

Beware of Greeks Bearing Debts

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Introduction

In recent weeks, turbulence has returned to global financial markets due primarily to deepening fears about the ability of Greece to service its sovereign debt and widening concerns about the ability of some other advanced European countries with large budget deficits and/or high ratios of public debt to GDP to meet their obligations. Led by Greece, interest rate spreads for some European sovereigns have shot up, equity markets have sold off in Europe and beyond, and measures of financial stress and volatility have escalated (although they generally remain well below their crisis peaks in late 2008 and early 2009).

The official international community has responded to this new challenge with a very large financial support package for Greece, involving both the European Union (especially the euro area) and the IMF—in conjunction with firm pledges by the Greek government to undertake rigorous fiscal consolidation and other reforms to restore creditworthiness and international competitiveness. To address remaining concerns about fiscal sustainability in other advanced European countries, the European Union and the IMF have pledged to supply up to \$1 trillion of financial support, and more if needed, to aid euro area members who face critical financial challenges—provided that these countries take appropriately vigorous measures to address their perceived fiscal weaknesses. The European Central Bank (ECB) has also indicated that, under this same proviso, it will purchase in the secondary market debts of euro area sovereigns when these markets appear to have become “dysfunctional.”

In this talk, I plan to address primarily the situation in Greece and the challenges to the IMF-EU-supported program that is designed to assist Greece. Before turning to that subject, however, it is important to reflect on the broader financial and economic challenges in Western Europe. Then, after discussing Greece in some detail, it will be relevant to reflect on the broader lessons from the Greek case for Europe and for the rest of the world, including especially the United States.

What's at Stake Beyond Greece

If Greece were perceived to be essentially alone in its present difficulties, then several different approaches by the international community to assist in dealing with Greece's problems would be reasonable to contemplate—and quite possibly adopt. But, Greece is not entirely alone in its present predicament.

Other countries in the euro area (specifically Portugal, Ireland, Italy, and Spain) are perceived to share, qualitatively if not quantitatively, some of the same concerns about fiscal sustainability and

international competitiveness (within the euro area and externally) that now afflict Greece. If Greece were to default upon and/or restructure its sovereign debt in the present environment, this would undoubtedly incite concerns that others might follow—contributing to the possibility of a self-fulfilling prophesy. In the extreme, if Greece were to exit from the eurozone in an effort to gain international competitiveness and spur economic growth, this would undoubtedly escalate concerns about the viability of the European Monetary Union for all of its members. This means that exit of Greece from the euro area must be viewed as an extreme step that should be avoided at virtually all cost.

More generally, while most of the world economy now appears to be recovering moderately vigorously from the great global recession, recovery in Western Europe is anemic and uncertain. There are some recent signs that recovery in France, Germany, and several other euro area countries is accelerating. A deepening crisis in Greece that spread to an economically more substantial group of euro area countries could seriously blunt recovery in the rest of Western Europe. Most of the rest of the world (except for Central and Eastern Europe) would be more modestly affected, but the effect would not be positive or trivial.

In sum, this is an especially inconvenient time for Greece to blow up into a major financial crisis raising fears of considerably broader problems in Western Europe and beyond. Indeed, an international effort that helps Greece avoid sovereign default—or at least postpones it until generally better times—is desirable not only and perhaps not primarily for how it may help Greece but also for its more general benefits.

Debt Dynamics and the Situation in Greece

The notes at the end of this paper detail the basic equation of debt dynamics. Specifically, the rate of increase of a government's debt to GDP ratio, D/Y , is the sum of two terms: first, the ratio of the primary deficit to GDP, P/Y ; and second the product of the difference between the interest rate on government debt minus the growth rate of GDP, $i - g$, times the debt to GDP ratio, D/Y .

The significance of this equation of debt dynamics, especially the importance of the differential between the interest rate on government debt and the growth rate of (nominal) GDP is well illustrated by example of the United States over the past 60 years. The US government has run persistent overall fiscal deficits virtually every year during this period and the primary budget balance (excluding interest on the government debt held by the public) has recorded a large cumulative deficit. Nevertheless, the debt to GDP ratio has fallen from 98 percent of GDP in 1950 to about 60 percent today. The reason is that, on average, during this period, the growth rate of nominal GDP (g) of 6.7 percent has exceeded the average interest rate on federal debt by about 2.5 percentage points.

For the nine years from 1999 through 2008, Greece enjoyed reasonably rapid nominal GDP growth, which generally exceeded the interest rate on Greek government debt. But, growing primary deficits dominated debt dynamics and D/Y grew. With the sharp slowdown in Greek growth in 2008–09 and further rise in P/Y , D/Y shot up to 115 percent at end 2009. The D/Y ratio now stands at about 120 percent (see scenario 1 in the notes below). With nominal GDP growth now expected to be significantly negative and with the increase in interest rates on Greek debt, forward-looking debt dynamics indicate rapid rises in D/Y . Greece's fiscal situation is clearly unsustainable under these conditions.

Meanwhile, Greece's international competitiveness has deteriorated in recent years as wage increases have substantially outpaced productivity increases (in key tradable goods industries and more generally). With the exchange rate pegged within the euro area, Greece requires outright wage deflation to restore competitiveness within the area. Achieving this will not be good for nominal GDP growth and for debt dynamics.

The adjustment and financing program recently agreed between Greece and the IMF/European Union is supposed to address these problems. The key features of this program are noted in the notes below. Assuming that this program works as advertised, the debt dynamics from 2013 onward would plausibly be described by scenario 2, 3, or 4, depending both on how credible and durable the market believed Greece's policy commitments to be and on how rapidly the Greek economy appeared likely to grow in terms of nominal GDP—both of which affect $i - g$.

In the base reform scenario 2 (IMF Program A), with $i - g = 0$, sustainability of debt dynamics is, at best, marginal. D/Y is declining but the rate of decline is not quite sufficient to allow timely repayment of official assistance (which enjoys preferred creditor status) except by increasing the debt/GDP ratio for private creditors. Thus, for this scenario to be viable, private creditors would need to be comfortable with the prospect that the ratio of privately held Greek debt to GDP would be rising for some years as official borrowings were repaid.

In the unfavorable (but realistic) reform scenario 3 (IMF Program B), $i - g = + 3$ percent, reflecting likely concerns that debt dynamics may be unsustainable. Here the rate of decline in D/Y , only 0.5 percent per year, is clearly too slow to reinforce market confidence, especially when it is known that paybacks of official assistance will far more than offset this modest rate of decline in D/Y as far as private creditors are concerned.

Good luck, however, is possible as portrayed in scenario 4 (IMF Program C). Here $i - g = - 2$ percent, signifying a high degree of market confidence in debt sustainability and a relatively high growth rate of nominal GDP. In this case, the rate of reduction in D/Y is sufficient to allow for reasonable rapid repayment of official support and a modest pace of reduction in the ratio of private credit to nominal GDP.

Immediate Debt Restructuring

A number of critics of the present approach have suggested, not without reason, that a debt restructuring for Greece is probably inevitable. More disputably it is argued that it would be best to do this restructuring up front in order (1) to avoid the loss of credibility of subsequently appearing to fail and being forced into a new strategy; (2) to keep the required amount of official financing to more moderate levels; and (3) to lessen concerns about moral hazard and "unfairness" by forcing all existing private creditors to realize upfront losses rather than allowing some creditors (with shorter-maturity Greek debts) to escape losses while holders of longer-maturity debt are later forced to accept even larger losses.

Scenario 5 describes the possible debt dynamics subsequent to an immediate restructuring. In this scenario, $i - g = 5$ percent, signifying both that growth of nominal GDP is likely to be negative at least during the initial period following an immediate restructuring and that after such a restructuring, creditors may worry that another restructuring may occur relatively soon. To contain this later concern, the initial

restructuring needs to be quite aggressive. In scenario 5 it is assumed that all existing debts are immediately written down by 50 percent with interest rates maintained at established levels on the reduced principals.

In the case of such an aggressive restructuring, it is plausibly assumed that Greece would lose access to new private credit for some time. Accordingly, the primary budget position would have to move immediately into moderate surplus in order to make the diminished interest payments on the reduced debt. The need for this primary surplus might be offset by official lending on a much diminished scale from the announced program. But, under immediate restructuring even with moderate international support, Greece cannot avoid a rapid move at least to primary budget balance and probably beyond.

An alternative scenario for immediate restructuring would involve a one-third write-down in the value of all outstanding debt, holding interest rates constant. This would be combined with a three-year extension of the maturities of all outstanding debts and a three-year moratorium on all interest and principal payments. The effect of such a (compulsory) restructuring would be to reduce the present value of the debt by about 50 percent—the same as in scenario 5. This form of restructuring would alleviate for three years the need to deal at all with the existing debt, at the cost of leaving a larger amount of private debt on the table to be dealt with later—perhaps with greater doubts about sustainability.

While there are good arguments to go for an immediate restructuring if it is reasonably certain that a restructuring will ultimately be necessary, there are also at least two good reasons in the present Greek case not to follow this path. First, it is not entirely clear that a restructuring will ultimately be necessary (although I would give it better than 50-50 odds). If it occurs, a sovereign debt restructuring will almost surely need to be quite aggressive in order to contain the perceived risk of early recurrence. Understandably, creditors will be irate and the Greek sovereign will not be able to return to normal participation in financial markets for some time. The functioning of the Greek financial system will be seriously impaired for some time. The whole Greek economy will suffer. Thus, looking only at Greece, there is good reason to try to avoid sovereign default and restructuring as long as there is some reasonable chance of being successful. Sovereign default is not a cheap way out. (Exit from the eurozone would be even more disruptive and expensive.)

Second, from a European and global perspective, this is not the best moment for a sovereign Greek debt restructuring. A year or two from now, most Western European economies should be considerably more advanced in their economic recoveries. Countries now perceived to have potential fiscal sustainability problems will have had an opportunity to demonstrate better their dedication to fiscal probity. European banks will have been able to strengthen their capital positions and prepare better for the consequences of a sovereign debt restructuring. In December 2008 President Bush decided (with obvious reluctance) that, in the face of continued high stress in United States and global financial markets, it was desirable to delay major corporate bankruptcies by General Motors and Chrysler by extending government loans. In those circumstances, kicking the can down the road to a time when resolution through the bankruptcy process would presumably be less systemically dangerous was clearly the right answer. A similar consideration weighs heavily against immediate sovereign debt restructuring for Greece.

Restructure Later?

The details of the IMF-EU plan for official financing for Greece is presented in table 4 of the “Memorandum of Economic and Financial Policies” attached to the Greek Government’s request to the European Union for

financial support (available at www.imf.org). This plan suggests that the issue of sovereign debt rescheduling for Greece will probably need to be revisited before the end of 2011. The plan, which needs to be understood as a planning scenario subject to revision, envisions the following: First, from now through the end of 2011, the financing need of the Greek state is estimated to be about €94 billion. Most of this need will be met by international financial support disbursements of €78 billion, with €25 billion supplied by an assumed rollover of short-term private credits. No rollover of longer-term private credits is assumed in this period. Second, from the start of 2012 through the middle of 2013, the Greek government's financing need is estimated to be about €99 billion. Only €32 billion of official financial support is tentatively scheduled in this period. The remaining financing need is assumed to be met by continuing rollover of short-term debts (€26 billion) and successful rollover of 75 percent of longer-term private credits maturing in 2012, rising to 100 percent in the first half of 2013 (for €43 billion of assumed financing).

This scenario raises the obvious and important question of whether, by the start of 2012, private creditors will be willing to lend, for the long term, substantial sums to the Greek sovereign at reasonable interest rates. In 2011, the Greek economy is projected to still be contracting. Important fiscal measures scheduled in the program for 2012 and 2013, amounting to 4.4 percent of GDP and providing for the move to primary surplus, will not yet have been implemented. Commitments to repay official lenders as preferred creditors will already exceed one-third of Greek GDP and stand in front of obligations to private creditors. In these circumstances it seems implausible to assume that private creditors be confident about extending longer-term credits to the Greek sovereign.

If the Greek authorities fail to implement the program to which they are committed, we shall learn relatively quickly that program is not viable and debt default and/or restructuring is likely soon to ensue. If the program is implemented as promised, we shall need to see in the summer and autumn of 2011 what is happening to yields in the secondary market for longer-term Greek debt. If these yields suggest that longer-term debt rollover is likely to be feasible at reasonable yields consistent with sustainable debt dynamics, then the program as envisioned in table 4 can probably proceed successfully.

However, if the markets signal that sufficient credibility has not been achieved by autumn of next year, then major decisions about revising the program will become necessary. One possibility would be to decide that a sovereign debt restructuring has indeed become necessary. The extent of the necessary restructuring would depend on what the Greek authorities had accomplished and reasonably could be expected to deliver in the future. A modest haircut for private creditors would almost surely not be an option. If restructuring is really needed, it will have to involve a substantial write-down in the present value of the private debt in order to provide reasonable assurance that another restructuring will not soon be needed. The result will likely be a costly mess for Greece and its creditors. Hopefully, however, by late 2011 the adverse spillover effects to the rest of Europe and the world economy will be limited.

The other alternative is to persevere with the program, augmenting its official financing and probably insisting on somewhat greater efforts by the Greek authorities. The additional official financing should not be a serious problem if, as hoped, other euro area members presently perceived to be at some risk regarding fiscal sustainability do not need to draw on the \$1 trillion of already agreed available support. Under this approach private creditors would receive an even larger "bailout," with increased official financing going to pay down longer maturities of Greek government debt. Unfortunately this would contribute both to the "immoral result" of rewarding past poor lending decisions and to the moral hazard from encouraging more such decisions in the future.

In contrast, the Greek government and people would not be receiving a true “bailout.” Massive fiscal adjustment would be required, sufficient to move the primary budget balance from substantial deficit into considerable surplus. Also, so long as the official support that Greece receives is the form of loans that must be repaid with interest that at least compensates official creditors for their own cost of funds, there is no true “bailout” of Greek citizens and the expense of taxpayers in other countries. What about the “moral hazard” of possibly encouraging other countries to follow Greece’s example because the even larger costs of sovereign default have been avoided? Well, watching the experience of Greece in this episode, who would reasonably say—“Let us follow the example of Greece in its great glory”?

Broader Lessons and Implications

Looking again beyond Greece, there are at least two important wider lessons to be drawn from this episode. First, while Greece is the first of the so-called “advanced economies” to seriously confront the risk of sovereign default and restructuring in half a century, it will not necessarily be the last.

Even the United States is not inherently immune. The economic and political power of the United States and the special role of the dollar in world finance provide a degree of protection. More important, the long record of the US government in meeting its financial obligations underlies confidence that this will continue to be the case. US public debt shot up to over 100 percent of GDP during the Second World War and was brought back down to about 30 percent by 1980. It rose again to about 60 percent by the early 1990s, and it was brought down again to around 30 percent by 2000. In the past two years, the US debt to GDP ratio has rebounded to about 60 percent and is surely headed higher. The test ahead will be whether this debt ratio can be contained at 75 to 80 percent of GDP in the next few years and then be brought down to more reasonable levels.

In this regard, stabilizing the federal debt to GDP ratio at around 80 percent, which appears to be the current administration’s objective, will not be enough. Containing rising entitlement spending, as well as providing for some structural rise in federal revenues are essential to put the debt to GDP ratio clearly on a downward course to somewhere below 50 percent. If the challenge is not met, there is a clear danger that the next time the United States has to confront a deep recession and/or major financial crisis, it will not enjoy the unalloyed market confidence that has allowed it to deal so forcefully with the recent crisis.

Finally, Greece is a relatively small country and is surely not “too big to fail” in the sense of enduring a sovereign default and debt restructuring. The international response to aid Greece in its present difficulties, however, is not motivated solely or perhaps primarily by concerns about the costly mess that would engulf Greece in the wake of sovereign default. The greater worry is that in present circumstances a Greek default might trigger a much deeper and wider crisis in Europe and around the world.

In a similar way, in September 2008, Lehman Brothers was not by itself “too big to fail,” and, in my view, the sudden bankruptcy of Lehman Brothers was not the cause of the deep crisis that gripped global financial markets in the autumn of 2008. Lehman’s bankruptcy helped to trigger that crisis, but it was the general weakness and perceived fragility of many financial institutions and other businesses that really made the crisis.

The lesson from this experience and from the present Greek case is that, whatever might trigger it, when a crisis threatens to go systemic, there is no sensible alternative but massive extensions of official financial support and government guarantees of a wide range of credits. Much can and should be done both to limit the risk of future crises and to contain the moral hazard that inevitably results from expectations of government intervention—especially when potential difficulties do not seriously threaten to reach systemic proportions. But centuries of economic history demonstrate that major crises will happen from time to time. It would be a great tragedy if the very forceful efforts that were deployed to contain the recent systemic crisis were paralyzed by too much talk about ending bailouts and “too big to fail,” with the result that we recreated the disastrous situation of the early 1930s.

Notes on Greece and the IMF

Debt Dynamics: The rate of change of the stock of public debt, D , is given by

$dD/dt = P + i D$, where P is the primary deficit and i is the average interest rate on government debt. The rate of change of the debt to nominal GDP ratio is

$d(D/Y)/dt = (P/Y) + (i - g) (D/Y)$, where g is the growth rate of nominal GDP.

Scenarios for Greek Debt Dynamics

Scenario	$i - g$ (percent)	D/Y (percent)	P/Y (percent)	$d(D/Y)/dt$ (percent)
Current, no program	10	120	8	20
IMF Program A	0	150	-5	-5
IMF Program B	3	150	-5	-0.5
IMF Program C	-2	150	-5	-8
Restructure now	5	60	-3	0
Restructure later	1	100	-5	-4

1. The program envisions declines in real GDP of 4 percent in 2010 and 2.5 percent in 2011, before growth resumes at a moderate pace. The price level is assumed to fall, at least this year and next. Nominal GDP is projected at €231 billion in 2010, €224 billion in 2011, €238 billion in 2012, and €235 billion in 2013.

2. The fiscal adjustment program includes consolidation measures amounting cumulatively to 11 percent of GDP by 2013, with 3.9 percent in revenue measures and 7.1 percent in expenditure measures. The (additional) effect of these measures is 2.5 percent of GDP in 2010, 4.1 percent in 2011, 2.4 percent in 2012, and 2.0 percent in 2013. A primary surplus of at least 5 percent of GDP is projected to be maintained after 2013.

3. The program ceiling on the public debt for end 2010 is €342 billion (148 percent of yearly GDP). The “indicative target” for public debt at end 2011 is €365 billion (163 percent of GDP). The implied ceiling for public debt at end 2012 is €381 billion (160 percent of GDP). Thereafter, the debt to GDP ratio is projected to decline.

4. The program also includes structural reforms to boost productivity and competitiveness, address problems in the financial sector, and bolster fiscal adjustment.