Austerity

Causes, Consequences and Remedies

Sven R Larson, Ph.D.
Senior Fellow in Economics
Wyoming Liberty Group
Twitter Generation Disclaimer:

The author is not responsible for misunderstandings based on the reader’s attempt to comprehend this paper within the time it takes to read a tweet.
Why Austerity Matters: The Policy Background

America’s current deficit crisis is not a crisis of simple, excessive spending. It is a crisis of a deeper, structural nature. Our federal government has made spending promises that put spending on a trajectory of growth that exceeds the trajectory of growth of tax revenues. The mechanisms that grow spending are built in to the entitlement programs and “bundled” together in habitual budgeting measures such as baseline spending increases.

The spending programs that drive our deficit are almost without exception parts of the welfare state. Therefore, it is appropriate to label our crisis a welfare-state crisis. We share this crisis with Europe, where the welfare states are larger and even more stifling on productive economic activity than here. But this also means that we share the same crisis trend as Europe: if we try to save the welfare state, we will inevitably share the same destructive austerity experience that Europe is currently going through.

We will, in plain English, follow in the Greek footsteps. Greece was the first country to go into full austerity mode, a state of affairs best described as fiscal panic. The government is wrestling with a budget deficit caused by spending programs that Greek taxpayers cannot pay for. In response to the deficit, the Greek government has repeatedly cut spending and raised taxes. Each new round of policy measures is executed with increasing urgency. Government gives itself less and less time to devise a long-term proactive strategy to restore economic growth and reduce unemployment and the deficit.

Recently Spain has fallen to the same level as Greece and is now wrestling with similar austerity measures. Neither country is showing signs of improvement, either in their government finances or their GDP. On the contrary, recent data from Eurostat, the EU statistics agency, indicate that several European countries, led by Greece and Spain, are in fact worse off now than before they implemented the latest rounds of austerity measures a year ago.

America is rapidly catching up with Europe. Our federal deficit is unsustainable and the lack of Congressional action over the past couple of years has only raised the urgency level of the problem. While it is not possible to use one country as a complete template for how another country will evolve economically, it is nevertheless important to recognize that America shares its macroeconomic system with debt-ridden countries like Greece and Spain. The mere size of our economy gives us a larger buffer zone, so to speak, against the stress caused by government deficits and debt, but that only gives Congress more time to deal with the problem before we have to resort to austerity. Our “cushion” does not give us a pass on solving our deficit problem.

It is also worth pointing out that Greece and Spain are not as small as their GDP might indicate. They are both part of the euro, the dollar’s closest currency competitor. When the euro was created there was a widespread consensus among economists that by its very size this new currency would provide a credit shield of unshakeable proportions for small EU states. Needless to say, the debt crisis in southern Europe over the past couple of years has proven that notion wrong.

America still has options on how to handle its deficit, but doing nothing is not one of them. Remarkably, this is the strategy suggested by, e.g., the Democrats in Congress in their response to the 2013 Republican budget. As this paper shows, doing nothing is the safest way for America to end up in the austerity trap that has forced Greece and Spain into what is best characterized as fiscal panic.

Austerity Does Not Work

The welfare state crisis in Greece, Spain, Portugal and Italy is not new. In many ways, their situation resembles the one that Denmark found itself in toward the end of the ’80s. Sweden went through a tough austerity crisis in the ’90s. In these earlier cases the welfare states were “saved” by unrelated events in the economy. Sweden relied on a timely surge in their exports that brought in enough tax revenues to help
government fund its welfare state. In Denmark, a newly elected government put together a policy strategy based on one of the policy options outlines in the Remedy section of this paper.

It is worth noting that both Sweden and Denmark are currently, again, fighting to save their welfare states. Sweden has once again resorted to the same type of austerity policies that were applied during the 1990s crisis, though on a smaller scale. Denmark has implemented “efficiency” reforms throughout its public sector to allow for modest downsizing of its otherwise very large government sector.

In the following section we will analyze:

- Why austerity policies often become the inevitable “last resort” effort to save big government; and
- Why those policies not solve the problems they are supposed to solve.

The analysis is as relevant to Greece and Spain as it is to the United States. Before we get to the analysis, though, let us look at the situation in the European countries currently fighting deficits with austerity.

On March 1 a news story from breitbart.com reported that the Greek parliament had adopted yet another austerity package:

The Greek parliament early Thursday approved a bill to cut health service costs after unions staged walkouts as part of Europe-wide demonstrations against austerity measures. … The bill, passed under an emergency procedure as parliament was surrounded by police, lays down a cut in pharmaceutical expenses through the development of computerised prescriptions and the use of generic medicines. It also limits the public health budget … The EU and International Monetary Fund made the passing of the text and other measures a condition for releasing a new bailout of 130 billion euros ($175 billion). The latest rescue, after a 110-billion-euro EU-IMF loan in 2010, is tied to a massive debt writedown with private creditors designed to reduce Greece's 350-billion-euro debt by 107 billion. ... [The package was passed] after ratings agency Standard & Poor's (S&P) declared Greece in "selective default" owing to a proposed debt swap with private banks, a move that forced the European Central Bank to suspend Greek bonds as acceptable collateral for ECB loans. The rating was lowered from S&P's already junk-level "CC" grade for Greece, which has been seeking to avoid an outright default on its massive debt by negotiating a "voluntary" debt exchange with creditors.

Fitch just downgraded Greece from "C" to "restricted default." This designation hardly comes as a surprise, since the ratings agency had previously said that the country's planned debt restructuring would throw it into restricted default. ... Unlike a disorderly default, in a "restricted" or "selective" default Greece has not actually been declared insolvent. Fitch said it will raise Greece's issuer rating from "RD" after its debt swap has been completed on March 12.
Panic-style policies have been used in other European countries, with the same feeble results. They are, in fact, in jeopardy of being downgraded as well:

Standard & Poor’s ratings agency has downgraded France's credit rating. French television channels reported on Friday, citing a government source. The channels did not provide further details. S&P warned in December that it could downgrade the credit ratings of several euro zone nations if European leaders failed to find a lasting solution to the debt crisis at a meeting of EU leaders that month. Several euro zone countries including France face an “imminent” downgrade by ratings agency S&P, Reuters and Dow Jones news agencies reported, sending the euro to a session low against the dollar and European stocks down. ... Germany and the Netherlands were not among the countries facing a downgrade later on Friday, but gave no further details.

As Fitch Ratings reported on March 14, 2012, not even Britain is safe:

[The] government's structural budget deficit is second in size only to the US ('AAA'/Negative) and indebtedness is significantly above the 'AAA' median, although currently broadly in line with France ('AAA'/Negative) and Germany ('AAA'/Stable).

A forced debt reduction may seem unthinkable in the United States. However, our credit line – our ability to debt-fund federal spending – is not endless. Again, Europe’s governments thought the euro would provide them with an ironclad shield against an urgent debt crisis. So long as Congress continues down a spending-as-usual path and does nothing to fundamentally reform its fiscal policy, we are in jeopardy of ending up at the end of our credit line. As we approach that point, austerity will become a tempting, yet destructive, policy alternative.

Austerity is characterized by panic-driven policies. One example is, again, a debt write-down. To see what a Greek-style write-down would mean for America, consider the fact that as of December 2011 the U.S. government owed $15.2 trillion worth of debt. Of this, 57 percent or $8.7 trillion, was owned by the general public. This means, e.g., professional investors, pension funds and middle class families who have bought Treasuries to save for their children's college and their own retirement.

If the U.S. government were to force its creditors to accept a 20-percent write-down, the American public would lose $1.74 trillion worth of savings. That is $5,700 for every American, or $22,800 for a family of four.

This is just one part of the price we would pay for austerity.

Let us review yet another reminder that a big economy with a big currency does not mean that a government has an endless credit line. As the Daily Telegraph reported on May 8, 2012, the sense of security for those holding European debt is increasingly reminiscent of the security felt by the passengers on the Titanic:

At the start of the crisis EU leaders declared it unthinkable that any eurozone state should require debt relief, let alone default. Each pledge was breached, and the haircut imposed on banks, insurers, and pension funds ratcheted up to 75pc. Last month the European Central Bank exercised its droit du seigneur, exempting itself from losses on Greek bonds. The instant effect was to concentrate more loss on other bondholders. "This has set a major precedent," said Marchel Alexandrovich from Jefferies Fixed Income. "It does not matter how often the EU authorities repeat that Greece is a 'one-off' case, nobody in the markets believes them."

There is a common denominator between America and Europe in general, and fiscally troubled member states like Greece in particular: the welfare state. Consequently, our economy has the same debt-driving mechanisms as those of Europe. Recently the Financial Times reported' that the Spanish government debt...

is growing quickly with each successive annual deficit. This year will see a further €60bn added to the total, or 6 per cent of GDP, and it could be greatly swollen in future by contingent liabilities for everything from bank bailouts to guarantees for lossmaking toll road contracts managed by the
private sector. Edward Hugh, a Barcelona-based economist who has studied the composition of Spanish public debt, concludes that by EU measures it has already reached about 70 per cent of GDP, to which must be added 7 percentage points for the unpaid bills of central, regional and municipal governments, 5 percentage points for the debts of public enterprises and a further 5 percentage points for public debt held by the state pension fund.

To make the American debt crisis even more similar to that in Europe, there are parallels between how EU member states respond to their deficits and how U.S. states handle their fiscal problems. California, e.g., has taken to IOUs to “pay” its bills, a strategy that, again according to the Financial Times, is now in vogue in Spain:

Mariano Rajoy, the centre-right prime minister, is acutely aware of the problem – not least because his government has announced it will pay €35bn in overdue bills owed to waste collection companies, pharmaceutical groups and other suppliers by municipalities and regional governments. The unpaid bills and the other extras take Spain’s actual public debt total to about 87 per cent of GDP – close to the €877bn estimated by the Bank of Spain as the amount of total public sector liabilities (although the items included by the central bank and Mr Hugh are slightly different).

Again, none of these panic measures is helping. On March 27, 2012 the OECD issued a stern warning to European governments:

The eurozone needs "the mother of all firewalls" if it is to protect the EU's single currency from debt contagion, the Organisation for Economic Co-operation and Development (OECD) has warned. Angel Gurria, OECD's secretary general, urged EU finance ministers meeting in Copenhagen on Friday to increase the eurozone's bailout fund to at least €1 trillion (£835bn). "Weak financial conditions, fiscal consolidation and economic adjustment are restricting demand in the short-term before the long-term benefits on stability and growth are felt," he said. … Mr Gurria stressed a big fund, the bigger the better, would be needed to fight a eurozone crisis that is not yet over. "When dealing with markets you must overshoot expectations," he said. "The mother of all firewalls should be in place, strong enough, broad enough, deep enough, tall enough, just big."

It is worth noticing that the austerity policies in Europe are beginning to exact a very serious price, even beyond the traditional realms of economic policy. As an illustration of how hard austerity can hurt a country, the Wall Street Journal recently reported of rising support for totalitarian parties in Greece. This can have serious consequences in the upcoming parliamentary election (emphasis added):

Mainstream politicians are increasingly painted as leading Greece into a debt trap, then impoverishing it in trying to escape. As a result, Greece's major parties, which have promised Europe they will enact yet another round of deep public-spending cuts by summer, are struggling for support. Half the electorate plans to vote for radical opposition groups, ranging from Soviet-style Communists to anti-immigrant neo-Nazis, according to recent opinion polls. ... The austerity measures "taken under pressure" from Germany "are exceptionally adverse for the Greek people," said Giorgos Karatzaferis, head of the nationalist party Laos. Extra austerity measures due in June "are completely repulsive," he said, vowing to fight them.

Such developments obviously add stress to a situation already characterized by panic-driven economic policies. Yet politicians in other European countries do not seem to learn from the Greek situation. Their focus is still on further austerity measures. Desperate to keep the debt wolves at bay, the Spanish government recently made a successful plea with the EU for a slightly less harsh austerity program than the European Union and originally demanded. However, as the EU Observer reports, this has not calmed private investors who ultimately hold the fate of Europe's fourth largest economy in their hands:

The EU has welcomed Spain's plan to cut another €10 billion off its yearly budget, but the measure failed to stop speculation the country could be next in line for a bail-out. Olivier Bailly, a European Commission spokesman, on Tuesday (10 April) said Brussels "welcomes" the move because it
"confirms both the Spanish government's determination to implement the necessary reforms, and furthermore the Spanish government's commitment to respect the 5.3 percent [of GDP] deficit [limit agreed] for 2012." ... [The European Commission spokesman] approved the move despite the fact the new cuts are mainly to hit education and healthcare. ... The new Spanish savings are expected to see hikes in university fees for students and the imposition of healthcare charges for high earners.

As austerity measures prove ineffective and the Spanish crisis deepens, private investors are becoming increasingly skeptical that government can solve the problem. From the EU Observer:

The €10 billion savings are to come on top of €27 billion of cuts promised on 30 March. But Spain's financial credibility has taken a battering in recent months, with the new centre-right government of Prime Minister Mariano Rajoy forced to admit the country's economic situation is worse than previously thought. Markets on Tuesday pushed the costs of 10-year Spanish bonds to almost 6 percent, prompting press to ask whether Madrid will need a Greek-type bail-out. The country's economy minister, Luis de Guindos, when asked in Madrid on Tuesday morning if he could categorically rule out an international rescue package changed the subject. The Spanish central bank chief Miguel Ordonez in a separate press event said the European Central Bank has "never" discussed a Spanish rescue. But he added that Spain's economy is unlikely to see a recovery any time soon and that its banks might need an injection of public capital.

One of the consequences of austerity policies is that the problems they are designed to solve actually aggravate the very same problems. Attempts to cut the deficit increase the deficit, and measures to cut government spending lead to more government spending. This obviously drives up government debt. As a sign of this, Eurostat, the EU statistics agency, reports that Spain's general government debt has been growing at astounding rates recently: 13.7 percent in 2008, 29.6 percent in 2009 and 13.8 percent in 2010. During the same time its GDP has come to a virtual standstill, with current-price GDP in 2011 having contracted to its 2007 level.

How can government be growing at these rates when it is actually implementing austerity programs to curb, even cut, government spending? Before we answer this question, let us also note that Spain is now having increasing trouble borrowing at affordable interest rates:

Spain's borrowing rate nearly doubled in a short-term debt auction as investors fretted over the euro zone's determination to deal with its debts. And Italy raised nearly €3.5 billion in a short-term bond sale today but at sharply higher interest rates amid fresh concerns over the euro zone outlook, the Bank of Italy said. The Spanish treasury said it raised €1.933 billion but the timing could hardly have been worse, with financial markets slumping on concern that Europeans are wavering in their commitment to austerity.

There is even more evidence in Europe of what panic-driven budget cuts can do to a country. Greece went into austerity mode in 2009, and since then the country has suffered badly under its own policies. Its repeated rounds of panic-driven spending cuts and tax increases have only deepened the recession. Therefore, the latest GDP forecast on the Greek economy comes as no surprise:

Greece's economy will contract a deeper than expected 5 percent this year, the country's central bank chief said on Tuesday, piling more pressure on to a citizenry already battered by crippling austerity and record joblessness. The projection topped a previous forecast the central bank made in March, when it projected the 215 billion euro economy would contract 4.5 percent after a 6.9 percent slump in 2011. Twice bailed-out Greece is in its fifth consecutive year of recession. Speaking to shareholders at the central bank's annual assembly, George Provopoulos, also a European Central Bank Governing Council member, urged strict adherence to reform and fiscal adjustment commitments Greece has agreed with its euro zone partners, saying they were needed to return the economy to sustainable growth.
And predictably, those who prescribed austerity in the first place want Greece to take another dose of the same medicine:

Athens is under pressure to apply more fiscal austerity to shore up its finances as part of a new rescue package agreed this year with its euro zone partners and the International Monetary Fund (IMF) to avert a chaotic default. Its continued funding under the 130 billion euro package will hinge on meeting targets. ... Greece is set to pick a new government on May 6, with the two main parties in the current coalition seen barely securing a majority in parliament, according to the latest opinion polls. Whoever wins will have to agree additional spending cuts of 5.5 percent of GDP, or worth about 11 billion euros for 2013-2014, and gather about another 3 billion from better tax collection to keep getting aid, the IMF has said.

Spain has similar problems with its economy:

Spain has promised to cut its public deficit - the annual shortfall of income compared to spending - to 5.3% of gross domestic product in 2012 and just 3% of GDP in 2013. Last year it had allowed the deficit to hit 8.5% of GDP - 2.5 percentage points over target. Desperate to meet its targets, the government approved €27 billion in fiscal tightening in its 2012 budget, in addition to an earlier round of tax increases and spending cuts amounting to €15.2 billion. But analysts say those targets will be harder to reach as tax income declines and welfare costs rise because Spain is back in recession just two years after emerging from the last downturn. Spanish GDP fell by an estimated 0.4% in the first quarter of 2012 after a 0.3% decline in the last three months of 2011, the Bank of Spain said yesterday. Spain, whose unemployment rate at the end of 2011 was already the highest in the industrialised world at 22.85%, suffered a further 4% year-on-year drop in employment in the first quarter of 2012, the Bank of Spain said.

According to Eurostat, the EU statistics agency, Spain's general government debt has been growing at astounding rates recently: 13.7 percent in 2008, 29.6 percent in 2009 and 13.8 percent in 2010. During the same time its GDP has come to a virtual standstill, with current-price GDP in 2011 being at its 2007 level. This has forced the debt-to-GDP ratio up from 36 percent in 2007 to 61 percent in 2010, and counting.

How can government be growing at these rates when it is actually implementing austerity programs to curb, even cut, government spending?
Causes and Consequences

The problem with Spain and Greece is not their wavering commitment to austerity. The problem is their commitment to austerity. Austerity is the combination of harmful spending cuts and tax increases. This combination drains the private sector of resources without increasing economic activity.

A key to why austerity is harmful for the economy is the difference between harmful spending cuts and productive cuts. Most spending cuts are of the latter kind, which meet two criteria that harmful spending cuts fail to meet:

1. The structural criterion. All spending cuts withhold resources from the economy that government otherwise would have returned to taxpayers. Productive spending cuts are designed in such a way that they remove permanently a government spending promise. A harmful cut keeps the spending promise – an cash entitlement or the provision of a service – in place but shrinks the amount of money that each eligible citizen will receive. A productive cut combines the termination of spending with reforms that allow the private sector to permanently replace government as the provider of a service or an entitlement. Dependents on government are given a transition out of government dependency and in to either self sufficiency or dependency on a private solution. By contrast, harmful spending cuts maintain government’s spending promise in kind but not in quantity, thus preventing the private sector from replacing government as the provider of the service or entitlement in question.

2. The tax cut criterion. Harmful spending cuts are combined with either constant or higher taxes. This means that government increases its drainage on the private sector: it gives less back of either a given amount of revenue or an increased amount of revenue. By contrast, productive spending cuts come in combination with tax cuts aimed at a net reduction of what government takes from the private sector. The productive spending cut thus opens for private provision of a product or entitlement both in terms of withdrawn government spending and presence in a market, and in terms of leaving enough money in the private sector to replace government funding.

Productive spending cuts take more time to implement than harmful cuts. This is an essential fact that we will return to as we discuss remedies for austerity. As for the effect on the rest of the economy, the productive cuts do not depress the private sector. If anything, they stimulate activity because they open for innovation and investments in areas previously covered by government.

Harmful spending cuts, by contrast, inflict harm on the private sector. By draining the private sector for resources they depress private economic activity and, if put to work in a recession, can escalate a recession into a depression. That is currently happening in some parts of Europe. It does not help that harmful cuts often are combined with higher taxes.

Appendix 1 presents a formal analysis of the effects of austerity. This section develops a less formal, more policy oriented analysis.

The Extended Rahn Curve

To assess the negative effects of austerity we need gauge the success or failure of government policies against an economic performance variable. There are several to choose from; the most commonly used are GDP growth, unemployment (or job creation) and real wage growth. Among these, GDP growth is the most universal: it is the measurement of the entire economy, and included by definition the bases for job creation and real wage growth. It is therefore the best variable for basic policy analysis.

Our analysis focuses on two policy variables: government spending and government tax revenues. Both these variables affect government’s share of GDP; in fact, the very purpose of austerity policy is to
change government’s GDP share. Therefore, it makes sense to contrast changes in government share of GDP to the performance of the economy, i.e., GDP growth.

The relation between GDP growth and the size of government is sometimes referred to as the Rahn curve. In a strictly theoretical context the Rahn curve is typically presented as an upside-down U: the notion is that when government is very small, its expansion makes a positive contribution to the economy. The rationale behind this is that when government protects life, liberty and property – and provides infrastructure – it builds a safe framework for the productive sector to operate.

At a certain point the positive influence of government fades away and it becomes instead a burden on the economy. This would be where government starts redistributing income and wealth between private citizens:

Figure 1

There is one problem with this theoretical Rahn curve: evidence bias. There is plenty of empirical evidence for the downslope of the curve, but no evidence of a positive influence of government on GDP growth.

There are two possible explanations for this evidence bias. First, it is entirely possible that government simply does not make a positive contribution to the economy. This does not necessarily mean that government at any size is superfluous or outright harmful. Assuming that the smallest possible government is the minimal state as defined by Robert Nozick, the government needed for those functions would be so small that it does not register in statistical studies of the size of government.

Secondly, even if government does have a positive effect on the economy during the upbound phase of the Rahn curve, it is entirely possible that there simply are no governments small enough to fall within that segment. The lack of empirical evidence of a positive correlation between government size and GDP growth could simply be explained by the fact that all governments that can be included in a credible empirical study are so big that they all fall within the downbound segment on the Rahn curve.

Whichever explanation is the correct one, it is reasonable to assume that the first phase of the Rahn curve does not exist. This means that we start our analysis at the peak point of the theoretical curve, i.e., where government makes neither a positive nor a negative contribution to GDP growth.

The assumption is that this point is equivalent to a minimal state, an assumption that could be interpreted as saying that Nozick’s minimal state is superfluous: the economy could do just fine without...
it. However, this would be a rush to conclusion: a more reasonable explanation is that the minimal state is a *sine qua non* for a free economy: without the minimal state the free economy cannot exist, and therefore we can have neither economic freedom nor prosperity.

In short: without the minimal state there would be no GDP to measure.

On the other hand, once government starts growing beyond the minimal state it intrudes on private-sector economic activity and slowly but steadily starts depressing GDP growth. This gives us an accelerating downslope which, in turn, we will divide into three phases, Tolerance, Decline and Austerity. The phases are divided by two breaking points:

**Figure 2:**

**Extended Rahn Curve**

![Graph showing the Extended Rahn Curve with phases: Tolerance, Decline, Austerity, and a breaking point indicating Austerity gap.]

*The Tolerance Phase and the First Breaking Point*

This is the phase of government growth where the productive sector of the economy can adjust to the burden of government without any major toll on its productivity. If, during this phase, a critic of the welfare state suggests that the growth in government will have negative effects on the economy, he will generally be considered to be wrong. Politicians who want to continue to grow government take the lack of negative effects on GDP growth (and thus other economic performance indicators) as a sign that the welfare state can indeed co-exist with a free-market system.

Once government grows to a certain size it is no longer possible for the productive sector to adapt and neutralize the negative impact of government. The burden of taxes, market-distorting spending and associated regulations becomes too heavy for private businesses to carry. GDP growth suffers.

This is where the economy hits the first breaking point. The first sign of it is a weaker ability to recover from a recession. The recovery takes longer and average growth after the recovery is slower than it was before the recession.

This warning sign is usually ignored by politicians and economists. The reason is not primarily that they are ideologically biased in favor of the welfare state. More likely, the reason is that modern economists do
not work with quantitative instruments that are structural in nature: it is difficult to simulate the structure of the economy at the same level of rigor as can be done with, e.g., the business cycle. To use well-established economics terminology, the structure of the economy is a stock, comparable to a factory building, while economic activity measured through a business cycle is a flow, comparable to the manufacturing that takes place in a factory. Changes to the stock are too rare to offer obvious, statistically significant material for economic models.

As a result, the economics profession tends to shy away from pursuing structural explanations to changes in economic activity. This is likely a major reason why economists have not yet acknowledged the long-term downward shift in GDP growth in countries with expanded, mature welfare states.

**The Decline Phase and the Second Breaking Point**

Europe’s welfare states continued to grow for the most part of the 20th century. During the ‘70s and ‘80s they passed the first breaking point and GDP growth slowed down notably. One important effect of this decline is a decline in the tax base compared to what the welfare state “needs”.

During this phase the welfare state has a systemic, negative influence on the economy. However, as is evident from the continued growth of government in Europe’s welfare states during the last quarter of the 20th century, it is unlikely that legislators responsible for economic policy recognize the systemic cause of this growth decline.

Due to this oversight on behalf of responsible politicians, government continues to expand. As the decline phase continues it becomes increasingly difficult to continue the growth and politicians resort instead to policy measures aimed to preserve the welfare state. These measures will be marginal compared to regular policies: there will be occasional tax increases, minor reforms to entitlements and marginal adjustments to government administration. The general course of government policies will not change: growing or at least maintained spending programs; generally the same structure and levels of taxes.

Small adjustments to entitlement spending, and marginal changes to government administration, initially have little effect on the services and entitlements that government provides. Generally, this is the phase where government is made to operate more efficiently. The public does not notice much of the cost-cutting measures that agencies and administrations put to work. Public satisfaction with government – and by implication the welfare state – stays largely intact. To legislators who implement such measures, this is an indication that government, as it exists, fulfills an economically justifiable role in the economy.

There was a growing interest in growth-promoting policy among politicians and economists during the 1970s and ‘80s. This interest was especially strong in countries whose welfare states were in the decline phase. Labor-market oriented research led to reforms of labor markets, income taxes and even the education system in many European countries. It is not until recently that such research has attracted attention in the United States, tentatively because U.S. growth did not slow down to European levels until in the last decade.

During the decline phase government is able to balance its budget or keep its deficits within manageable proportions. However, once GDP growth has slowed down enough, and thus increased the GDP share of government high enough, the growth in tax revenues can no longer keep up with the needs of government. As a result, growth-promoting policies will no longer “do the trick”: in European countries and in American states, periods of deficits exceed periods of a balanced budget. The economy hits the second breaking point.

The U.S. federal government is somewhat of an anomaly here, but the excessive deficits under the Obama administration can be signs that the U.S. government is now reaching this second breaking point. If so, we are on the threshold of the same austerity policies as Europe has experienced in waves since at least the mid-1980s.

It is important to keep in mind that the tolerance and decline phases do not necessarily cover only a few years. Different economies have different resiliency: a large, diversified economy such as the American will be able to prevail in the tolerance phase longer than a small economy such as, e.g., Greece. In a similar fashion, an economy that relies heavily on exports, such as the Swedish one, can remain in the
decline phase for quite some time; the exports industry feeds the economy from markets that are independent of the austerity policies being put in place domestically.

Despite these individual differences, the underlying macroeconomic mechanisms that bring an economy through one phase and into the next, are universal.

*The Austerity Phase*

When an economy passes the second breaking point there is a clear shift in fiscal policy. Budget balancing will take precedence over other economic issues, and the bigger the deficit, the more panic-oriented the attempts at closing the gap. In practice this means that legislators resort to the kind of spending cuts we classified as harmful earlier.

Harmful spending cuts drain the private sector of resources, thus causing a net reduction of economic activity. But that does not happen instantly. The initial effect is an improvement in the government budget as tax revenues remain constant. However, as soon as the reduced spending takes effect total economic activity is reduced. This results in more unemployment claims and more people filing for income-eligible welfare. Government spending increases again, though at a lower economic activity level.

The net effect of harmful spending cuts is a downward adjustment of economic growth and a maintained or increased government share of GDP. In terms of the extended Rahn curve, this means a continuation of the curve into the austerity phase. In other words, the economy reacts to the harmful cut by neutralizing the effect of the cut.

The other leg of an austerity strategy, namely a tax increase, also comes with a similarly neutralizing effect. A tax increase initially increases tax revenues, thus improving the government budget. But as the well-established Laffer curve explains, there comes a peak where the positive effect on government revenues from the tax increase is reversed and government starts losing money instead.

If the tax increases are big enough the net result will be that tax revenues actually shrink. If the number of taxpayers is reduced as a result of the tax increase, the total collection of revenue as share of GDP will actually fall. When we combine this with the net expansionary effect on government spending from the spending cuts, we are faced with the paradox that:

- A cut in government spending leads to increased government spending; and
- An increase in taxes leads to a reduction in tax revenues.

Since the purpose of the austerity strategy was to close a budget gap, the conclusion is that the austerity policy is entirely counter-productive.

If the austerity policies are repeated, the economy is put on a trajectory of perpetual budget deficits. The harder the government tries to close the gap by means of austerity, the larger the gap will grow. In addition to the persistent budget deficit, the economy also pays the price in form of ever lower growth rates.

Technically, the Rahn curve plunges toward the horizontal axis, but as Figure 2 illustrates, it does so in a split form. Government spending as share of GDP increases while tax revenues as share of GDP decreases.

Appendix 2 provides a formal explanation of the austerity paradox.

One important, prevailing effect of austerity policies is that the composition of government spending is changed. The deeper into the austerity phase we get, the more of government spending will be concentrated to entitlement programs. There are two reasons for this: first, as economic growth slows down average incomes drop, relatively, thus making more people eligible for entitlements; secondly, it is politically easier to terminate non-entitlement spending than entitlements, which makes non-entitlement spending an easier target when government chooses its austerity-driven spending cuts.

This gradual shift in the composition of government spending explains why the government share of GDP actually increases as a result of austerity policies. Entitlement programs are open to everyone who is eligible, and there is no cap on how many eligible persons are allowed in to a program. The longer austerity policies go on, the more people will be pushed into entitlement eligibility – and entitlement dependency.
This shift in the composition of government spending is reinforced by the efforts by austerity-minded politicians to raise taxes. Higher taxes lead to less activity in the private sector and thereby both higher unemployment and lower overall earnings. Therefore, the tax-hike side of austerity policies helps push government spending in the direction of entitlements.

One often overlooked effect of this shift in government spending is that it, by itself, drives down GDP growth. When government produces services, paid for with taxes, it makes a positive (meaning higher-than-zero) contribution toward GDP. When government cuts down on, or stops providing, services it removes resources from the economy that otherwise would have contributed toward GDP.

If the spending cuts that remove these resources were part of a strategy to replace government as the service provider with the private sector, the net effect would be higher GDP growth. The private sector is better suited to pay for, produce and allocate education, health care and virtually every other service that is provided by government in traditional welfare states. But a reduction of government spending without reforms to pave the way for private provision of corresponding services causes a net reduction of GDP growth.

As GDP growth slows down, again, there is a move of more people from self-sufficiency into dependency on government-provided entitlements.

_Greece: A Case in Point_

In the late 1980s Denmark went through a period of austerity policies. An election put an end to it as voters elected a new government that wanted to break the vicious circle of austerity. Their traditional demand-stimulating policies gave temporary relief and created a period of several years of sustained economic growth. However, the causes of the fiscal problems that led to austerity were left in place, which has now put Denmark on a track toward another round of austerity.

Sweden experienced a period of deep austerity in the mid-1990s. Thanks to a change in monetary policy that led to a 40-percent depreciation of the Swedish currency vs. the U.S. dollar, exports started growing dramatically during the period when austerity was implemented. The result was a dichotomization of the Swedish economy between a depressed domestic sector and a thriving export industry. (Sweden was one of the first countries in Europe where gross exports surpassed private consumption as the largest GDP component.) Tax revenues from the export industry provided sufficient remedy to ease the austerity pressure and bring the country’s slide into the austerity phase to a crawl.
Germany experienced a period of austerity-style policies in the 2000s, but the policies were terminated before they had any lasting, detrimental effects on the economy.

Today, Greece is the country that is most notoriously associated with austerity. As Figure 4 shows, recent events make the Greek economy well suited to illustrate the effects of austerity policies. In 2009 the Greek government enacts tax increases (a) and spending cuts (b). These measures have the desired effect: by 2010 per-capita tax revenues increase again (c) while per-capita government spending is shrinking (d). However, the consequences of these measures show up in 2011, when tax collections are down (e) and the downward trend in dependency on government entitlements is broken (f). All things equal, the two lines will cross again in 2012: government spending per capita will once again increase while tax revenues per capita will continue to decline.
Remedies

Once an economy enters the austerity phase, legislators will be faced with a very limited set of remedial options. To date, there is no example of a modern welfare-state economy that has pulled out of an austerity phase by inherent policy measures. On rare occasions countries have been able to stall the downward austerity trend, but the common factor has always been an exogenous rebound in tax revenues. The example of Sweden in the 1990s is a case in point: exports surged for a number of years after a dramatic depreciation of the currency. Tax revenues from the booming exports industry allowed government to put its austerity policies on hold.

The first option under austerity is to terminate entitlement programs immediately. The only way to motivate such a policy is to rely on a completely static approach to economics. Even if the strategy would combine over-night spending cuts with over-night tax cuts, there is only a very limited likelihood that the strategy would yield strong GDP growth and a balanced government budget. The main problem, from a strictly economic viewpoint, is that the tax cuts and the spending cuts may not target overlapping constituencies. Families in low income brackets who receive entitlements as supplements to their income tend to be net takers from government, while taxpayers in higher income brackets tend to be net contributors. Since low-income families have a higher propensity to consume than high-income families, the short-term result would be a decline in consumer spending. The effect is a decline in economic activity instead of the sought-after expansion.

Another strictly economic reason why this strategy would fail is that overnight tax cuts would flood the economic system with liquidity at a time when demand for liquidity is low. It is well established that consumers, regardless of income, respond slowly to an increase in disposable income. (The Permanent Income Hypothesis as well as life-cycle theories rest on solid empirical ground.) Furthermore, consumers are even more unlikely to increase spending in a recession. The effect of a large, sudden tax cut is therefore a significant rise in savings. This means a build-up of cash reserves in banks as high-income earners increase their savings balances, a depression of interest rates and a reinforcement of a phenomenon called “the liquidity trap”, discussed next.

The second option under austerity is to use monetary policy to stimulate economic activity. Popularly known as “printing money”, this option would replace higher taxes with a monetization of government debt as a means to pay for entitlements. So long as this happens in a recession and there is no dramatic expansion in entitlements, there is practically no inflation risk associated printing money. The association between expanding money supply and inflation is based on pop-culture misunderstandings of economics that fail to recognize the need for a transmissions mechanism between more money and prices. That transmissions mechanism is only present when the economy is expanding or government is radically growing its entitlement programs. In the austerity phase, neither is the case.

Printing money to fight austerity is very likely to be entirely ineffective for another reason than inflation. The reason has to do with the phenomenon mentioned briefly earlier, known in the economics literature as the liquidity trap. When money supply expands at a given level of money demand, interest rates fall as the bank system tries to sell the newly available liquidity to prospective borrowers. While lower interest rates generally enable stronger GDP growth, two conditions must be met for this to happen. First, there must be enough credit-worthy borrowers to take new debt; the average credit rating of individuals and businesses is lower in a recession than in a strong growth period. Secondly, businesses and individuals who qualify for new loans must have an outlook on their personal financial future that is strong enough to encourage them to borrow. This is also unlikely to be the case in a recession.

When the central bank prints money in a recession, the end result is more than likely that it will add liquidity to an economy that is already saturated with liquidity and thus unable to put more money to work. Hence the liquidity trap.

The third policy option under austerity is Keynesian deficit stimulus. Contrary to what mis-educated opinions of Austrian economists tend to stipulate, Keynes did not develop his theory of deficit spending for regular recessions. Keynes was a depression economist, explaining how an economy can pull out of a situation where the private sector is unequivocally depressed and unable as well as unwilling to take the
risk of spending more money. This is a unique situation that does not occur in the regular business cycle but has been misused by politicians in search of a scholarly motivation to grow government.

The key to understanding the Keynesian anti-depression strategy is to understand the role of effective demand in the economy. The core of Keynes's macroeconomic theory is that the actual spending taking place in an economy will determine the short-to-medium course of key performance variables, GDP growth being one of them. Referring to actual spending as effective demand, Keynes explained that an economy with stagnant or falling effective demand will either go into a recession or be stuck in a recession.

Effective demand comes from either of four categories of economic agents: consumers, private investors, government or foreign buyers (exports). In a normal recession private effective demand in the form of consumption, investments and exports will balance each other out through the course of a business cycle. When households lose confidence in the economy, some businesses see opportunities and increase investments, thus providing new effective demand to an otherwise stagnant economy. By contrast, a fall in business investments tends to be countered by exports or a rebound in consumer confidence.

In a normal recession there is no need for government to intervene. In fact, government intervention in a regular business cycle is almost always going to distort the allocation and reduce the performance of the economy. The case for a Keynesian intervention comes when the economy continues its downward trend in a recession: when the limited pessimism of a recession becomes economy-wide, the private sector is in a sustained state of universal pessimism. The effect of such pessimism is a universal resistance to increasing effective demand. By definition, the economy is in a depression.

Government is the only agent in the economy that can take deliberate action to provide more effective demand. To once again correct a pop-culture misunderstanding of Keynesian economics, it is important to point out that government does not need to spend money to provide more effective demand in the economy. It also has the option to cut taxes.

One of the key features of the economic policy that constitutes austerity is, again, tax increases. In order to reverse the downward trend of higher taxes, growing government and weaker growth, government could therefore reverse its tax policy. By simply stopping to raise taxes government would remove one of its two measures that negatively influences the economy; if it stops raising taxes but continues to try to cut spending, it will not add any effective demand. All that it will accomplish is to slow down the drainage of effective demand that drives the economy downward. Tax cuts on the other hand put more resources back into the economy.

We could combine tax cuts with spending cuts, preferably productive cuts as defined earlier. However, productive spending cuts take comparatively long time to implement – they are ineffective when as recovery measures when an economy is in a deep recession or a depression. Such reforms are highly effective in preventing an economy from falling into the austerity phase in the first place, but once we enter the downward spiral of panic-driven, harmful spending cuts, tax increases and declining private-sector activity we no longer have any room for productive, long-term oriented, structural spending cuts.

One alternative is to combine tax cuts with harmful, across-the-board spending cuts. These cuts reduce government’s presence in the economy without providing a replacement plan for the private sector. Tax cuts do let the private sector keep more of its resources, a measure that counters some of the negative effects of harmful cuts.

However, the combination is haphazard in the sense that those affected by the spending cuts are not necessarily the ones benefiting from the tax cuts. Even though this combination would be a broader form of withdrawal of government from the economy than if the harmful cuts were combined with tax increases, the net effect on the economy is not going to be much better than stand-alone tax cuts.

In a situation where austerity policies have brought the economy into, or on the verge of, a depression it is critical that every policy measure has maximum effect. A better strategy than across-the-board budget cuts is to freeze spending, cut taxes on a broad scale and wait with spending cuts until confidence and optimism has returned to the private sector.

One measure that does not cost anything is deregulation: some types of deregulation can on the margin improve confidence in the private sector. It is difficult to provide any general analytical advice on how to deregulate an economy in the midst of a depression: every economy has a different regulatory system and even in the United States regulations vary from industry to industry, state to state. It is also important to remember that regulations, while costly and stifling to operations and investments in business, do not
cause a depression in themselves. Therefore, they can be helpful in pulling the economy out of a recession but not as a stand-alone measure.

When the private sector generally has a positive outlook on the future, it is more willing to take risks and more willing to invest in new industries and sectors of the economy. This is also a good time to initiate productive spending cuts. These are, again, cuts that structurally replace government with private-sector solutions to, e.g., health care, education, retirement and welfare. The more affluent the private sector is, the more resources there will be available for investments in, e.g., private education as an alternative to public education; private, charity-based welfare as opposed to government-provided welfare; and privately funded, owned and operated health care.

Such structural reforms are necessary if we want to prevent the economy from entering the downward slope into the austerity phase in the first place. The cause of the problems that eventually bring us into austerity is to be found in the welfare state. So long as the welfare state remains, it will sooner or later put us on a track to austerity by its own inherent mechanisms.
Appendix 1

The formal explanation of how austerity policies reduce economic activity begins with the traditional definition of GDP from the demand side:

\[ Y = C + I + G + (X - Z) \]

where \( Y \) is gross domestic product, \( C \) is private consumption, \( I \) is gross fixed capital formation (or investments), \( G \) is government spending, \( X \) is exports and \( Z \) is imports.

To do a comparative-static analysis we need to define in more detail how each of these variables are determined. Starting with private consumption:

\[ C = C_E + b(Y - tY) \]

where \( C_E \) is subsistence consumption, or consumption financed by welfare and unemployment checks, \( b \) is the propensity to consume out of earned income and \( t \) is the average income tax rate.

Gross fixed capital formation, or private corporate investment, is determined by:

\[ I = aY_{-1} \]

where \( a \) is the propensity to invest based on last year’s GDP. This is a very simple representation of the accelerator.

Government spending:

\[ G = G_C + G_E \]

where \( G_C \) is government consumption and \( G_E \) is spending on entitlements. It is assumed that \( G_E = C_E \) at all times.

\( G_C \) is the form of government expenditure that pays for services, such as public education, and goods, such as school buses. It is customary in national accounts theory and macroeconomics to treat government investments equally to government consumption (unlike the private sector where investments are reported as a separate type of spending). Therefore, government investments are assumed to be included in \( G_C \).

Exports:

\[ X = xY_W \]

where \( x \) is the propensity of the world – represented by global GDP or \( Y_W \) – to buy our goods and services.

Imports:

\[ Z = zY \]

where \( z \) is the propensity to import based on our GDP.

We substitute these definitions of each of the five variables in equation 1. We then add three basic quantitative assumptions that largely represent the U.S. economy: the propensity to consume, \( b \), is 0.7 or 70 percent of the last earned dollar; net taxes; the income tax rate is 0.22 or 22 percent on the average earned dollar; and the propensity to import is 0.15, or 15 percent. This gives us the following multiplier for an increase in economic activity (represented here by private consumption):

\[ \frac{dY}{dC} = \frac{1}{1 - b(1-t) - z} = \frac{1}{1 - 0.7(1-0.22) - 0.15} \]
Suppose we try to increase tax revenues by ten percent by increasing the tax rate, \( t \), from 20 to 22 percent. The higher tax weakens the multiplier and depresses private consumption. Consumers spend less than they otherwise would have done. Due to the counter effect of a lower level of private spending, the ten-percent increase in tax revenues that politicians wanted ends up being a 4.9 percent increase.

This calculation does not take into account the loss of taxpayers as unemployment rises. If we add that factor, assuming ten percent of the lost GDP translates into increased entitlement spending, the growth in tax revenues is cut in half again, to 2.6 percent.

The neutralization of the tax increase grows with the tax rate and with the rate of government dependency. Suppose, e.g., that the initial tax rate is 40 percent, a realistic assumption for a European welfare state. Suppose also that 20 percent of the lost GDP translates into entitlement dependency, also a realistic assumption for a European welfare state. If government tries to increase its tax revenues by ten percent under these assumptions, total tax collections actually fall.

If we also adjust the propensity to import upward, as we would have to do for a European country, the result from the tax increase is a net reduction in tax revenues. Taxes as share of GDP plummet while government spending as share of GDP continues to rise, just as explained in the extended Rahn curve analysis.
Appendix 2

The trajectory of government entitlement spending as created by austerity policies can be illustrated as follows:

\[ G_E = \alpha \sin \left( \frac{2\pi}{t} t \right) + \rho^R \]

where \( R > 1 \).

In a similar fashion, the long-term trend in tax revenues is negative. Each tax increase erodes the tax base, effectively making the tax increase a self-defeating policy measure:

\[ T_E = \alpha \cos \left( \frac{2\pi}{t} t \right) + \rho^S \]

Here, \( S < 1 \), making the trend negative.

Over time a gap develops between entitlement spending and tax revenues. This gap is driven by the policies that try to close that very same gap: higher taxes and spending cuts. A graphic illustration would look as follows:

**Figure 5:**

![Graph showing the relationship between government spending and tax revenues over time.](image)
Endnotes


2 Please see: http://www.breitbart.com/article.php?id=CNG.9707ff7bc7b5ac3908f92bb1ccfedb5.b1&show_article=1


6 Daily Telegraph: Legal skull-duggery in Greece may doom Portugal, March 8, 2012: http://www.telegraph.co.uk/finance/comment/ambroseevans_prichard/9132216/Legal-skull-duggery-in-Greece-may-doom-Portugal.html

7 Please see: http://www.ft.com/cms/s/0/2c02be0c-6870-11e1-b803-00144feabdc0.html#axzz1odW23Nam


11 EU Observer: Markets wary despite extra round of Spanish cuts, April 10, 2012: http://euobserver.com/19/115834


14 See note 14.


