

THE CASE AGAINST DEFICIT HAWKS

When Is Austerity Right? In Boom, Not Bust

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History shows that austerity does not work when economies are weakening. Some influential studies argue otherwise. These two writers show that the leading such study does not prove the point. If anything, the data show the very opposite. Do not try to cut deficits in recession or weak recovery.

The boom, not the slump, is the right time for austerity at the Treasury.

—John Maynard Keynes (1937/1983, 390)

SHOULD THE UNITED STATES CUT ITS DEFICIT IN THE SHORT TERM? This has been the subject of intense debate among politicians, policy analysts, and thinkers over the past year. What are the consequences of cutting the deficit with interest rates low, unemployment high, and growth uncertain?

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A recent paper by Alberto F. Alesina and Silvia Ardagna (2009, henceforth A&A) examines a cross section of deficit-reduction policies among different countries. It looks at examples in which large-scale deficit reduction is associated with economic expansion and where the ratio of debt to the gross domestic product (GDP) falls in the medium term (three years after the adjustment). Based on this research, many popular commentators suggest that the United States can adopt such a policy and grow.¹

However, a further examination of the data shows that such a conclusion is unmerited. The overwhelming majority of the episodes used by A&A did not see deficit reduction in the middle of a slump. Where they did, it often resulted in a decline in the subsequent growth rate or an increase in the debt-to-GDP ratio. Of the twenty-six episodes they identify as “expansionary,” in virtually none did the country (a) reduce the deficit when the economy was in a slump and (b) increase growth rates while reducing the debt-to-GDP ratio. The sole example not covered by those two qualifiers can be explained by a combination of two policy maneuvers that are not easily available to the United States at the moment: currency depreciation and interest-rate reduction.

We expand on their initial examination and cover the entire data set of 107 observations, finding very little evidence for success when “cutting in a slump”—in our terminology, when the growth rate in the previous year was lower than the average growth rate over the past three years. Only one additional case out of 107 can be seen as an example of success in fiscal consolidation, and we show that this one does not bear scrutiny either.

Key Findings

- Countries historically do not cut their deficits in a slump but, instead, address these problems at a nonrecessionary time.
- When countries cut in a slump, it often results in lower growth or higher debt-to-GDP ratios. In very few circumstances are countries able to successfully cut during a slump, and this happens only when either interest rates or the exchange rates fall sharply.

- In our analysis, we find that there is no episode in which a country facing the same circumstances as the United States (recent recession, low interest rates, high unemployment) has cut its deficit and succeeded in reducing its debt through growth.
- We conclude that there is little evidence provided by A&A that cutting the federal deficit in the short term, under the conditions the United States currently faces, would improve the country's prospects. It may even make the situation far worse.

Background

A&A find what they consider evidence of episodes in which “spending cuts adopted to reduce deficits have been associated with economic expansions rather than recessions.” A&A suggest that the episodes they have isolated show that reducing the deficit can lead to an increase in growth. They then use these examples as a basis for investigating the optimal way to reduce the deficit.

But what are these examples, and how useful are they in the current situation in the United States? A&A use a panel of Organization for Economic Cooperation and Development (OECD) countries from 1970 to 2007, including Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

A&A filter these data to find episodes of fiscal adjustment by capturing years in which the primary deficit decreased by at least 1.5 percent of GDP. This leaves them with 107 periods of fiscal adjustment. Such an approach contrasts with the narrative approaches taken by Romer and Romer (2007) that were meant to control for the endogeneity of when to reduce the deficit. These are abrupt changes in GDP, regardless of whether the primary deficit is being decreased at the height of a boom or at the bottom of a slump. As we will see, cutting at the height of a boom characterizes many of their results and as such is not relevant for the current United States.

They adopt a second filter and take the average growth rate for the

year of the fiscal adjustment and the two years following and compare it to the average G7 growth rate (weighted by GDP) over the same period. They identify the top 25 percent of the difference between these two growth rates as periods of “expansionary fiscal adjustments.” Note here that an expansion is doubly relative. First, an episode is expansionary if it is in the top quartile of the comparisons being made. But the economy need not be growing quickly (or indeed at all) for this to happen. Second, a country may be growing more slowly or even contracting in the three-year period (inclusive) following the year of adjustment and be considered expansionary if it is growing at a rate that is quicker than the G7 growth rate. This unusual definition of expansionary selects twenty-six episodes in which fiscal consolidation takes place and calls them “expansionary.”

The last filter A&A use to determine whether or not a deficit reduction is “successful” is if the cumulative reduction of the debt-to-GDP ratio three years after the beginning of deficit reduction is greater than 4.5 percent. Seventeen out of their twenty-six examples qualify.

Examining A&A's 26 Cases

In examining the data more closely, we seek to examine how much these episodes can be used to provide guidance for the U.S. economy.² At the outset, therefore, we should remember where the U.S. economy is and what it has just been through. The United States underwent a sharp recession in the past year, growing at -2 percent in real terms, according to the OECD data that A&A (and we) use; it was (obviously) lower than the average growth rate from 2007 to 2009. (We use three-year windows to be as close to the A&A windows as possible.) The unemployment rate exceeds 9 percent and probably is even higher in real terms, because there are far more discouraged workers now than in previous periods. The questions we ask are: how many of A&A's expansionary adjustments occurred in similar circumstances, and what were the outcomes in terms of growth increases in the country?

Table 1 provides such an examination, using their twenty-six episodes. The third column gives the growth rate in the year of the

fiscal adjustment. The fourth column gives the growth rate in the preceding year. The first thing to note is that the average real growth rate in the year preceding is 4.1 percent across all episodes. In other words, their examples of successful consolidation were, on average, growing strongly the year *before* the year of adjustment. This is, of course, unlike the U.S. case today, because the country was in recession last year.

Furthermore, the growth rate in the year preceding the adjustment was higher than the average growth rate for the three years preceding the adjustment in most of the cases (twenty out of twenty-six). Why is this important? Because fiscal consolidation in periods of relative booms or steady growth is far less likely to be destabilizing than such actions in periods of slumps. Indeed, it may be standard Keynesian countercyclical policy in some cases. Policymakers are far more likely to undertake fiscal adjustments and to maintain growth in these circumstances than in others.

It should be noted that in fully seven of the twenty-six episodes of “expansionary adjustments” identified by A&A, growth in the country actually slowed in the three-year period (inclusive) following the adjustment, compared to the three-year period before the adjustment. Indeed, growth actually slowed for four of the six episodes in which consolidation occurred when the growth rate in the previous year was lower than the three-year average preceding consolidation.

So this leaves us with two cases in which growth in the year prior to the deficit reduction was not higher than the previous three years and growth did not slow after the reduction. The two cases that successfully cut their deficits in a slump without reducing future growth rates are Norway (1983) and Ireland (1987).

Two Specific Cases

Norway (1983)

Norway interestingly is not a country that A&A classify as a “successful fiscal consolidation.” The reason is clear from a cursory examination of the debt-to-GDP ratio. In 1983, the year of consolidation, the debt

Table 1

Alesina and Ardagna's Cases of Expansionary Adjustments

| Country | Year | Real GDP growth year t | Real GDP growth rate year t - 1 | Average growth rate t - 3 to t - 1 | Average growth rate from t to t + 2 | Average growth rates from (t to t + 2) to (t - 3 to t - 1) | Do they cut in a slump? (is growth t - 1 below average of t - 3 to t - 1?) | Is average growth higher in post-adjustment than pre-adjustment? |
|---------|-------|------------------------|---------------------------------|------------------------------------|-------------------------------------|--|--|--|
| Spain | 1986 | 3.3 | 2.3 | 2.0 | 4.6 | 2.7 | No | Yes |
| Spain | 1987 | 5.5 | 3.3 | 2.5 | 5.1 | 2.7 | No | Yes |
| Finland | 1973* | 7 | 7.7 | 5.1 | 4.0 | -1.1 | No | No |
| Finland | 1996 | 3.7 | 3.9 | 2.2 | 5.0 | 2.8 | No | Yes |
| Finland | 1998 | 5.2 | 6.2 | 4.6 | 4.7 | 0.1 | No | Yes |
| Finland | 2000 | 5.1 | 3.9 | 5.1 | 3.1 | -2.0 | Yes | No |
| Greece | 1976 | 6.9 | 6.4 | 2.7 | 5.7 | 3.0 | No | Yes |
| Greece | 2005 | 2.2 | 4.6 | 4.6 | 3.7 | -0.9 | Yes | No |
| Greece | 2006 | 4.5 | 2.2 | 4.2 | 3.7 | -0.6 | Yes | No |
| Ireland | 1976 | 1.4 | 5.7 | 4.9 | 5.6 | 0.7 | No | Yes |

| | | | | | | | | |
|-------------|--------|-----|------|------|-----|------|-----|-----|
| Ireland | 1987 | 4.7 | -0.4 | 2.4 | 5.2 | 2.9 | Yes | Yes |
| Ireland | 1988 | 5.2 | 4.7 | 2.5 | 6.5 | 4.0 | No | Yes |
| Ireland | 1989 | 5.8 | 5.2 | 3.2 | 5.4 | 2.2 | No | Yes |
| Ireland | 2000 | 9.4 | 10.7 | 10.2 | 7.2 | -3.0 | No | No |
| Netherlands | 1996 | 3.4 | 3.1 | 2.5 | 3.9 | 1.4 | No | Yes |
| Norway | 1979 | 4.4 | 3.9 | 4.6 | 3.5 | -1.1 | Yes | No |
| Norway | 1980 | 4.5 | 4.4 | 4.1 | 2.0 | -2.1 | No | No |
| Norway | 1983 | 3.9 | 0.1 | 2.0 | 5.1 | 3.0 | Yes | Yes |
| Norway | 1996 | 5.1 | 4.2 | 4.0 | 4.4 | 0.4 | No | Yes |
| New Zealand | 1993** | 6.4 | 1.1 | 0.1 | 5.3 | 5.2 | No | Yes |
| New Zealand | 1994 | 5.3 | 6.4 | 2.1 | 4.3 | 2.3 | No | Yes |
| New Zealand | 2000 | 2.4 | 5.3 | 2.5 | 3.6 | 1.1 | No | Yes |
| Portugal | 1986 | 4.1 | 2.8 | 0.2 | 6.0 | 5.8 | No | Yes |
| Portugal | 1988 | 7.5 | 6.4 | 4.4 | 6.0 | 1.5 | No | Yes |
| Portugal | 1995 | 4.3 | 1 | 0.0 | 4.0 | 4.0 | No | Yes |
| Sweden | 2004 | 4.1 | 1.9 | 1.8 | 3.9 | 2.1 | No | Yes |

*Real GDP growth was not available for 1970 for Finland; hence the average growth rate from 1970 to 1972 is the average growth rate for 1971 and 1972.

**Real GDP growth was not available for 1990 for New Zealand; hence the average growth rate from 1990 to 1992 is the average growth rate for 1989, 1991, and 1992.

was 20.83 percent of GDP. It rose about fourteen percentage points to 34 percent of GDP by 1986.³

The other case is indeed a case of unusual success. We now take a closer look to see if there are ways in which the United States can emulate its experience.

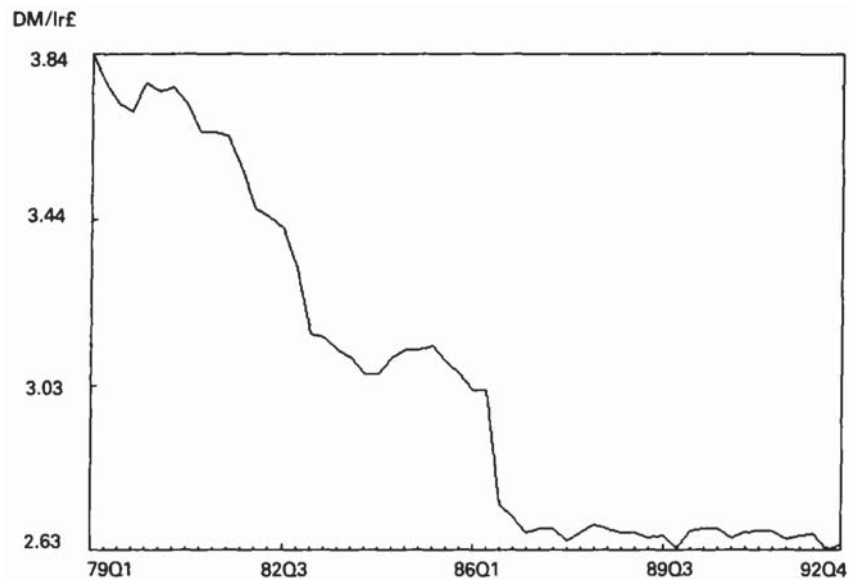
Ireland (1987)

Ireland is the only case of a fiscal adjustment in which the economy was in a recession the previous year. It is also a rather well-known case of fiscal consolidation that has been extensively explored by many scholars, including Considine and Duffy (2007) and Walsh (1993).

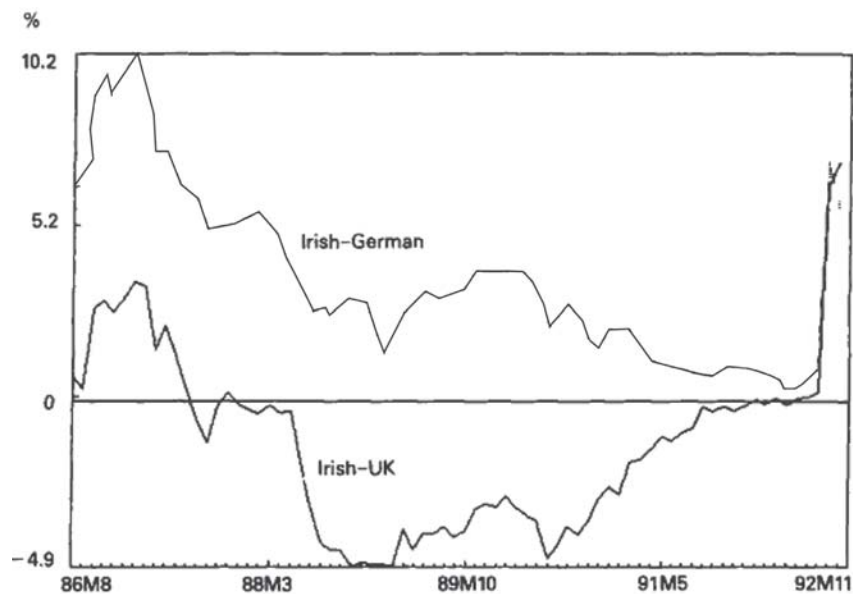
The Irish struggle over public finances began in 1983 and involved two attempts to consolidate. The first period was from 1983 to 1986 and was remarkably unsuccessful. The second attempt, the episode selected by A&A, was very successful. It is worthwhile to quote Considine and Duffy more extensively to understand the difference between these two periods.

This first attempt at fiscal stabilisation coincided with a downturn in domestic economic activity and an international economic environment that was less favourable than in the second half of the decade. The second adjustment was preceded by a massive 10 percent devaluation of the Irish pound within the European Exchange Rate Mechanism in August 1986. This devaluation combined with positive implications of the fiscal adjustment for foreign direct investment helped the performance of Irish exports. Investment was further aided by the continued reduction of the interest differential with Germany, while exports were aided by the “Lawson Boom” in Britain (Ireland’s largest trading partner at the time). (2007, 10)

As Walsh (1993) shows, the variables in question had sharp movements. The deutsche mark (DM)/pound exchange rate fell from about DM3/Irish pound to about DM2.7/Irish pound in 1986 (and stayed at that level for a few more years). The interest rate differential between Ireland and Germany and between Ireland and the UK fell sharply. It dropped from 10 percent to 5 percent between mid-1986 and early 1988 for the Irish-German differential and from about 3.5 percent to -1 percent in the case of the Irish-UK interest rate over the same period. (See Figure 1.)



a. Irish pound/German mark exchange rate, quarterly data, 1979–1992



b. Irish-German and Irish-UK short-term interest rate differentials

Figure 1. Irish Interest Rates and Exchange Rates

Source: Walsh 1993.

Table 2

Portugal (1995) Interest Rates

| | Short-term interest rates | Long-term interest rates |
|------|------------------------------|-----------------------------|
| 1995 | 9.8% | 11.5% |
| 1996 | 7.4% | 8.6% |
| 1997 | 5.7% | 6.4% |
| 1998 | 4.3% | 4.9% |

Source: OECD statistics.

It is not immediately obvious how the growth experiences of a country with a population roughly the size of Chicago's is a suitable example to hold up for the United States today, given these facts: It was undergoing a massive exchange-rate devaluation, while its closest trading partner is undergoing a once-in-a-decade boom, while also witnessing a decline of about 5 percent in the interest rate differential between it and the benchmark interest rates over the course of a year. The United States today has the benchmark rate, and its interest rate is at zero. In addition, the United States is a large country that cannot rely extensively on export-led growth—especially when its major trading partners are also undergoing recessionary conditions.

A Special Case: Portugal (1995)

One of the cases that does not make it through the filter we apply but needs further examination is Portugal in 1995. Portugal was growing at only 1 percent in the year preceding consolidation and had undergone a recession two years earlier. It therefore bears further examination. As Jorge Correia da Cunha and Cláudia Rodrigues Braz (2006) show, Portugal's contractionary fiscal stance in 1995 as part of its attempt to join the ERM was followed by smaller expansionary stances for the next three years. But the key difference compared to the United States today was the ability to lower interest rates and encourage private investment. Portugal had an interest-rate profile in 1995–2000, as shown in Table 2.

Table 3

Cases of Consolidation When the Deficit Was Cut in a Slump

| Country | Years |
|----------------|------------------------------------|
| Australia | 1987 |
| Austria | 1997 |
| Belgium | 1982, 1987, 2006 |
| Canada | 1981, 1987, 1996, 1997 |
| Spain | 1994 |
| Finland | 1976, 2000 |
| United Kingdom | 1996, 1997 |
| Greece | 2005, 2006 |
| Ireland | 1984, 1987 |
| Italy | 1976, 1982, 1990, 1991, 1992, 1997 |
| Japan | 1984, 1999, 2006 |
| Netherlands | 1973, 1983, 1988, 1993 |
| Norway | 1979, 1983, 1989, 2000, 2004 |
| New Zealand | 1987, 1989 |
| Portugal | 1982, 1983, 1992, 2002 |
| Sweden | 1981, 1986, 1987, 1994, 1997 |
| Total cases | 48 |

Once again, there was considerable leeway to lower interest rates—a policy unavailable to the United States today.

All Cases

In the second step, A&A filtered their results from 107 adjustments to 26. We now turn to the full panel of 107 adjustments to undertake this examination. First, for most of the cases, consolidation did not take place in a slump. Table 3 shows the 48 episodes in which deficits were cut in a slump. Of these, more than half saw reductions in their growth rates in the years following compared with the years preceding.

The remaining 23 are listed in Table 4. Of these, most of the countries that have the requisite data (data are missing for debt-to-GDP ratios in the OECD tables for many years before 1980) experienced rises in the

Table 4

Cases in Which Fiscal Consolidation Occurred in a Slump and Growth Increased

| Country | Years |
|----------------|------------------|
| Australia | 1987 |
| Austria | 1997 |
| Belgium | 1987, 2006 |
| Canada | 1997 |
| Spain | 1994 |
| United Kingdom | 1996, 1997 |
| Greece | 1994 |
| Ireland | 1984, 1987 |
| Italy | 1976 |
| Japan | 1984, 1999 |
| Netherlands | 1983, 1988 |
| Norway | 1983, 1989, 2004 |
| New Zealand | 1989 |
| Sweden | 1986, 1994, 1997 |
| Total cases | 23 |

debt-to-GDP ratio in the years following the adjustment—suggesting that growth increases were insufficient to generate the revenues required to reduce debt. We are left then with eight cases (Table 5). Of these, only two, Norway in 1989 and Ireland in 1987, are examples that approximate the U.S. experience today, in that they both experienced recessions in the year before consolidation. We have already considered the case of Ireland. We are quite puzzled by the classification of the Norwegian case of 1989 as an example of a fiscal adjustment. We were unable to obtain cyclically adjusted primary balances from the OECD Web site before 1992, but other information available makes it somewhat implausible that this year should be seen as a period of consolidation. It should be noted that A&A use a different definition of cyclical fiscal variables, and this is possibly the source of the contradiction.⁴

As researchers at the University of Oslo's Research Department and at Statistics Norway (Bowitz et al. 1993) show, 1989 was the first year of

Table 5

Cases in Which Fiscal Consolidation Occurred in a Slump, Growth Increased, and Government Debt-to-GDP Ratios Fell

| Country | Years |
|-------------|------------|
| Australia | 1987 |
| Belgium | 2006 |
| Canada | 1997 |
| Ireland | 1987 |
| Norway | 1989, 2004 |
| Sweden | 1986, 1997 |
| Total cases | 8 |

Table 6

Cyclically Adjusted General Government Primary Balances [Surplus (+) or deficit (-) as a percent of potential GDP, excludes revenues from petroleum]

| Government primary balance | |
|----------------------------|------|
| 1986 | 3.9 |
| 1987 | 3.2 |
| 1988 | 3.0 |
| 1989 | 2.9 |
| 1990 | 1.6 |
| 1991 | -8.1 |

a very strong expansionary policy in Norway as a reaction to the recession of 1988. They note that between 1988 and 1991, “The cyclically adjusted primary deficit increased by 3.8 percent of trend GDP.”⁵

Such a trend is consistent with the OECD’s data on the cyclically adjusted government primary balance that we were able to obtain from an online source (“Cyclically-Adjusted” 2003) drawn from previous reports of the OECD. According to these data, the Norwegian primary balance went from a 3.0 percent surplus relative to trend GDP to a -8.1 percent deficit by 1991. In 1989, there was a modest decline in the surplus relative to 1988 of 0.1 percent of trend GDP—a mild expansion. See Table 6 for the relevant years.

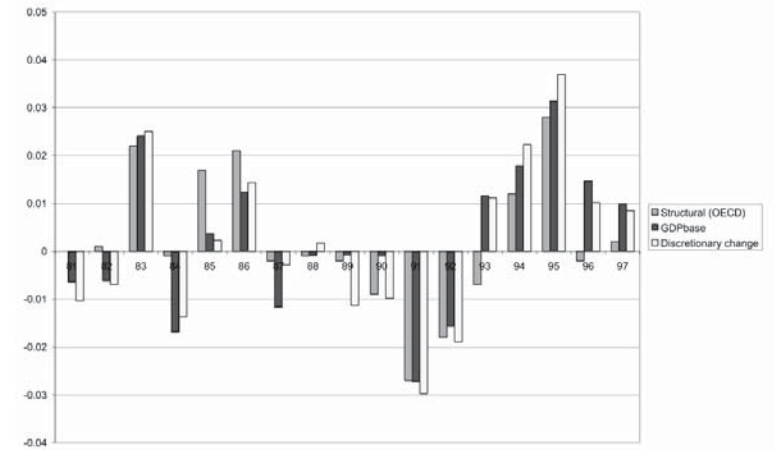


Figure 2. Norway's Expansion, 1989–1991

Source: Braconier and Holden (1999).

The idea that 1989 was a year of fiscal policy expansion, not contraction, is further supported by Braconier and Holden (1999). They show that 1989 and later years saw sharp increases in the discretionary budget for expansion. Figure 2, reprinted from that paper, makes the point more clearly.

Looking at the broad spectrum of examples, we cannot find a situation in which cutting the deficit in the middle of a slump resulted in growth without also devaluing the currency, increasing debt-to-GDP ratios, or decreasing interest rates.

An Additional Test Using a Longer Window

We turn now to another filter that is perhaps more appropriate for determining whether a cut is occurring in a slump. We have thus far been trying to maintain consistency with the three-year window used by A&A. Instead of taking the growth rate in the previous year and comparing it to the average growth rate over the past three years, we now compare it to the past five years. The idea is to have a more robust idea of the trend growth rate in the economy. It should be noted that the United States is indeed in a position where the growth rate in the previous year

Table 7

GDP Growth Using Longer Growth Trends

| Episodes of fiscal consolidation when growth in year $t - 1$ was lower than average from $t - 5$ to $t - 1$) | Year | Lagged growth rates | Does GDP growth in years t to $t + 2$ exceed GDP growth in years $t - 3$ to $t - 1$? |
|--|-------------|----------------------------|---|
| Finland | 2000 | 3.9 | No |
| Greece | 2006 | 2.2 | No |
| Ireland | 1987 | -0.4 | Yes |
| Norway | 1979 | 3.9 | No |
| Norway | 1980 | 4.4 | No |
| Norway | 1983 | 0.1 | Yes |

was well below the five-year average from 2005 to 2009 (inclusive). In Table 7 we ask the same questions that we asked above.

First, it is important to see that fiscal consolidations very rarely occur when the growth rate in the year before is lower than the five-year average preceding the consolidation. This occurs for only 8 cases out of 107 where adequate data are available. In four of the cases, the economy is growing robustly in the year preceding. In only one case, Ireland in 1987, did the economy recently undergo a recession. One case out 107 resembles the United States (superficially), and as we have shown above, the latitude afforded to policymakers in that case was far more than what is available to the United States today.

Conclusion

We are living in extraordinary times. This is the largest recession since the Great Depression. A large part of the rest of the world is also undergoing a sharp downturn. There is a genuine and reasonable concern that public intervention will replace the private debt overload with a sovereign debt

overload. As such, sound policy advice requires that we recognize what historical examples are relevant for our current situation.

The A&A data do not appear to provide much solace in this regard. Their examples of successful consolidation are typically conditional on cutting a deficit during a boom and not during a slump. There may be situations in which consolidation does indeed result in better outcomes, but those do not apply to the United States at the moment. It is not clear that immediate fiscal consolidation will do much to alleviate that worry. Without robust growth, there is little hope of the debt-to-GDP ratio falling. The hope in undertaking such steps is for private investment to be reignited by increased trust and faith in the viability of government finances. While this may be a reasonable hope in some situations, the prospects for such a revival in the United States appear bleak.

Notes

1. For example, see Brooks (2010), who approvingly cited A&A's paper and suggested that it be used as guidance for the United States.
2. Ryan Avent (2010) has considered a couple of examples that A&A use and suggests that they are not very useful for policy guidance. We argue that virtually none of the cases they look at are.
3. This is most likely because the lower addition to debt was not matched by a sufficiently large addition to GDP to reduce the debt.
4. A&A correct various components of the government budget for year-to-year changes in the unemployment rate. As they note: "More precisely, the cyclically adjusted value of the change in a fiscal variable is the difference between a measure of the fiscal variable in period t computed as if the unemployment rate were equal to the one in $t - 1$ and the actual value of the fiscal variable in year $t - 1$. We prefer this method to more complicated measures like those produced by the OECD because the latter are a bit of a black box based upon many assumptions about fiscal multipliers upon which there is much uncertainty" (2009, 7).
5. By the OECD's definition; by the government's own statistics, the expansion was even larger.

For Further Reading

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