

The Austerity Trap: A Century of Unrest and Budget Cuts

Hans-Joachim Voth

Budget cuts can be dangerous. Inspired by the wrenching experience in Greece, increasing attention is now being paid to the fact that austerity may fail to reduce the government deficit if the economy declines in response, as is likely in a liquidity trap (Delong and Summers 2012). In this short paper, we point out a second channel through which austerity may be self-defeating. When government budget cuts lead to a backlash on the streets in the form of unrest and politically-motivated violence, uncertainty increases. This in turn reduces growth. Investments are postponed, workers not hired until the uncertainty resolves itself. We first survey the evidence linking austerity with social and political instability, and then turn to the consequences for output.

The pattern of unrest

In Greece, the years 2010-12 have been marked by violent clashes between the police and demonstrators protesting against round after round of budget cuts. August 2011 saw days of rioting in London and other cities in the UK. In Spain, demonstrators known as *indignados* occupied town squares and demanded a full-scale change of the political system. By historical standards, however, both the frequency and severity of these incidents are quite mild – nowhere near the property damage and human cost of, for example, the 2005 violence in France (Ireland 2005). Is there a clear link between budget cuts and unrest – or do both reflect deeper, underlying issues?

Many incidents can lead to an eruption of violence– from the killing of Mark Duggan in London in 2011 to a high-speed pursuit gone wrong (in the case of

the Rodney King riots in LA in 1992). These kinds of events happen all the time, and typically, they do not result in mass demonstrations, and riots, in buildings burned and bank offices ransacked. Why are cities at some points in time more akin to a tinderbox? Why does it only take one incident for massive violence, riots, or anti-government demonstrations to erupt? Here, the role of budget measures is important.

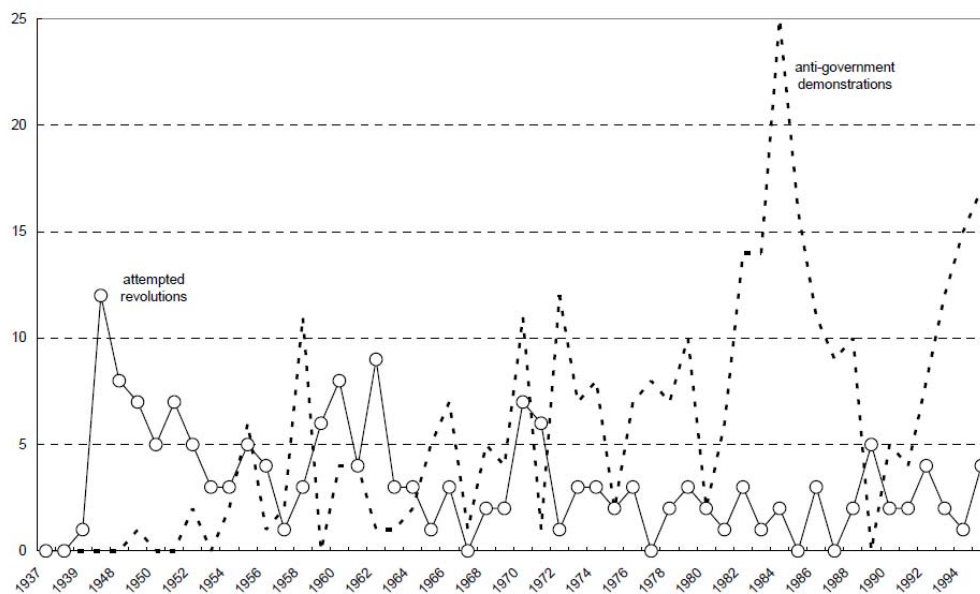


Figure 1: Anti-Government Demonstrations and Attempted Revolutions, South America, 1937-1995

Mass events are, by their very nature, rare. To unlock the patterns driving them, a look at history can be useful. It shows that, from the end of Germany's first democracy in the 1930s to the anti-government demonstrations in Europe after 2009, austerity has tended to go hand in hand with politically motivated violence and social instability. In Ponticelli and Voth (2011), we assemble cross-country evidence for the period 1919 to the present, and examine the extent to which societies become unstable after budget cuts. The results show a clear positive correlation between fiscal retrenchment and instability. The same is true for the period 1938-1995 for a sample of 11 South American countries (Voth 2012, forthcoming).

A range of different indicators of instability – anti-government demonstrations, riots, assassinations, general strikes, and attempted revolutions, can be used to track unrest and instability. The data comes from a large-scale international data collection (Banks 1994), and is based on an analysis of reporting in the *New York Times*. The individual indicators are then aggregated by summing them up for each country and year. This gives the variable called CHAOS. Figure 1 shows the number of anti-government demonstrations and attempted revolutions in South America (Voth 2012). The number of attempted revolutions was high in the immediate post-World War II era, and again in the 1960s and 1970s. Anti-government demonstrations, on the other hand, peaked in the 1980s (driven by high levels of unrest in Chile and Argentina).

Large changes over time, and big differences between countries also characterize the pattern of unrest in Europe. Figure 2 gives an impression how it evolved over time since 1919, showing the mean and the maximum. The interwar years are characterized by a high level of unrest, as does the immediate post-World War II era, and the period from 1970 to the early 1990s. In any one year, the difference between the country with the highest level of unrest, and the one with the lowest is very considerable.

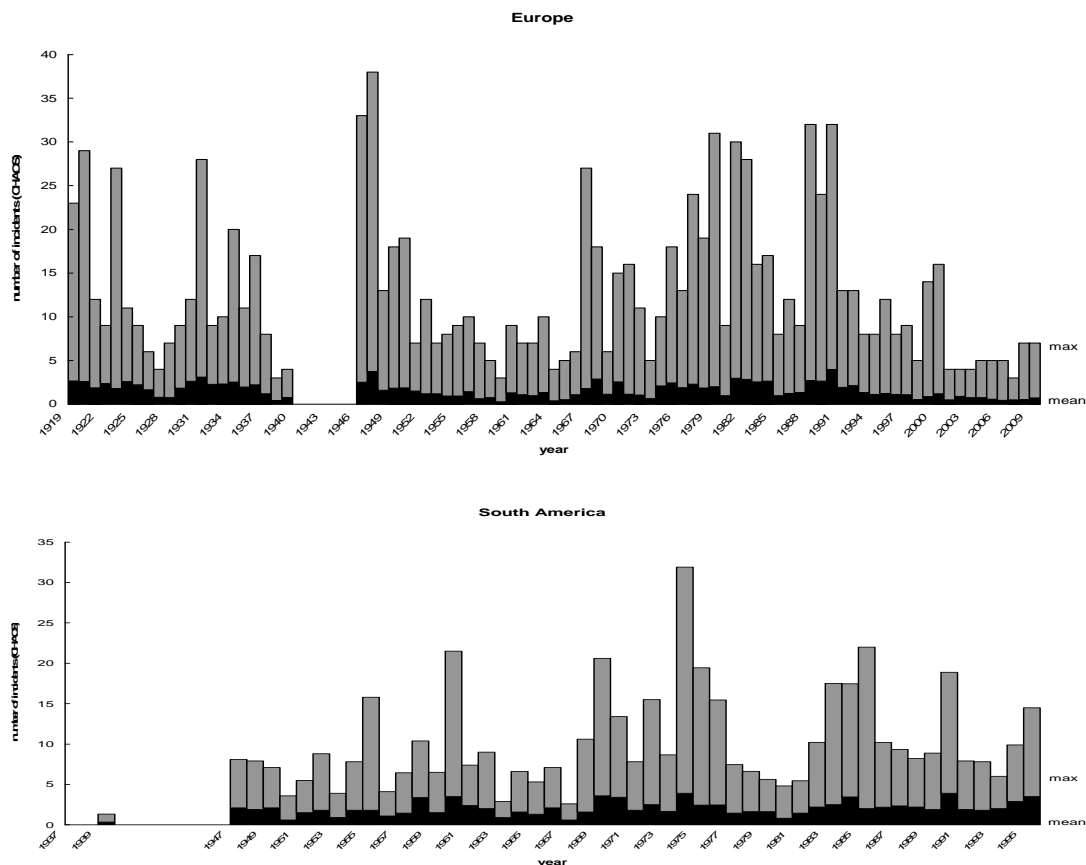


Figure 2: Number of Incidents in Europe and South America, 1919-2009

The impact of austerity

Next, we ask if unrest can be explained by the scale of austerity measures.

Figure 2 summarizes our main findings for South America and Europe. The bars show the number of incidents per country and year. As the color of the bars goes from blue to red, budget cuts get deeper, first changing from expansion to contraction, and then with cuts rising to above 1%, 2%, 3%, and finally, 5%. In an average country and year when spending is increasing, in both Europe and South America, one should expect about 1.5-1.7 incidents. Once expenditure is cut by more than two percent of GDP, instability increases rapidly to 2-2.5 incidents. Severe cuts – of five percent or more, as in Greece today – are associated with the highest level of instability in both Europe and South America.

It could be argued that the result is unsurprising, and not directly driven by the effects of austerity itself. Instead, in times of crisis, unemployment tends to be high, and those rioting in the streets have a lower opportunity cost of their time. This would be in line with arguments about the timing of political transitions by Acemoglu and Robinson (2001). As a matter of fact, the counter-cyclical nature of unrest is not driving our findings. Controlling for the cycle does not reduce the magnitude or significance of results. Also, in a related dataset where the cause of each demonstration can be determined, only those caused by opposition to budget cuts are actually predicted by the magnitude of cut-backs (Ponticelli and Voth 2011).

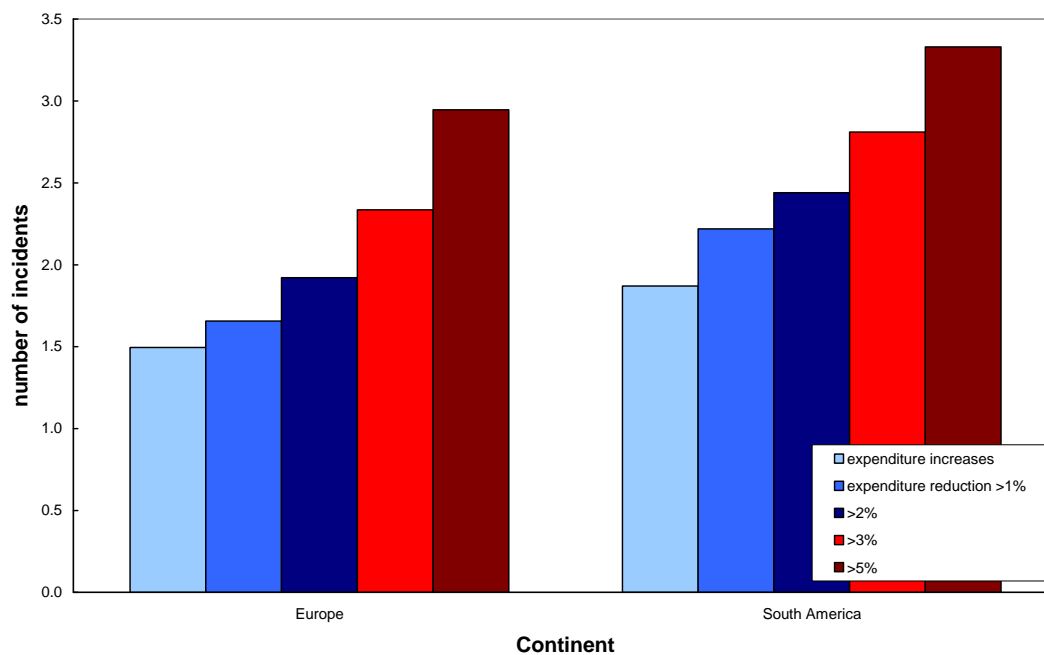


Figure 3: Unrest and budget cuts

Revenue changes typically do not have the same effect. They are also associated with increasing unrest, but the link is weak and could be due to chance. We also examined if the relationship between cut-backs and instability that we document simply reflects that both are more likely in economic downturns, and conclude that this is not likely. Hard times tend to see more unrest, but cuts deepen the degree of instability even when we control for this effect. Finally, we look at a subset of budget cuts that are

clearly driven by policy actions, and not simply by automatic stabilizers and the like. The IMF has recently compiled a detailed list of policy-driven austerity episodes (Devries et al. 2011). If we only focus our analysis on these periods, a very similar pattern to the one in Figure 2 emerges.

To examine if we are picking up some confusing third variable, we conduct a “placebo test”. For a small subset of our data, we have information on the main cause of each demonstration. We test if demonstrations focused peace issues or ecology are similarly associated with austerity measures. The answer is a resounding “no” – only demonstrations aimed at protesting against cut-backs actually show a significant association with the timing and scale of expenditure reductions.

In our paper (Ponticelli and Voth 2011), we also analyse interactions with various economic and political variables. While autocracies and democracies show a broadly similar responses to budget cuts, countries with more constraints on the executive are less likely to see unrest as a result of austerity measures. Anecdotal evidence about the “Arab Spring” and the *indignados* movement suggests that modern forms of telecommunications can facilitate the growth of unrest. To test if this is true, we examined two types of media penetration – radio and TV, typically uni-directional forms of that make it easier to spread the government’s message, and peer-to-peer communications, such as the telephone. Growing media penetration actually does not lead to a stronger effect of cut-backs on the level of unrest. For both types of telecommunications, the link between austerity and unrest becomes weaker as more people can exchange more information more easily. This is not to say that Facebook, sms and email did not play a role in early 2011. It does suggest that until recently, higher levels of media penetration did not fan the flames of unrest in the same way as they apparently do now.

Economic consequences

When the Great Recession spread, governments around the globe followed advice by leading economists who concluded that budget cuts can be good for growth (Alesina et al. 2002; Alesina and Ardagna 2010; Giavazzi and Pagano 1990). In addition, an important literature has argued that there is no effective penalty for budget cuts at the ballot box – voters apparently understand the need for austerity, and do not punish governments that implement it (Alesina, Perotti, and Tavares 1998; Alesina, Carloni, and Lecce 2010). This literature has recently been reassessed by the IMF (Devries et al. 2011), which reworked the available data. The findings suggest that cuts are, in fact, contractionary, as had long been assumed. New theoretical work (Eggertson and Krugman 2012; Delong and Summers 2012) also point in the direction of less borrowing and less debt not being beneficial at a times of crisis, especially in periods of deleveraging.

The first implication of our findings is that a major constraint that prevents governments from cutting expenditures is not to do with issues of economic decision-making or interest-group politics, but because of (well-founded) fears of unrest. When the Hoover administration introduced savage budget cuts in the early 1930s, it deliberately exempted army units from pay reductions – in the expectation that it could not be assured of army support in case of disturbances otherwise.

There is an additional implication of our findings once we recognize the feedback between political and social unrest on the one hand, and aggregate uncertainty on the other. ttempted revolutions, general strikes, riots and anti-government demonstrations typically cause large reductions in the confidence of economic agents. The 20th century is replete with economic disasters when output, consumption, and asset values all fell simultaneously (Barro and

Ursua 2008). Many of these were associated with political shocks and social unrest. As a matter of fact, stock market volatility typically surges when unrest of the type described here erupts (Voth 2007).

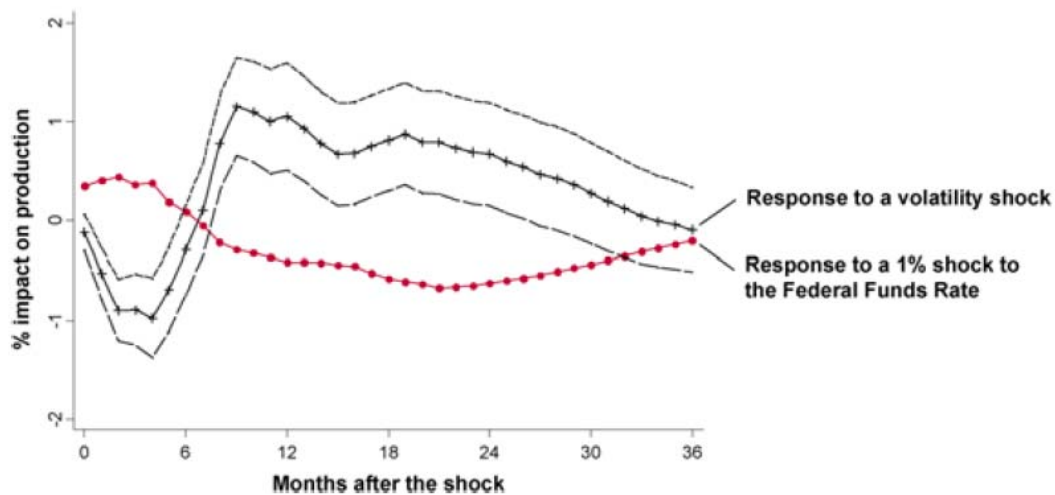


Figure 4: The impact of volatility shocks on industrial production

Source: Bloom (2009)

Uncertainty is well-known to reduce growth, investment, and employment on a significant scale. Bloom (2009) shows that a one standard deviation rise in volatility leads to a 1% fall in employment and production within 3-6 months. While not every spike in uncertainty – as reflected in stock market measures like the VIX – has led to a downturn in the economy, every large downturn has been associated with a big rise in uncertainty.

The combination of these three factors leads to a potential political and social austerity trap. Expenditure cuts increase the probability of unrest. The uncertainty induced by political instability and social turmoil causes investment, employment, and output to plummet. Since tax revenue is procyclical, the government deficit will typically increase as production falls. This will in turn worsen the government accounts, and may lead to another round of cuts, in an ever-worsening downward spiral. How long a country can endure this policy mix depends on a variety of factors including institutions,

local culture, and leadership. In some countries, such as Germany in the 1930s, the downward spiral can continue for several years; elsewhere, austerity programs may be reversed quickly.

The alternative to the austerity trap is an end to expenditure cuts. In fact, there is indirect evidence that this is exactly the effect that unrest – potential and actual – produces. Woo (2003) studied the relationship between public debt and instability. He finds that countries that are more unstable also have higher debt burdens. This implies that governments either are more inclined to spend freely, or that they are finding it harder to cut back – either in response to actual or to the risk of possible trouble if they imposed austerity.

Conclusions

Economists disagree on how much austerity is a good idea. What is typically neglected is the threat that austerity poses for the political and social fabric whose very existence allows modern economies to attain a high degree of efficiency. Once social and political instability take hold, the consequences can be dire – both in terms of political outcomes (such as in the case of the Weimar Republic's demise) and in terms of growth. The strong link between unrest and austerity suggests that cutting expenditures in times of crisis may be even harder than previously thought. If so, the sustainable level of debt in countries will be lower because budgets cannot easily be balanced by cuts. To avoid the spectre of default and a downward spiral of collapsing output, lower tax revenue, and a rising wave of unrest – an austerity trap – governments have to act more cautiously in good times. They need to borrow less and keep taxes high even if public debt is falling in a period of expansion.

References

- Acemoglu, D., and J.A. Robinson. 2001. "A theory of political transitions." *American Economic Review*: 938-963.
- Alesina, Alberto, Silvio Ardagna, Roberto Perotti, and F. Schiantarelli. 2002. "Fiscal policy, profits, and investment." *American Economic Review* 92 (3): 571-589.
- Alesina, Alberto, Dorian Carloni, and Giampaolo Lecce. 2010. "The electoral consequences of large fiscal adjustments." *Harvard University, mimeo*.
- Alesina, Alberto, Roberto Perotti, and Jose Tavares. 1998. "The political economy of fiscal adjustments." *Brookings Papers on Economic Activity* 1998 (1): 197-266.
- Alesina, Alberto, and Silvio Ardagna. 2010. "Large changes in fiscal policy: taxes versus spending." *Tax Policy and The Economy*.
- Banks, Arthur S. 1994. Cross-National Time-Series Data Archive. Binghamton, New York.
- Barro, Robert, and José Ursúa. 2008. "Macroeconomic Crises since 1870." NBER working paper No. 13940.
- Bloom, Nick. 2009. "The Impact of Volatility Shocks." *Econometrica* 77(3): 623-85.
- Delong, Bradford, and Larry Summers. 2011. "Fiscal Policy in a Depressed Economy." *Mimeo*.
- Devries, P., J. Guajardo, D. Leigh, and A. Pescatori. 2011. "A New Action-based Dataset of Fiscal Consolidation." *IMF Working Paper No. 11/128*.
- Giavazzi, Francesco, and Marco Pagano. 1990. "Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries." *NBER Macroeconomics Annual*: 75-111.
- Ireland, Doug. 2005. "Why is France burning?", *The Nation*, 28 November.
- Ponticelli, Jacopo, and Hans-Joachim Voth. 2011. "Austerity and Anarchy
- Voth, Hans-Joachim. 2012, forthcoming. "Tightening Tensions: Fiscal Policy and Civil Unrest in Eleven South American Countries, 1937-1995." In: J. Galí, ed., *Fiscal Policy and Macroeconomic Performance*. Central Bank of Chile.
- Woo, J. 2003. "Economic, political, and institutional determinants of public deficits." *Journal of Public Economics* 87 (3-4): 387-426.