserves, something other major central banks were doing already. Within days, the Fed implemented this new power, essentially converting bank reserves into more government debt. Fiat money traditionally pays no interest and therefore allows the government to purchase real resources without incurring any future tax liability. Federal Reserve notes will, of course, continue to earn no interest. But now any seigniorage that government gains from creating bank reserves will be greatly reduced, depending entirely on the differential between market interest rates on the remaining government debt and the interest rate on reserves. The lower this differential is, the less will be the seigniorage. Indeed, this new constraint on seigniorage becomes tighter as people replace the use of currency with bank debit cards and other forms of electronic fund transfers. In light of all these factors, even inflation well into the double digits would be able to do little to alleviate the U.S. government's potential bankruptcy.

Assuming that revenues from explicit taxes remain capped at 20 percent of GDP, whether for structural or political reasons, and that politicians will have little incentive to cut spending, seigniorage would have to come up with the difference. Given that 10 percent inflation during the 1970s generated revenue amounting to 0.5 percent of GDP in the United States, a straight-line extrapolation suggests that covering the growing fiscal shortfall would require more than a tripling of the price

level year after year after year. Within three years, the dollar would be worth only about 2.5 percent of its value just three years earlier. Such continual triple-digit inflation would be unprecedented, the highest the United States has ever experienced outside of its two hyperinflations. Moreover, seigniorage itself faces its own Laffer Curve (known as the Bailey Curve, after economist Martin Bailey). In order to avoid higher taxes on their real-cash balances, people spend money faster as inflation rises, thereby exacerbating the price increases. Higher rates of inflation thus generate proportionally ever-smaller revenue increases. Once we also acknowledge that the CBO's projections are probably too optimistic, we can see why our estimate that financing the explosion in Social Security, Medicare, and Medicaid payments will necessitate a 246 percent annual inflation is probably too low. How likely is it that governments in any developed country will be willing or even able to unleash such appalling currency depreciation? Recall how politically unpalatable the mere double-digit inflation of the 1970s was. The bottom line is that inflation's implicit tax on real-cash balances will not be much more able to resolve the escalating budgetary problems of the U.S. government than would an excise tax on chewing gum.

Of course, it is not literally impossible that the Federal Reserve could unleash the "Zimbabwe option" and repudiate the national debt indirectly through hyperinflation rather than have the Treasury repudiate it directly. But our guess is that the U.S. government, faced with the alternatives of either seeing *both* the dollar and the debt become worthless or defaulting on the debt while saving the dollar, will choose the latter. Treasury securities are second-order claims to central-bank-issued dollars. Although both may ultimately be backed by the power of taxation, that in no way prevents government from discriminating between the priority of the claims. After the American Revolution, the United States repudiated its paper money and yet, after postponing interest payments for a few years, eventually honored its debt in specie (i.e., gold and silver). It is true that fiat money, as opposed to a specie standard, makes it harder to separate the fate of a government's money from that of its debt. But Russia in 1998 is just one recent example of a government choosing partial debt repudiation over a complete collapse of its fiat currency.

Admittedly, seigniorage is not the only way governments have benefited from inflation. Inflation also erodes the real value of government debt, and if the inflation is not fully anticipated, the interest the government pays will not fully compensate for the erosion. This happened during the Great Inflation of the 1970s, when investors in long-term Treasury securities earned negative real rates of return, generating for the government maybe one percent of GDP, or about twice as much implicit revenue as came from seigniorage. But today's investors are far savvier and less likely to get caught off guard by anything less than hyperinflation. Indeed, given that Social Security, Medicare, and Medicaid (as well as part of the formal Treasury debt itself) are indexed to inflation, such indirect "repudiation" through inflation will do little to touch the underlying source of the government's future fiscal problems.

To be clear, we are not denying that a Treasury default might be accompanied by some inflation. Inflationary expectations, along with the fact that part of the monetary base is now de facto government debt, can link the fates of government debt and government money. This is all the more reason for the United States to try to break the link between U.S. currency and debt. We still may end up with the worst of both worlds: outright Treasury default coupled with serious inflation. We are simply denying that such inflation will forestall default.

How might such a Treasury default unfold? The financial structure of the U.S. government currently has a nominal firewall between Treasury debt and the government's unfunded liabilities, provided by the trust funds of Social Security, Medicare, and other, smaller federal insurance programs. These funds give investors the illusion that the shaky fiscal status of social insurance has no direct effect on the government's formal debt. But according to the latest intermediate projections of the trustees, the Hospital Insurance (HI, Medicare Part A) trust fund will be out of money in 2026, and the Social Security (Old Age, Survivors, and Disability Insurance [OASDI]) trust funds will be empty by 2033 (Social Security and Medicare Boards of Trustees 2013). Although other parts of Medicare are already funded from general revenues, when HI and OASDI need to dip into general revenues, the firewall will be gone. If investors respond by requiring a risk premium on treasuries, the unwinding could move very fast, much like the sudden collapse of the Soviet Union or the more recent fiscal crisis in Greece. Politicians will be unable to react fast enough to close the gap, and there will be no one able to bail out the U.S. government, unlike what happened with the Greek government. Despite the compelling logic of our argument, participants in bond markets do not see things this way. Short-term and longer-term interest rates on U.S. government debt are very low, which implies that investors see very little chance of default. However, participants in financial markets have often been wrong in the past and could well be wrong now.

There is one piece of good news here. For years, many believers in smaller government have advocated a balanced-budget amendment to the U.S. Constitution to rein in federal spending. One of the big problems with such an amendment, from the viewpoint of its advocates, is that putting "teeth" in such an amendment is difficult. If Congress and the president fail to balance the budget, what penalty would they face? And who would enforce a penalty? But a U.S. government default on the federal debt would make it much more difficult for the federal government to borrow again. In short, a default could be that balanced-budget amendment with teeth.

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