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Article
The effects of austerity

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What are the costs in terms of output losses of so-called “austerity” policies designed to reduce large government deficits and mounting public debt? The debate on this issue is raging, especially after the latest round of austerity in Europe.

The question is difficult to answer for at least three reasons. The first is “endogeneity,” the two-way interaction between fiscal policy and output growth. Suppose you observe a reduction in the government deficit and an economic boom. It would be highly questionable to conclude that deficit reduction policies generated growth, since it could be easily the other way around. Second, major episodes of austerity are often accompanied by changes in other policies: monetary policy, exchange rate movements, labor market reforms, regulation or deregulation of various product markets, tax reforms, and so on. In addition, they are sometimes adopted at times of crisis due to run-up debt, not in periods of “business as usual.” Third, virtually all austerity programs are based upon multi-year plans announced in advance and then revised along the way. To the extent that expectations matter, the multi-year nature of these plans cannot be ignored.

An early literature started by Francesco Giavazzi and Marco Pagano reviewed and summarized by Alberto Alesina and Silvia Ardagna reached two conclusions regarding austerity policies in advanced industrial economies. First, expenditure-based adjustments, namely those based upon cutting spending and not raising taxes, or relying less on tax increases than on spending cuts, were found to be much less costly in terms of output losses than tax-based approaches.

Second, expenditure-based adjustments accompanied by an appropriate set of related policies can sometimes be expansionary, even in the short run. This literature was well aware of the three problems discussed above. The first was initially addressed by considering cyclically adjusted deficit over GDP ratios as measures of fiscal policy. This variable, in principle, should eliminate the effects of output fluctuations. The second and third problems were addressed in a variety of ways, including case studies. In some recent research, we and our coauthors have revisited these questions, and tried to go deeper than previous work. In order to address the endogeneity problem, we adopt the “narrative method” proposed by Christina Romer and David Romer. This approach attempts to solve the endogeneity problem by identifying through direct consultation of the relevant budget documents only changes in fiscal policy not implemented to achieve cyclical stabilization, but for other goals.

In the previously cited work with Carlo Favero, we address the third problem mentioned above, namely that fiscal adjustments are typically carried out through multi-year plans in which announcements and revisions deeply affect the expectations of economic agents. To begin, we checked the episodes of exogenous fiscal consolidations identified by Devries, et al, and corrected a few inconsistencies. More importantly, we constructed “plans.” By going back to the original sources (National Budget Reports, EU Stability Programs, IMF documents, OECD Economic Surveys, etc.), we reconstructed actions taken at the time an austerity plan was adopted, announcements made at the time of adoption regarding future periods of up to three years, and revisions of these announcements in the actual policies then carried out.

To be more precise, a fiscal plan implemented at time t typically contains three components:

- Unexpected shifts in fiscal variables, announced upon implementation of measures announced before time t
- Shifts implemented at time t but which had been announced in previous years
- Shifts announced at time t, to be implemented in future years

Each year of a fiscal plan is fully characterized by these three components, which we allow to have different effects on macroeconomic variables. To study the potentially heterogeneous effects of plans depending on their nature, we distinguish between Tax-Based (TB) and Expenditure-Based (EB) plans. A plan is labeled TB if the sum of output losses is larger than the tax revenue raised, EB otherwise.
Alberto Alesina is the Nathaniel Ropes Professor of Political Economy at Harvard University and director of the National Bureau of Economic Research. He is a member of the Center for Economic Policy Research, the Econometric Society, and the American Academy of Arts and Sciences.

Alesina has published five books, including The Future of Europe: Reform or Decline, with Francesco Giavazzi, and Fighting Poverty in the US and Europe: A World of Difference, with Edward Glaeser. He has been a co-editor of the Quarterly Journal of Economics for eight years and has published widely in all the major academic journals in economics.

He has written columns for leading newspapers around the world, and has visited at institutions including MIT, Tel Aviv University, Stockholm University, the World Bank, and the IMF. He holds a visiting position at IGIER, Bocconi University.

Born in Italy in 1957, Alesina obtained his Ph.D. from Harvard in 1986 and served as chairman of the department of economics there from 2003–06.

Our main finding is that fiscal adjustments based upon cuts in spending are much less costly, in terms of output losses, than those based upon tax increases. Over our estimation period (1981–2007), the effect of a one percent reduction in spending cuts and those based on increases in spending are highly distinguishable from zero for about two years and then becomes significantly positive, while TB adjustments lead to deep recessions. The component of aggregate demand which seems to explain these differences in all countries, not only Canada, is investment, which is correlated with investment confidence.

In our work with Favero, Barbiero, and Paradisi, we extend the dataset up to 2013 for the following countries: Austria, Belgium, Denmark, Spain, France, Germany, United Kingdom, Ireland, Italy, Portugal, and the United States. The effects of recent episodes of austerity do not look different from previous ones. Out-of-sample simulations of our model projecting our results onto a scenario in which only exogenous fiscal adjustments do reasonably well in predicting the total output fluctuations of the countries in our sample. But over the years 2010–13, particularly for those countries in which the main shock in that period was a fiscal policy one. For example, our estimates suggest that the tax-based adjustment implemented in Italy in 2010–13 is sufficient by itself to explain the recession experienced by the country over the period 2011–12, with negative GDP growth of around 2 percent in each year. The expenditure-based adjustments implemented in countries such as the U.K. and Denmark are associated with much milder recessions, with GDP growth fluctuating around zero.

We cannot reject the hypothesis that recent fiscal adjustments had the same effect on output growth in some cases failure to reject is marginal. We do not find sufficient evidence to suggest that the recent rounds of fiscal adjustments have been especially costly for the economy, and we conclude that the fiscal multipliers estimated using data from the pre-crisis period give a valuable indication about the potential for output loss due to the post-crisis fiscal consolidation measures. This result is at odds with Blanchard and Leigh, who find that the costs of fiscal adjustment have been significantly higher in recent years than previously estimated.

The difference between the two results depends on a number of factors, including our choice not to constrain consolidations based on spending cuts and those based on increases in government revenues to have identical effects on output.

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In current work in progress with Favero, Barbiero, and Paradisi,15 we take our analysis a step further by exploring the potential welfare effect of the output effects associated with different components of revenues and expenditure in government consumption and investment. These shocks into four components: government consumption and investment, transfers, direct taxes and indirect taxes. From a theoretical point of view, each of these components should affect GDP growth through different channels. For instance, in the short run, cuts in government consumption and investment might impact GDP growth through demand-side effects, whereas in the medium and long run, their effect on growth might depend on the government’s efficiency in providing public goods and services. Transfer cuts reduce the resources available to households, which in turn may be forced to cut consumption, especially if liquidity constrained. These measures also may have welfare effects by increasing labor supply. In addition, a reduction in both expenditure components may generate expectations of future cuts that could induce reduced future economic distortions, with potentially positive wealth effects. The previous literature has addressed the issue of composition primarily by looking at revenues versus spending in the aggregate. Recent papers by Karel Mertens and Morten Ravn,16 Romer and Romer,17 and Roberto Perotti18 are exceptions. However, they focus only on the United States. One potential limitation in an international panel of disaggregated fiscal consolidation plans and analyzes their economic effects. Building on the methodology established in our work with Favero, we classify fiscal plans into different components of revenues and expenditure, excluding transfers, are much less than tax-based fiscal adjustments in terms of foregone output growth. In fact, cuts in government consumption seem to have virtually no costs in terms of output losses on average—a result which probably balances some recessionary and some expansionary cases. Tax-based fiscal adjustments are very costly in terms of output losses. Cuts in government transfers seem to lie somewhere in between the extremes of government consumption and tax increases, though they are closer to tax hikes. Perhaps the smaller effect of transfers cuts relative to tax increases may have to do with a supply-side role, as recently pointed out on this point. Regarding which tax increases are more costly, direct and indirect taxes seem to have overall similar welfare effects, though this is also an issue to be explored further.

We also find that the differences in tax-based and expenditure-based fiscal adjustments cannot be explained by different responses of monetary policy, although the evidence points to a slightly more expansionary response of monetary policy in the case of expenditure-based adjustments, perhaps because tax-based adjustments tend to raise prices, while expenditure based adjustments tend to lower them, or because central banks believe that expenditure-based adjustments are more flexible and credible.

Our findings seem to hold for fiscal adjustments both before and after the financial crisis. We cannot reject the hypothesis that the effect of fiscal adjustments, especially in Europe in 2009–13, were indistinguishable from previous ones. They certainly show the same relative patterns between tax-based and expenditure-based adjustment. This does not mean, however, that expenditure-based and tax-based plans have identical effects during periods of economic expansion and contraction. This question, in the context of disaggregated fiscal plans, remains hard to answer.


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