Preventing a U.S. Fiscal Crisis: An Experiment in Political Economy

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This paper investigates the potential for a fiscal crisis of European nature in the United States. The paper uses the crisis in Greece as a case study to identify three necessary conditions for a crisis. Based on those conditions and on observed fiscal similarities between Greece and the United States, the paper defines a fiscal crisis as a policy problem and explains why it cannot be properly addressed within the confinements of mainstream methodology in economics.

THE PROBLEM

In my years as a public policy economist I have found that about 80 percent of traditional, scholarly economics research lacks applicability in, or relevance for, economic policy. The problem is not as serious as the number suggests: the purpose behind scholarly research is far from always to inform legislation or political debate. Nevertheless, with the proliferation of technical rigor and mathematical sophistication throughout economics research, the status of the discipline as a social science has weakened. Its production of policy-relevant research has narrowed over time. At the risk of over-generalization, if a topic of inquiry does not lend itself to rigorous technical analysis, it has no place in the mainstream.

The exclusion of problems based on the choice of methodology is having repercussions on economic policy, and the problem manifests itself both at the heights of economic theory and in the context of policy making. At the theoretical level, emphasis on technical rigor tends to prevent practitioners of contemporary economics from properly analyzing fundamental uncertainty and its influence on economic institutions and choices (Keynes, 1936; Alchian, 1950; Davidson, 1978; Okun, 1981; Shackle, 1992; Larson, 2002).

This paper is concentrated on the policy end of the spectrum of economics, but with close reference back to theory. The question at hand, namely the risk of a fiscal crisis in the United States, does not easily lend itself to traditional technical analysis: the rarity of fiscal crises is a major reason in itself, preventing standard statistical analysis based on regularity in time series and cross sections of data.

Furthermore, a fiscal crisis represents a state of economic activity where economic agents make decisions based on criteria that are not present during regular economic conditions. When the economy is stable, and therefore predictable, consumers, entrepreneurs and policy makers act under conditions of confidence. Their default view of the future is regularity and repeatability of successful economic behavior.

In a fiscal crisis, by contrast, the default view is one of uncertainty. Regularity is no longer to be assumed. Rather than extending economic behavior in time, through long-term contracts and spending

commitments, consumers, entrepreneurs and policy makers seek to minimize their exposure to the future. Since traditional quantitative methodology relies on the former kind of economic behavior, its application to a fiscal crisis stands in the way of meaningful contributions from the economics profession.

This paper aims to explain the foundation of a different approach. By drawing on more traditional political economy, its goal is to open for new forms of inquiry into the nature of fiscal crises. Focus is on the United States, primarily out of a sense of urgency. As this paper explains, the U.S. economy fulfills three necessary conditions for a fiscal crisis: 1) sustained, long-term growth in the welfare state; 2) long term slowdown in GDP growth; and 3) universal political commitment to the welfare state. Together they point to notable parallels between the lead-up to the Greek fiscal crisis and the current fiscal and macroeconomic situation in the United States. That the U.S. economy is growing at 2.5-3 percent per year and the labor market is historically competitive, actually reinforce the parallel to Greece. In the decade before the Great Recession, the Greek economy basically kept up with the U.S. economy in terms of GDP growth. Despite that, and despite solid growth in tax revenue, both governments ran chronic budget deficits.

Although there are significant differences between the United States and Greece – the very size of each economy being an obvious one, the system of government another – the similarities are compelling enough to raise the possibility of a Greek-style crisis in the United States. Economists have a major role to play in assessing the risk, the consequences and potential remedies. However, the very nature of the problem suggests that the practitioners of the economics profession must partly, maybe even entirely, put established quantitative methodology aside.

The question about the role of mainstream methodology in an inquiry into a U.S. fiscal crisis is not only motivated by factors inherent to the profession and academic discipline, but also motivated by the unfolding of the Greek crisis itself (Blanchard and Leigh, 2013). This paper is an experiment in an alternative methodological approach: using Greece as a case study, the purpose is to open a dialogue around how the European crisis can inform decision makers in the United States. By the very nature of the problem in focus, this approach fuses two methodological obstacles in the way of established forms of quantitative research: the rarity of the European crisis experience – there are fewer than five of comparable nature in the past 30 years – and the nature of the tentative solutions.

With very few examples of fiscal crises comparable to Greece, there is not enough data available to apply traditional methodology. On the remedy side, the need is for discrete, unique reforms to government spending of a kind that is even more rare than the crises that those reforms would be designed to prevent. As this experiment suggests, the root cause of the Greek crisis was a welfare state with spending promises that were economically unsustainable and politically unbreakable, a combination that is easy to find in the United States. Yet the welfare-state reforms that this paper implies, are unheard of in a comparable context. Therefore, it is incumbent upon the economics profession to address this problem from a fresh methodological perspective.

The choice of Greece deserves an explanation. Other countries have suffered comparable crises, some of them simultaneously with Greece. Spain, Ireland and Portugal are three examples, though Europe was rife with fiscal problems during the years immediately after the crisis (Larson, 2014). Those countries could indeed serve as informative case studies, but from a macroeconomic viewpoint, Greek stands out. Its combination of strong growth and sustained deficits for at least two decades prior to the crisis is strongly similar to the American experience.

Historically, the Danish and Swedish crises in, respectively, the late 1980s and early 1990s could be informative. However, the Scandinavian countries did not experience sustained deficits of the kind the United States has done. Fiscal policy prior to their crises was generally focused on budget balancing, especially in Sweden. Furthermore, Greece was part of a large currency area that bought their government considerable credit in terms of deficit monetization. While this did not happen prior to the crisis, the ECB's equivalent to the Federal Reserve's Quantitative Easing provided a credit line for the Greek government that resembles what the Fed has done for the U.S. government. During the Danish and Swedish crises, both countries operated with their own, national currencies, and neither the Danish

National Bank nor the Swedish Riksbank intervened in the treasury bond market in the way that the ECB did once the Greek crisis broke out.

Monetary intervention is an important component of the Greek crisis, resembling the role that the Federal Reserve could be expected to take, should a U.S. fiscal crisis become reality.

WHAT IS A FISCAL CRISIS?

First and foremost, it is notable that there is no established definition of a "fiscal crisis". The term itself is used frequently, but contextually it appears to be taken for granted. This is the case regardless of its use in a systemic context (Block, 1981; Scharpf, 2011), with focus on individual countries (Gill, 2000; Bergin, 2011; Raudla and Kattel, 2011) or in strictly technical analysis (Combes et al, 2014).

Perlman (2009) comes close to offering an explicit definition, distinguishing between "fiscal stress", meaning budget deficits while tax revenue is still growing, and "fiscal distress" where a deficit is combined with shrinking tax revenue. However, the use of the term "(di-)stress" only kicks the can down the road by begging the question why a deficit is "stress".

It should also be noted that Perlman inaccurately refers to a situation with declining revenue as one where "revenues actually become negative". This is impossible unless government actually pays taxpayers instead of the other way around. His point is conveyed nevertheless, despite this logical somersault.

Budget deficits themselves are not immediately problematic, even if sustained over a longer period of time. The problem with sustained deficits is instead in the gradually accumulated debt: at a certain point – the actual circumstances differing from country to country – the cost of honoring the debt becomes a major item in the government budget.

This point could be thought of as a fiscal breaking point, at which a deficit that prior to then was not considered a problem, becomes the focus of urgent attention of investors in the sovereign debt market. This breaking point would mark the beginning of a fiscal crisis, but it does not in itself define the crisis. That definition must reflect the fact that once the breaking point is reached, pressure from the sovereign debt market places external restrictions on fiscal policy. These restrictions come in two different forms:

1. Rising interest rates reflect rapidly eroding confidence in the country's treasury bonds. Demand for deficit reduction measures force the legislature to ignore long-term economic policy goals. The short-term goal of immediately reducing the budget deficit takes priority.
2. The larger the deficit reduction and the shorter the time for implementation, the more favorably the measures will be received by the debt market.

The second form of restriction is of particular importance and appears to have attracted even less attention in the literature than the first. When governments are forced to respond to a fiscal crisis, their preferred fiscal-policy regime, often called "austerity", is short-sighted in nature as specified earlier. Concern is no longer with the regularity of long-term economic activity, but with minimizing exposure to uncertainty over the short term.

A shift in policy making from long-term regularity to short-term irregularity leads policy makers to ignore the long-term consequences of deficit reduction policies. As again exemplified by the Greek experience, even economists seeking to inform policy makers can be tripped up by the urgency of the situation (Blanchard and Leigh 2013).

Further tightening the time constraint in a fiscal crisis is the delicate political nature of an austerity response. Politicians in both Europe and America are often ideologically or strategically committed to the spending programs that define a modern welfare state. Therefore, they are sensitive to adverse public reactions to spending cuts in major entitlement programs.

Political and ideological considerations are not ingredients of proper analysis in economics. Yet they cannot be ignored as part of an explanation of why fiscal crises occur and escalate. This further complicates the analysis of the European crisis, suggesting that economists may benefit from reconnecting with the political-economy roots of their discipline.

Non-regular Decision Making: A Theoretical Background

Established theory can relatively well account for the macroeconomic effects of austerity, primarily by means of the traditional Keynesian multiplier. However, there is no consensus in the literature about what happens at the microeconomic level during and after an austerity episode. Walrasian microeconomics is implicitly the base for theory where regularity and repetition of successful behavior are the norm. Its methodological default is to assume that economic decision makers enjoy a maximum of confidence based on perfect foresight. For this reason, Walrasian theory is inept at providing an explanation of decision making under uncertainty.

An alternative explanation replaces confidence with uncertainty as the decision-making default. In a fiscal crisis, cumulatively adverse economic events inject uncertainty into the economy. When uncertainty replaces confidence as the default for information about the future, a fiscal crisis is at hand. The shift from confidence to uncertainty harms the fabric of economic stability, a process that is compounded by fiscal austerity.

Keynes explained the practical meaning of this shift:

> An act of individual saving means – so to speak – a decision not to have dinner to-day. But it does not necessitate a decision to have dinner or to buy a pair of boots a week hence or a year hence or to consume any specified thing at any specified date. Thus it depresses the business of preparing to-day's dinner without stimulating the business of making ready for some future act of consumption. It is not a substitution of future consumption-demand for present consumption-demand, - it is a net diminution of such demand. Moreover, the expectation of future consumption is so largely based on current experience of present consumption that a reduction in the latter is likely to depress the former, with the result that the act of saving will not merely depress the price of consumption-good and leave the marginal efficiency of existing capital unaffected, but may actually tend to depress the latter also. In this event it may reduce present investment-demand as well as present consumption-demand. (Keynes, 1936, ch. 16)

The first two sentences replace perfect foresight with uncertainty as the decision-maker's default for forming expectations about the future. Under confidence, a change for the worse in economic plans "today" is followed by a change for the better in economic plans tomorrow. By contrast, under uncertainty, the second decision is cancelled. There is no reciprocity between economic plans for today and for tomorrow. This leaves a vacuum where economic activity would otherwise take place.

In the aggregate, this vacuum has substantial consequences for the economy. With the third and fourth sentences, Keynes explains how the economy operates differently based on his non-Walrasian foundation. Under Walrasian theory, the presumption is that when macroeconomic activity declines, it will also increase again. The downturn causes a future upturn.

Under uncertainty, there is no such multiplier symmetry. When the economy declines, under default uncertainty, it will not recover until economic decision makers have an explicit reason to shift decision default to confidence. While the decline in economic activity following the decision "not to have dinner today" eventually ebbs out, a future rise in economic activity is strictly a *non-sequitur*.

This cut between the present and the future becomes a methodological problem in the analysis of fiscal crises, and possibly explains why the economics literature is thin on analysis of its nature and consequences. This, in turn, can explain inadequate, even erroneous perception of the problem among policy makers.

Shackle observes that economic theory based on uncertainty does not conveniently lend itself to traditional quantitative analysis. He notes that tomorrow

> is to us unknown, yet what is most peculiar to men is their concern with imagining it, seeking to originate it in the image of their own ambitions. Economic theory is exceedingly shy of this conception. The source of its distaste for *expectation* is not far to

> seek. Expectation, time itself, is alien to reason, except in the perfect, void freedom of pure mathematics, where time is merely an extensive variable, not the real, enigmatic inarguable reality (Shackle, 2009, Preface)

Prudent inquiry into economic behavior under uncertainty begins, Shackle notes, with asking how we know what our circumstances are in the first place. Expectations are now assigned a different purpose than under Walrasian conditions: they are no longer about outcomes under given circumstances, but about building those circumstances. They are conveyors of building material for the construction of circumstances within which we can make as rational a choice as possible (Shackle 2009, p. 155).

The question, then, is where that building material comes from. Consumers and entrepreneurs replace confidence with uncertainty because the building material they had in place for their expectations, proved to be inadequate for the purpose. The reliability of tax rates, entitlement spending, cost of living or doing business, and overall macroeconomic activity, form the building material for confidence that today's successful economic behavior can be repeated tomorrow. When reliability has been shattered, economic decision makers need new material.

Alchian (1950) explains where this material comes from. He also distinguishes between:

- The "inside", closed economic system, based on and confined within the boundaries of the Walrasian mechanical system; the economic environment is defined by perfect foresight and uncertainty is absent; and
- The "outside", or open economic system where, as Alchian explains, "incomplete information and uncertain foresight" are permitted as axioms of economic behavior.

In order to explain the open economic system, Alchian needs to replace the motives of individual action as stipulated in the Walrasian system with motives that fit a world of uncertainty. The closed, Walrasian system "relies heavily on decisions made by rational units customarily assumed to be seeking perfectly optimal situations" (Alchian, 1950, pp. 211-212). While real-world economic behavior cannot be subjected to the foreseeable outcomes needed for optimal decisions, they can be brought in proximity thereof when the future is confidently predictable based on the past and the present.

Under uncertainty, predictability does not exist. Therefore, decision makers must make possible future outcomes predictable. Active measures by individuals can make the uncertain future predictable. The process by means of which the uncertain becomes probable is what Shackle refers to as "the exercise of imaginative conjecture", better known as the formation of expectations.

This is the purpose of expectations under uncertainty: to build predictable circumstances in an otherwise uncertain world. Expectations form reference points in reality by means of which we can navigate with increasing logic and expanding reason. The more reference points we can use, the more likely it becomes that we will be successful in our economic actions.

The process by which expectations are formed, and reference points created, is by default not guaranteed to be successful. Some expectations successfully lead economic agents to a satisfied need, while others leave needs unsatisfied.

It is not clear *a priori* what method for forming expectations will be successful. Therefore, economic behavior under uncertainty does not lend itself to economic methodology that is based on repetitive behavior. Before circumstances of possible success – reference points for the building of confidence – have been created, the only rationalized pattern that can be applied to the formation of expectations is one that ranks the possible outcomes from best to worst, or from most desirable to least desirable. If there is no way to tell the probability of an outcome, this dichotomy offers a method that, to the extent possible, protects the decision maker against disastrous consequences.

In this case, doing nothing may invariably prove to be better than doing anything. Committing no economic resources may prove more profitable than committing any. Hence Keynes's point about the lack of causality between a negative economic decision today and economic activity tomorrow.

The Unfolding of a Fiscal Crisis

With this theoretical background in mind, it is easier to understand the nature and consequences of a fiscal crisis. It is also understandable why such a crisis is, fundamentally, a policy problem. In a modern welfare-state economy, taxation and government spending, and related regulations and predictability patterns, heavily influence macroeconomic activity. The prevention of or solution to a fiscal crisis must therefore integrate policy considerations with economic analysis. The economic analysis, in turn, must begin with the recognition that every crisis is statistically rare and institutionally unique, with analytical methods chosen accordingly.

The Greek crisis is a good example of a this. Greece became global news in 2010 when the European Union, the European Central Bank and the International Monetary Fund – colloquially known as the "Troika" – imposed its first austerity package on Greece. In return for tough fiscal measures designed to quickly bring down the deficit, the Greek government was offered help with deficit financing.

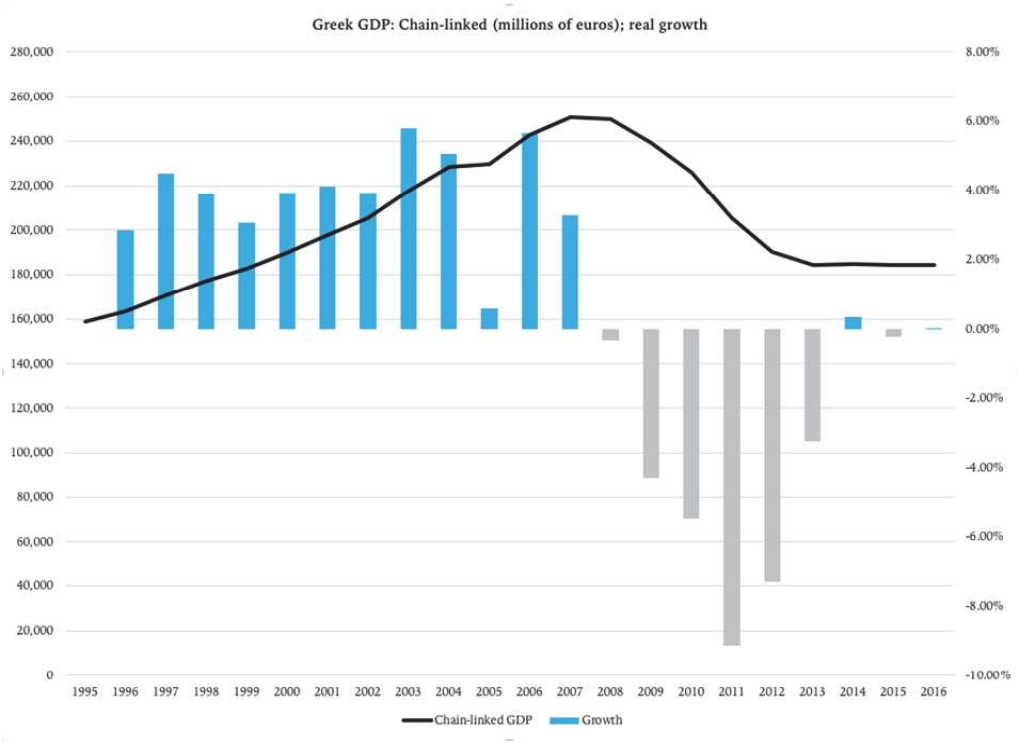
A quick statistical examination of the Greek crisis at the time of the first austerity package confirms that this was a policy crisis in need of economic information. In 2010, the Greek budget deficit amounted to almost 13 percent of GDP; when the Troika imposed the first austerity package on the country, the implication was that it would close the budget gap.[1] However, it was never explained how an economy would absorb such drastic austerity measures and at the same time bring about a balanced budget.

Economic consequences of fiscal policy are long-term in nature, thus taking the backseat to upfront policy choices in response to debt-market confidence concerns. Yet the two cannot be isolated from each other; it cannot be possible for a legislature to make decisions in response to a fiscal crisis without due consideration of the consequences of raising taxes and cutting spending at a total fiscal value of 13 percent of GDP.

Subsequently, the loss of economic activity in the wake of austerity should have informed the consideration of new austerity measures. Since 2010, the Troika has subjected Greece to approximately one dozen austerity packages (the exact number varying depending on how one technically separates the packages) apparently without taking into account the macroeconomic trend during those years. This point is especially important given the country's macroeconomic performance before the crisis:

- In 2004-2007, the years immediately preceding the crisis, the Greek economy grew by more than 3.5 percent per year, on average
- In 2008-2011, the first years of the crisis, yearly growth averaged -4.8 percent:

FIGURE 1
GREEK GDP: REAL GROWTH, MILLIONS OF EUROS



Source: Eurostat

The crisis took many other forms, as reported by the following numbers from Eurostat:

- From 2008 to 2013, one in four Greek workers aged 20-64 lost their jobs;
- During the same period, 55 percent of all young employed persons, aged 15-24, lost their jobs;
- In 2013, sixty (60) percent of all young Greeks were unemployed, with the rate subsequently stabilizing around 50 percent;
- In 2013, less than half the Greek population had a job;
- From 2007 to 2015, gross fixed capital formation fell by 66.4 percent in current prices;
- In six years, 2011-2017, the average Greek family lost 38 cents of every euro of income, in current prices;
- From 2009 to 2016, government spending declined by more than one fifth; during the same period of time, taxes increased from 39 percent of GDP to 50 percent;
- Every year from 2008 to 2013, the consolidated budget deficit exceeded eight percent of GDP in current prices.

By means of policy choice, the Greek government – and especially the Troika – made the last variable the focal point of the crisis.

It took six years before the budget balanced. When it did in 2016, spending had been reduced by one third in current prices and taxes had gone up by 11 percentage points of GDP.

THE PRICE OF AUSTERITY[2]

In June 2011, the Greek parliament approved yet another package. In addition to one-time revenue infusions from sales of government property, pensions were again cut while taxes went up. An extra tax on higher incomes and a new property tax were combined with a construction-industry specific VAT.

Another package in October the same year raised taxes in multiple steps, one o f them being a "solidarity levy" on personal income. The package also included a cut of the standard income-tax deduction by more than half (from 12,000 euros to 5,000 euros), a substantial increase in the VAT for restaurants, a one-third hike in excise taxes on fuel, cigarettes and alcohol, to mention a few. These tax hikes were combined with spending cuts in government employee wages (which were reduced by a sweeping 20 percent), the national defense budget, health care, income security, pensions, local governments and education (which led to the closing or merger of almost 2,000 schools).

The choice to carry on with austerity policies is called into question as the Troika again acknowledged that their policies had not accomplished anything, not even stopped the growth in the Greek government debt. In fact, by October 2011 the Troika warned that the Greek economy was in a substantial decline and would contract by 15% in the three years from 2009 to 2012. Yet the Troika and the Greek government pressed on. In November 2011, Prime Minister Papandreou resigned after a failed attempt to resist more austerity. His replacement, Lucas Papademos, an economist and former vice president of the ECB, carried on with austerity.

As yet another example of the policy content of a fiscal crisis, the Troika sought universal support for austerity in the form of commitment letters from all "political chiefs". By March 2012, new cuts in pensions, health care and defense spending were accompanied by large layoffs of government workers. The country's minimum wage was cut in an effort to slow the rise in unemployment.

By October 2012, the political and policy reality of the crisis was inextricably tied to the country's economic reality, and vice versa. According to the news site Ekathimerini.com, the Troika wanted the government to frontload its austerity measures for fears that the Greek economy would not perform as well as they had expected. They turned out to be correct: in 2013, the crisis had driven one in ten Greeks – almost one million people – into living conditions where their income, including government help, was insufficient to buy even the most basic necessities (Matsaganis, 2013). The number of poor in Greece increased dramatically: Table 1 shows the poverty threshold for a family of two adults with two children, the number of poor under that threshold, and the poverty rate:

TABLE 1
POVERTY IN GREECE

	2004	2010	2016
Poverty threshold, euros	12,851	17,016	10,928
People in poverty	2,851,000	2,998,000	2,959,000
Poverty rate	25.8%	28.5%	27.8%

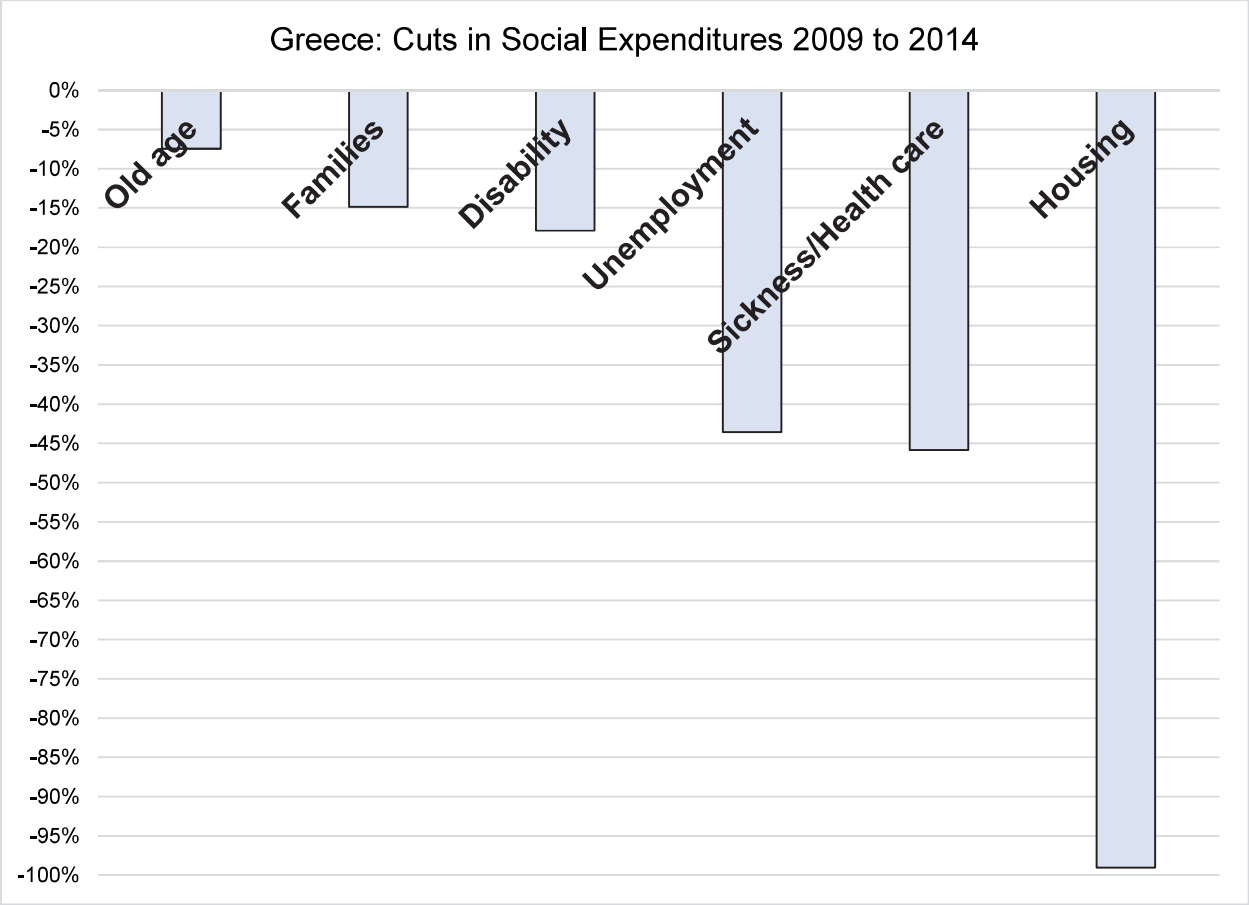
Source: Eurostat

From 2004 to 2010, the poverty threshold – which is 60 percent of average income – increased by 32.4 percent, yet the number of poor only increased by five percent. During this period of time, life got better in Greece, even for the poor, as their population on average earned more money and thus had more room in their everyday finances. In 2016, after the Great Recession and six years of austerity, almost the exact same number of Greeks were still poor. However, they were now crammed into an income bracket that was 36 percent narrower than in 2010.

In 2016 the average income for a family of four was 18,213 euros, only seven percent higher than the poverty threshold in 2010.

While poverty was increasing dramatically, austerity took a big bite out of social expenditures:

FIGURE 2
SOCIAL EXPENDITURES IN GREECE



Source: Eurostat

Some of the hardest-hitting reductions took place in unemployment benefits. From 2009 to 2014, total spending declined from 3.4 billion euros to 1.9 billion euros, in current prices. While not the largest cuts percentage-wise, the impact on an individual level was substantial, with a decline from 7,000 to 1,500 euros per year.

Tax-paid health care, a staple of the European welfare state, also took a hard beating. From 2009-2014, government reduced health care spending by 46 percent. Table 2 explains how government walked away from its promises to provide benefits practically across the entire health-care spectrum:

TABLE 2
CUTS IN GREEK HEALTH CARE SPENDING

	Spending cuts 2009-14
Dentists	-58.5%
Specialized hospitals	-43.2%
Ambulatory care	-41.3%
Retail medicine	-37.9%
General hospitals	-36.9%
Pharmacies	-36.3%
Medical, diagnostic laboratories	-26.8%
Ancillary svcs	-23.3%
Mental health facilities	-18.4%

Source: Eurostat

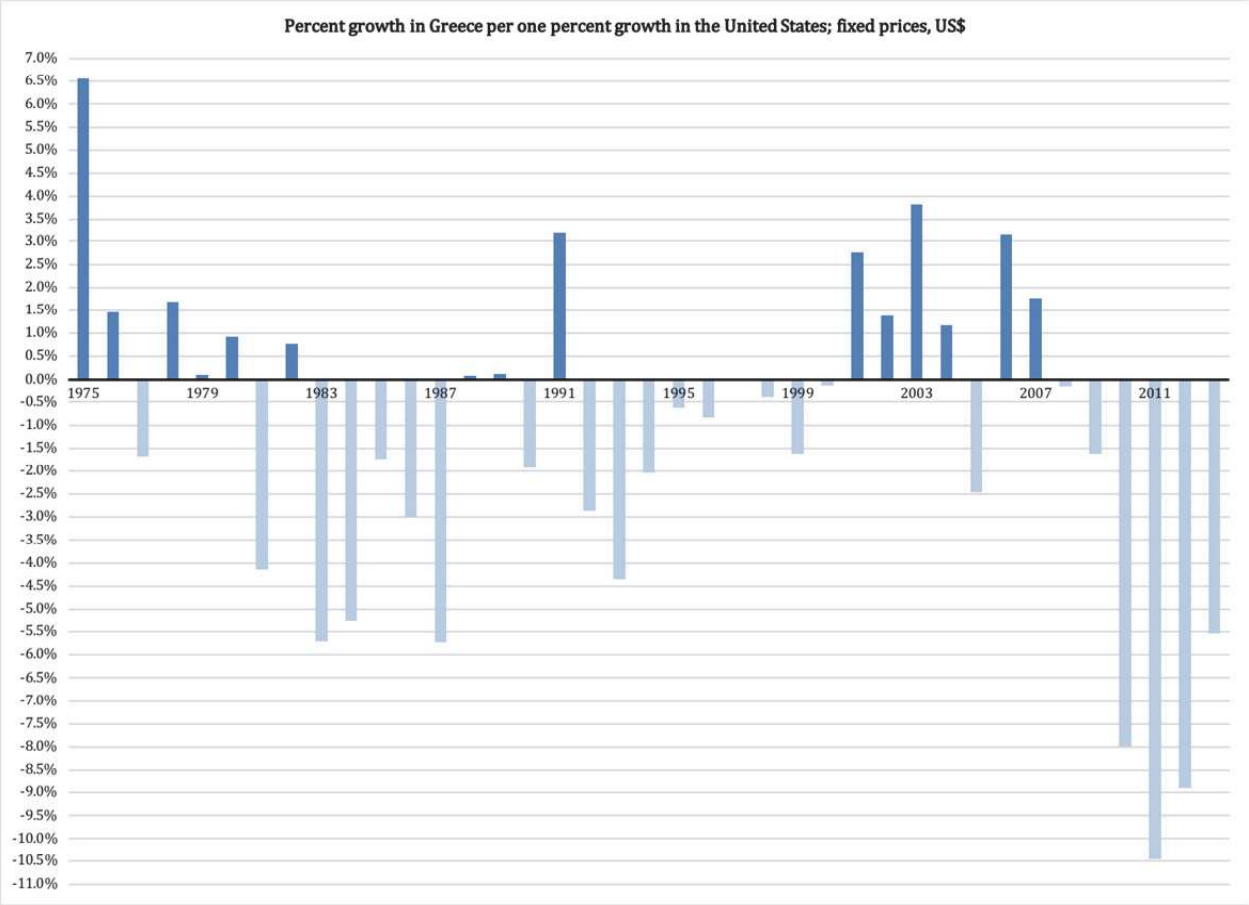
All these spending cuts represent partial or full-scale defaults on promises that the welfare state has made to its citizenry. The decision to continue policies that defaulted welfare-state promises to the citizenry, was deliberate and made in plain view of macroeconomic data explaining the price the country's economy was paying. The Troika knew that its policies were not working; the Greek government had access to the same data, making the continuation of austerity a deliberate policy choice. This suggests that the political alternative cost to continuing austerity was higher than the price the country was paying.

Would U.S. Congress Respond Differently to a Fiscal Crisis?

The answer to this question depends less on the actual economic circumstances, which are similar enough to make likely a fiscal crisis in the United States. Policy choices are more important, although a thorough answer will depend on the extent to which Congress and the President would make the same alternative-cost calculations as the Troika and the Greek government did.

As mentioned earlier, the Greek economy performed well before the Great Recession, keeping up and occasionally outgrowing the U.S. economy:

FIGURE 3
GROWTH IN THE GREEK AND U.S. ECONOMIES



Source: United Nations National Accounts Database

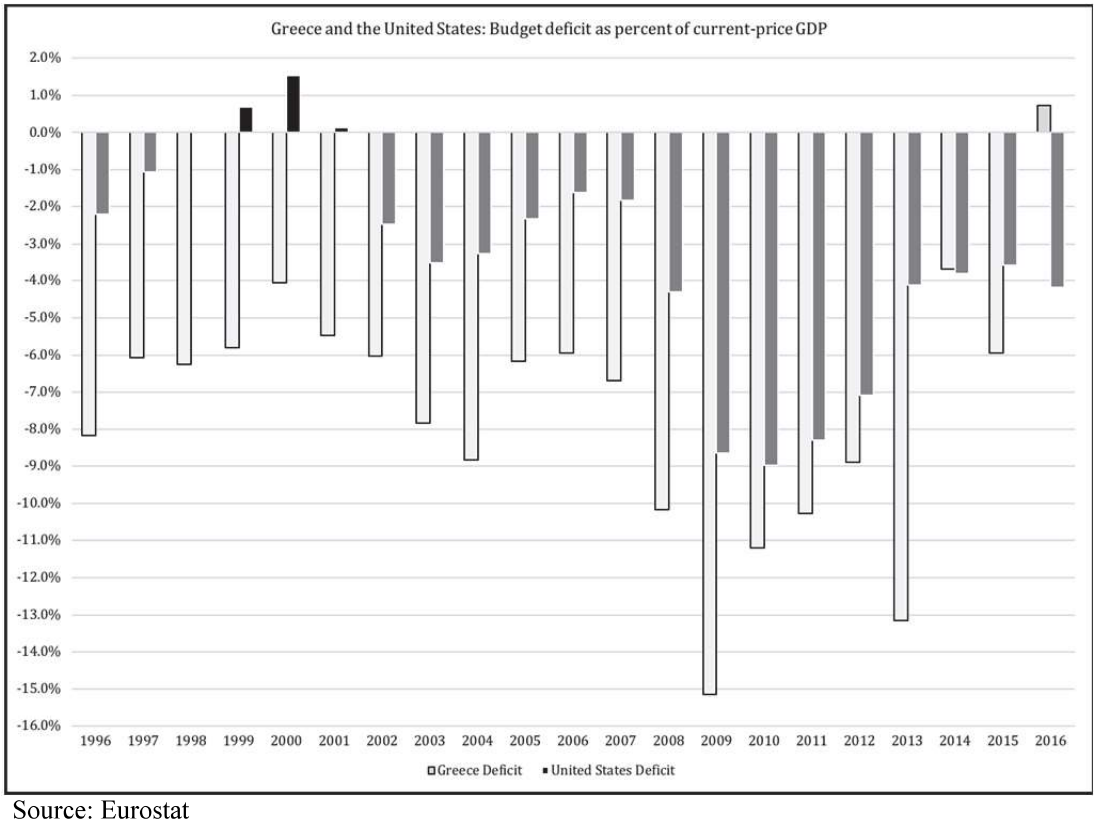
In both countries, the economy grew in the 2-3 percent range as recently as in the 2000s; in fact, the Greek economy occasionally outperformed its American counterpart.

As a result of the strong growth, both countries saw generous growth in tax revenue:

- In Greece, tax revenue grew at seven percent per year, doubling annual revenue from 1996 to 2006;
- In the United States, federal tax revenue collections expanded by 5.8 percent per year on average from 1988 to 2007.

In 2005 and 2006, revenue growth reached 14.5 percent and 11.8 percent, respectively. Despite these numbers, both countries saw sustained budget deficits:

FIGURE 4
BUDGET DEFICITS, GREECE AND THE UNITED STATES

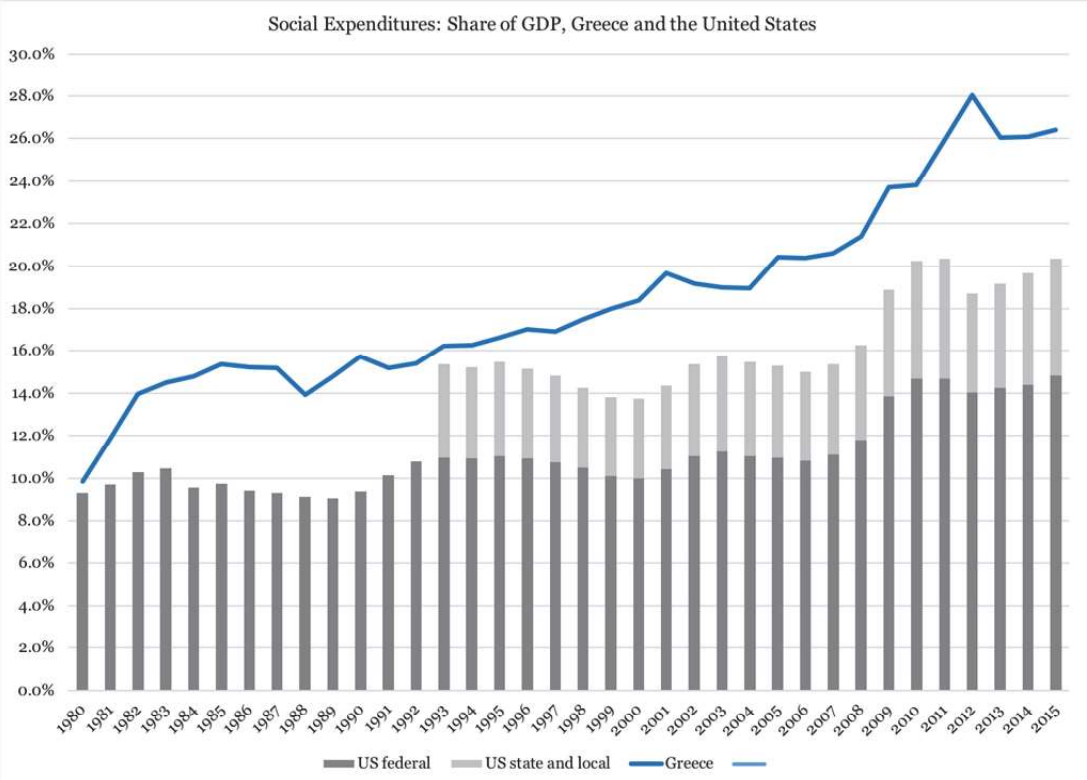


Source: Eurostat

The combination of strong GDP growth, fast-paced increases in tax revenue collections and sustained deficits inevitably points the finger of blame for those deficits at the spending side of the budget. Like Greece, the United States is a highly developed egalitarian welfare state (Larson 2018); there are fewer differences than similarities between the two countries. Both welfare states offer expansive social-expenditure entitlement programs aimed at redistributing income and consumption between citizens.

Furthermore, these programs have grown substantially over the years, both in actual appropriations and as share of GDP (disaggregated data for state and local government spending is only available for a limited period of time):

FIGURE 5
SOCIAL EXPENDITURE, SHARE OF GDP, GREECE AND THE UNITED STATES



Sources: Eurostat (Greece); Office of Management and Budget (U.S. federal); Census Bureau (U.S. State and Local)

When government spending grows over time as share of GDP, inevitably there is a need for steadily higher taxes. It does not matter how fast GDP is growing, nor does it matter how fast tax revenue grows with that GDP growth. An increase in government spending as share of GDP does, by definition, create a need for higher taxes; unless taxes are increased, government will use deficits as a permanent, supplementary arm for funding its spending.

At some point an economy reaches it's the cap for how high taxes can be on the private sector without losses to GDP growth. There is a fair amount of evidence suggesting that when total taxation exceeds 40 percent of GDP there is a permanent decline in growth (Afonso, et al, 2005; Gill and Raiser, 2012; Larson, 2014, chapter 3; Larson, 2018, pp. 80-82). Therefore, an expansion of the welfare state over time inevitably leads to slower growth unless the government chooses to use budget deficits as a permanent third arm of funding, in addition to taxes and user fees.

Both Greece and the United States are elaborate welfare states, and both governments have chosen to rely in part on deficits to pay for welfare-state spending. In doing so, they have postponed the decline in growth that kicks in at the 40-percent threshold. In the Greek case, that threshold was passed during the austerity years when taxes increased from 39 percent of GDP to 50 percent. The country's slow economic growth, even recently, could at least in part be caused by this increase, thus presenting U.S. lawmakers with evidence of what the consequences would be if they chose to follow the same policy path as Greece did.

Data on social expenditure suggest another important institutional similarity between the two countries. Government provides for retirement and poverty relief, gives cash and in-kind benefits to families with lower incomes, and funds entitlement spending with taxes that disproportionately target

higher incomes. Health care is under government hands to a larger extent in Greece than in the United States, but over the years the differences have become smaller.

With regard to government spending, the main difference is in the growth trend. Greek expenditures have grown continuously, while U.S. spending has jumped with recessions. There is a visible jump in federal social expenditures around 1980, in the wake of the second oil-price recession of the 1970s.

During the Reagan presidency federal social expenditures dipped below ten percent of current-price GDP. With the recession in the early 1990s that ratio once again climbed above ten percent and has never been below that mark again. Not even during the strong economy of the late 1990s did the ratio fall to Reagan-era levels.

The Millennium and Great Recessions bumped up federal social expenditures ratio in two increments, above 14 percent of GDP. There is even a hint of a rise in the past couple of years, right as the economy was recovering from the Obama-era recession and stagnation.

Institutionally, the American welfare state differs from most of its European peers in one important way: it splits its spending between three levels of government. States and local governments are responsible for social expenditures equal to approximately five percent of GDP, money that must be added to the federal outlays in order to give an accurate picture of just how big the American welfare state is. When added together, federal and state social expenditures are now at 20 percent of GDP; the U.S. levels of spending are not at contemporary Greek levels. However, it is worth noting that when the Great Recession began in 2008, Greek social expenditures were just a smidge above 20 percent of GDP.

IS A U.S. FISCAL CRISIS PREVENTABLE?

The United States meets three necessary conditions for a fiscal crisis:

Condition 1: Sustained, long-term growth in the welfare state. In addition to the aforementioned growth in social expenditures as share of GDP, the American people has become more dependent on entitlements – transfers – to make ends meet. In the 1950s, transfers accounted for just over five percent of U.S. personal income. It passed 10 percent in 1974 and reached 15.6 percent in 2008, just before the Great Recession. In the ten years since the start of the recession, Bureau of Economic Analysis data shows that it has continued to grow: as of 2018 it is well past 17 percent.

Condition 2: Long-term slowdown in growth. To recap: we have not seen five percent growth in a single calendar year since 1984; the last time we saw four percent growth was in 2000 and 2005 was the last year with three percent growth.

Condition 3: Universal commitment to the welfare state. The American welfare state enjoys steadfast political support across the political spectrum (Larson, 2018). The system of redistributive entitlement programs that was created with the War on Poverty (starting in 1964) has never been challenged, but has instead been allowed to continue to grow, regardless of the political affiliation of the president or Congressional majorities.

The U.S. fulfillment of the third condition is further reinforced by the Trump tax reform, which reinforced the redistributive nature of the federal income tax code (Larson, 2018a).

To successfully prevent a fiscal crisis, a government not only needs proper economic analysis, but also needs it in a timely fashion. The predictive powers of economists and other analysts play a decisive role in the successful timing of preventative policies. Unfortunately, the record from the Greek crisis is not encouraging on this point, reinforcing the need for the economics profession to rethink its participation in public policy.

This is not a hindsight criticism of the economics profession, merely an observation of an important failure by a profession that aspires to add value in the form of forecasting (Ormerod 2010). Any

suggestion that the crisis was predictable (Pollin and Villieu, 2014) should back this up analytically, thus contributing to a predictive method for future crises.

Fiscal policy timing has been covered in the literature since at least the 1950s, when Keynesian macroeconomic theory had worked its way into fiscal policy practice. However, this has mostly been with focus on business-cycle stabilization. Very little attention has been given to the timing of responses to a fiscal crisis, during which – as explained earlier – the legislative reaction time is cut short by the debt market's eroding confidence in a nation's treasury bonds.

Despite the apparent mutual exclusion between stabilization and deficit reduction, the literature on timing of the former can inform a discussion about timing of the latter. The policy instruments are the same: taxation and government spending. Furthermore, spending is also divided into two categories, automatic stabilizers and discretionary outlays, affecting the ability of government to design appropriate responses within short periods of time.

The only theoretical circumstance under which the timing of fiscal policy could be irrelevant, either for stabilization or deficit reduction, is when rational expectations apply (Currie, 1985), though even in absence of uncertainty about the choice of policy strategy, lags will still slow down policy reaction (Gramlich, 1971). One reason for these lags the complex institutional structure under which fiscal policy is conducted. Poole (1962) explains that anti-recession measures are hampered by "the details of legislation and the technical circumstances of widely differing programs" which "insure that delays will occur."

In a manner of speaking, the complexity of government spending has led to a general clumsiness of the legislative apparatus (Kenen, 1969). Another complicating factor is the difference between discretionary and permanent spending, limiting the scope for immediate policy reaction to the latter (Dodge, 2002).

The scarcity of literature on timing of budget-balancing measures is likely attributable to the prevalence of Keynesian theory in macroeconomics in general and macroeconomic modeling in particular. Models have been developed based on the historic practice of fiscal policy, which implies what policy makers can be expected to need in the future. However, even in the context of stabilization policy, timing is not an easy matter to address. Discussing timing with regard to business-cycle stabilization, Taylor (2000) notes "disagreement among researchers about the size … timing, and the economic mechanism through which a fiscal stimulus or contraction occurs". This view is generally supported by Burnside et al (2000). Blanchard and Perotti (2002) note some inconsistency between theory and modeling, in part with reference to the timing issue. There is also more attention given to medium-to-long term policy measures accurate (Libich and Stehlik, 2012) as opposed to short-term measures, which represent the window for fiscal policy responses to either stabilization or budget-balancing problems.

The specific issue of budget balancing is not addressed in the literature on fiscal policy timing. Wald (1957) tangents the issue in a discussion about unintended consequences of budget surpluses. The paydown of debt that comes with a surplus can create inflationary and destabilizing growth after the recovery from a recession. This, however, is a problem that arises after a recession is over, and again due to government trying to time counter-cyclical policy measures.

Wald's point, while theoretically astute and relevant in a mid-20th century government finance context, is also rendered irrelevant by the supply of cheap money in the 21st century. This supply, in turn, is a direct consequence of central-bank attempts to ease the cost of government debt. It is not related to the timing of budget-balancing measures during a recession.

ENDNOTES

1. Please see: https://www.theguardian.com/business/2010/jan/28/greece-papandreou-eurozone
2. For news sources related to this section, please see:
   http://www.bbc.com/news/business-13940431
   http://www.protothema.gr/news-in-english/article/153442/eu-give-greece-the-sixth-tranche/
   https://www.theguardian.com/business/blog/2011/oct/20/eu-crisis-emergency-talks#block-27
   https://www.theguardian.com/world/2011/nov/10/lucas-papademos-greece-interim-coalition
   https://euobserver.com/economic/114344
   http://www.nytimes.com/2012/01/18/world/europe/papademos-says-greece-could-force-creditors-to-take-losses.html
   http://www.sueddeutsche.de/politik/schuldenkrise-griechisches-parlament-billigt-sparprogramm-1.1282416
   http://www.ekathimerini.com/145123/article/ekathimerini/news/troika-wants-faster-cuts

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