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Introduction

Alberto Alesina and Francesco Giavazzi

Fiscal policy is at the forefront of political debates on both sides of the Atlantic. The recent Great Recession has raised (once again) several fundamental questions: Should aggressive fiscal policy be used to counteract business cycle fluctuations? At what level do public debts start being a source of concern, and how can they be reduced? Is the current generation leaving an excessive debt burden to future ones? What are the political constraints that governments face in reducing deficits and are there legislative or constitutional rules that may help?

On the first question, regarding countercyclical stabilization policy, many economists would support the "tax smoothing" principle. This theory implies stable tax rates over the cycle, allowing deficits to accumulate during recessions, when tax revenues fall, to be compensated by surpluses during expansions, when tax revenues recover. But the agreement stops here. Economists disagree about the value of more aggressive discretionary tax and spending policies to counteract the cycle.

The second set of questions relates to long-term issues. Is our generation building an intergenerational time bomb above and beyond the deficits induced by the Great Recession? In other words, are we following policies that are inherently unsustainable and will lead to a drastic reduction of the standard of living of future generations of Americans and Europeans?

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The third set of questions relates to how to chip away at accumulated deficits. Will this occur by raising taxes or cutting spending? What taxes (if any) should we raise and which spending programs (if any) should we cut? Would some inflation help? Are we heading toward sovereign debt defaults, orderly or less so?

Finally, one has to recognize that fiscal policy is highly charged politically: we cannot ignore politics and institutional arrangements when discussing it. For instance, how willing is the current generation of voters to reduce deficits? Are there rules that should be adopted in national constitutions like balanced budget amendments?

There is much that we do not know about all these questions. In the area of monetary policy, academic research and the practice of central banking have joined forces in aiming to make monetary policy scientific. Research in monetary economics has deeply affected policymaking. During the Great Moderation we thought that we had solved most of the problems regarding monetary policy. The recent crisis has made our profession reconsider this conclusion, in particular with the lack of attention to the financial sector, which characterized previous research on optimal monetary policy in Dynamic General Equilibrium Models.

Fiscal policy has experienced a similar fate, perhaps starting from an even lower level of agreement between economists even before the Great Recession. In fact, researchers are still deeply divided on some crucial issues such as the size (and sometimes also the sign) of fiscal multipliers. Also, fiscal policy is much more politicized than monetary policy. Policymakers have been willing to delegate monetary policy to technocrats (central bankers), but they keep fiscal policy close to their chest. This is because spending programs and tax rates are the bread and butter of what politics is all about: politicians build coalitions within generations and across generations. Politicians rarely, if ever, are willing to delegate fiscal policy.

This book sheds some light on these issues, drawing from the best research available. Hopefully it will help make the practice of fiscal policy a bit more "scientific."

Discretionary Countercyclical Fiscal Policy

The first question pertains to the need for aggressive discretionary fiscal policy during recessions like the one we have just experienced. Is it a good idea to engage in expansionary tax and spending policies during recessions?

This question has very different answers in models with a neo-Keynesian flavor or in full-employment models of the business cycle, like real business cycle models with no role for aggregate demand to stimulate output. In the latter type of model it makes no sense to advocate expansionary spending policies to stimulate output. Generally speaking, they would have the opposite effect by implying higher taxes in the future. Thus, if one does not believe that downturns can be caused by insufficient aggregate demand, and, conversely, that stimulation of aggregate demand can facilitate the end of recessions, asking about spending multipliers is meaningless.

If one instead thinks that when aggregate demand is lacking fiscal policy can have a role, then it makes sense to ask when and how discretionary fiscal policy can help reduce business fluctuations. The answer to this question depends, among other things, on the size of spending and tax multipliers. A spending multiplier measures by how much GDP increases for a one-dollar increase in government spending, and an analogous definition holds for tax multipliers. There are two difficulties of calculating these multipliers. First, government spending, taxes, and GDP are deeply correlated and move together. Movements in policy variables like spending and taxes affect GDP, but movements in GDP in turn affect tax revenues and certain spending programs (think of unemployment compensation). How does one establish a direction of casualty? The second difficulty is that fiscal policy does not act in isolation, and when evaluating the effects of, say, an increase in spending, one has to take into account what other factors were at work at the same time: monetary policy, the exchange rate, the international business cycle, and so on. Not an easy task.

Chapter 1 by Valerie A. Ramey and the accompanying discussion by Roberto Perotti illustrate these difficulties well and also effectively summarize what we know about spending multipliers. The bottom line seems to be that based upon US data, spending multipliers are most likely between 0.4 and 1.5. This is a very large interval. If the "true" multiplier were close to 0.4 it would be impossible to advocate an aggressive spending policy to stimulate the economy. In fact, such a multiplier would imply that for each dollar spent by the government, the private sector spends half a dollar less. If one then factors in the future cost of taxation needed to cover the additional spending, it is hard to imagine that this policy would be welfare-improving. The argument would be quite different if the multiplier were close to 1.5 instead.

Valerie A. Ramey and Roberto Perotti would probably agree on this wide range. Narrowing it should be high on the fiscal policy research agenda. But before moving forward, two methodological points of great importance need to be solved. On both issues the two economists sharply disagree. Ramey argues that the best way to isolate movements in spending, which are exogenous to the state of the economy, is to use defense spending as the "exogenous" component of federal spending. Defense spending is dictated by foreign policy needs, which are most likely uncorrelated with the state of the business cycle. In addition, changes in military spending during and after major wars are large and thus can provide much needed variability in the policy variables. Perotti instead believes that using military spending relies on too few wartime observations. In addition, he argues, in those war years many other confounding factors were at work, like the prohibition of purchasing durables for consumers, or "patriotic" effects on people's behavior.

However, it is a priori unclear whether these "war induced" behaviors and laws would bias the estimated multipliers up or down. The second methodological disagreement is on how important it is to distinguish on whether or not changes in government spending are anticipated by the private sector. Ramey thinks that it is important, but Perotti disagrees. The point is vital because if shifts in fiscal policy were anticipated, then the statistical techniques that are sometimes used to identify "exogenous" policy shifts (for example, imposing restrictions on a vector autoregression) would be invalid, and the multipliers thus estimated meaningless.

In her chapter, Valerie A. Ramey also investigates the effects of exogenous changes in government spending on employment. She finds that virtually all of the increase in employment comes from new government hires; that is, from the jobs directly created by the federal and local governments. The induced effect on private employment is very small or even absent. This is interesting in light of the recent discussion of the employment effect of the US stimulus package, because so far unemployment has remained stubbornly high in the United States. Ramey's results would suggest that this is because private employment does not respond much to government spending. Others would argue instead that the stimulus package was simply too small.

A common thread in some recent research is that there is no such thing as a "single" fiscal multiplier; that is, a single number policymakers could use to inform their fiscal actions. Chapter 2 by Alan J. Auerbach and Yuri Gorodnichenko shows that spending multipliers do not need to be the same in every period: their size may depend on other features of the economy. The kind of multipliers estimated by Ramey (and others) of, say, slightly less than one, is an average of larger multipliers during recessions and smaller ones during booms. This insight has important policy implications, since it suggests that during deep recessions spending multipliers are especially large.

A related argument concerns the effectiveness of fiscal policy when the zero lower bound on nominal interest rates binds. (Correia et al. 2011, for example, show that when monetary policy can no longer provide appropriate stimulus, tax policy can deliver it at no cost and in a time-consistent manner.) The results in this chapter are also relevant for a discussion of fiscal policy at the "zero bound," namely, in situations where interest rates cannot fall any more and monetary policy has almost exhausted its role as a stimulus to the economy. We say "almost" because during the recent Great Recession, several Central Banks have used nontraditional forms of interventions, which have made it a bit less obvious what the zero lower bound is as in the traditional liquidity trap of a Keynesian nature.

In chapter 3, Francesco Giavazzi and Michael McMahon come to a similar conclusion by following a different approach based on micro data. They study how individual heads of households respond to a particular type of government spending: military contracts awarded by the Pentagon. Their way to identify "exogenous" shifts in government spending uses the variation of spending not across time, but across US states—a strategy that allows them to control for other factors that were at work at the same time as fiscal policy was changing: monetary policy, the exchange rate, the international business cycle, all summarized in "time fixed effects." That is, they hold constant everything that varied over time and focus on comparing different states in the same year. Similar to Auerbach and Gorodnichenko, they also find significant differences in the effects of government spending, depending on the state-specific unemployment rate. In states with relatively low unemployment, government spending could have insignificant or even negative effects on private consumption. On the contrary, private consumption increases in high-unemployment states, suggesting that in such states the multiplier is likely to be positive. They also find that fiscal policy can have important distributional effects, since there is significant heterogeneity in households' responses to shifts in government spending. For instance, lower-income households and households where the head works relatively few hours per week following an increase in spending tend to reduce consumption. Heads who on average work relatively few hours, differently from those working full time, also respond to an increase in spending by working more—a result that confirms that fiscal policy can have important supply-side effects.

Recognizing that the effects of fiscal policy are heterogeneous is important not only when considering the consequences of fiscal action at different points along the business cycle, but also when considering their effects in different countries. Favero, Giavazzi, and Perego (2011), for example, find that the effect of fiscal policy on output is different across countries. They find that the response of output to a fiscal retrenchment ranges from significantly contractionary in Belgium and France, to not significantly different from zero in the United Kingdom and Italy, to initially zero and then slightly expansionary in Canada and the United States, to significantly expansionary in Japan and in Sweden, at least on impact. Interestingly, one example of expansionary contractions is Japan, the country with the highest debt ratio in the Organization for Economic Cooperation and Development (OECD), suggesting that the level of the debt is important in determining the sign of fiscal multipliers.

And what about tax multipliers? A widely cited paper by Romer and Romer (2010) identifies several episodes of large shifts in taxes in the United States and argues that tax multipliers are quite large, in the order of three. This number seems unreasonably large, particularly when confronted with the results of previous research, such as Blanchard and Perotti (2002), who find a multiplier close to one. Recent research by Perotti (2012) and Favero and Giavazzi (2012) has suggested that tax multipliers could be much smaller: the impact of a shift in taxes on output growth rarely exceeds one, although it could be larger than spending multipliers, contrary to the basic

Keynesian model. Confirming the results on heterogeneity, they also point to the instability of the tax multiplier, at least in the United States, before and following 1980: larger before 1980, smaller in the following decades where it is not significantly different from zero.

In summary, what can one conclude about fiscal multipliers? The very basic textbook Keynesian argument is that spending multipliers should be (much) larger than one, and tax multipliers should be smaller. The evidence seems mixed at best. Spending multipliers appear to be smaller than tax multipliers and most estimates of tax multipliers place them not too far from one. The Keynesian argument in favor of aggressive spending policies may have a bigger bite during deep recessions. One also has to take very seriously the notion that multipliers might be different in different states of the economy (recessions versus expansions, low versus high debt). There is still a lot of uncertainty about the size of multipliers, but one needs to allow for them being different if we want to make progress in understanding the role of discretionary fiscal policy. Even though multipliers might be larger in recessions, one has to take into account two caveats. First, one has to keep in mind the "long and variable lags" argument by Milton Friedman. Namely, by the time an expansionary fiscal package has been decided, approved, implemented, and spent, it may come into action too late and thus be useless or even counterproductive. The second caveat is how to evaluate the future costs of reducing the accumulated deficits generated by aggressive spending programs, an issue to which we now turn to. In fact, by and large the literature on fiscal multipliers is silent regarding the long-run effects of expansionary fiscal policy (although Favero, Giavazzi, and Perego [2011] show that the size of spending multipliers depends on how the government is expected to meet its intertemporal budget constraint). In other words, one may believe that fiscal multipliers are relatively large and therefore engage in deficit spending during recessions. This may help during the recessions, but what are the medium term long-run costs of such a policy? What are the costs associated with debt accumulation? This problem is made even worse if one adds political economy considerations here. A deficit accumulated during a recession could be relatively easily eliminated by allowing surpluses during expansions, retrenching the expansionary measures introduced during the recession. However, experience shows that policymakers are eager to embrace the deficit spending side of the equation, but reluctant to embrace the other side. Surpluses are almost never large enough during expansions. The result is a series of deficit spending during recessions, which lead to ever-growing debt levels. These potential costs are not incorporated in these measures of fiscal multipliers. A different way of putting it is that we know very little about welfare. Even assuming that spending multipliers are relatively large (say, above one), do we know if aggressive spending policy during recessions raises overall welfare when we take their long-run effects into account?

The problem is made even worse by the aging of the population and the shrinking of the number of taxpayers relative to the beneficiaries of government transfers, an issue we address in the next several chapters.

Long-Term Accumulation of Debt

The recent Great Recession has generated a very large increase in government indebtedness, both in the United States and in Europe. But this could only be the tip of the iceberg: debt problems in advanced economies could be even deeper than what has been caused by the Great Recession. Their roots are structural.

Chapter 4 by William Easterly makes a simple but important point. He argues that advanced economies did not adjust their fiscal policy to a secular decline in their rate of growth. Such secular decline is "normal": richer countries are expected to grow less as they become richer according to many, although not all, models of long-term development. Governments in those countries have not adjusted their fiscal policies to this basic fact, and debt over GDP ratios have kept increasing simply because the denominator of this ratio was growing less while the growth of the numerator was not adjusted accordingly. A different way of putting it is that many OECD economies mistook (perhaps strategically for short-term attitudes of various governments) a secular decline of their rate of growth for a temporary one. While a temporary one would not require a structural fiscal adjustment, a permanent one would. Yet in other words many OECD economies tried to "fight" a secular downturn in growth with temporary expansionary spending policies that were largely ineffective. This is why many countries, when hit by the Great Recession, were in an already weak fiscal position with large accumulated debts. A perfect example is Italy, where a decade-long decline of growth started in the early nineties and led to an increasing debt over GDP ratio, even with relatively small current deficits.

This problem is compounded, according to chapter 5 by Richard W. Evans, Laurence J. Kotlikoff, and Kerk L. Phillips, by an underestimation of the liability of the current generation versus future ones. According to this chapter, the current generation is following policies that will lead to an exceptionally high burden for future ones. Indeed, projection of Medicare and Social Security spending with unchanged policies look definitively unsustainable for the United States and similar consideration applies to many other countries. This chapter suggests that if a generation introduces unsustainable policies the problem compounds very quickly, leading to disaster—namely, to the inability of the government to fulfill its obligations. Chapter 5 is a reminder of how dangerous it can be to rely on conventional measures of deficits, which often disguise intergenerational obligations that escape such measures. This chapter is a sobering reminder of the importance of a careful analysis of what true government liabilities to future generations really are; in other words, of the importance of the so-called "generational accounting" principle. Often the budget deficit, as conventionally measured, is just the tip of the iceberg of the liabilities that the current generation is banqueting to future ones. In addition, measures that reduce current deficits as conventionally measured are simply a rewriting of the book to borrow even more from the future.

In this regard chapter 6 by Mathias Trabandt and Harald Uhlig raises an additional warning flag. European countries, and to a lesser extent the United States, have reached levels of government spending and taxation approaching 50 percent of GDP, and in a few cases even more. When considering further increases in government spending, one should start worrying about whether they would imply levels of taxation approaching the maximum that can be extracted from an economy. In other words, the question is how far various economies are from the top of their Laffer curve. Obviously the answer depends upon the various assumptions that the authors use to estimate Laffer curves. However, under the assumptions of the model, the picture that emerges is somewhat worrisome; many countries are not too far from the top of the Laffer curve. This raises the question of how much additional space tax increases have to solve the debt problems of OECD economies.

What should we expect given this worrisome scenario? If substantial tax increases are not feasible (as argued in chapter 5), and large spending cuts are difficult to implement, is inflation the way out, or will widespread defaults occur? This is the topic addressed in chapter 7 by Eric M. Leeper and Todd B. Walker. In a famous article, Sargent and Wallace (1981) argued that if primary deficits are impossible to reduce, then monetary policy loses its ability to control inflation. In such a situation the economy falls into a regime of "fiscal dominance": politicians set the rules and the central bank has no choice but to raise inflation to generate the seigniorage revenue necessary to avoid a default. In the current world the inflation solution—and thus the Sargent-Wallace argument—often look unrealistic, both because in many countries the independence of the central bank is protected by law, or even by a constitution (such as for the European Central Bank), and because in the midst of a world recession it is hard to envisage a surge in inflation. This chapter argues that there is a subtler way for the central bank to monetize the debt, one that does not necessarily require a large increase in inflation. The reason is that not all government bonds are real, that is, indexed to the price level, as the Treasury Inflation-Protected Securities (TIPS) issued by the US Treasury. Recognizing that most government bonds are nominal introduces a direct channel from fiscal policy to inflation, which does not rely on seigniorage. Instead, it springs from the fact that a nominal bond is a claim to a *nominal* payoff—dollars, euros, or pounds—and that the *real* value of the payoff depends on the price level. Higher nominal debt may be backed by real resources—real primary surpluses and seigniorage—or it may be backed only by *nominal* cash flows. When real resources fully back the debt, the Sargent-Wallace intuition holds and fiscal policy is inflationary only if the central bank monetizes deficits. But when the government cannot or will not raise the necessary real backing, the fiscal theory creates a direct link between current and expected deficits and inflation: it is fiscal, not monetary policy, that determines the level of prices in the economy. The bottom line is that the concern for a monetization of the debt could be more serious than it is often thought to be.

In summary, the message from this set of chapters is very sobering and should make policymakers pause. The fiscal problem of OECD countries may be substantially deeper than the short-term one caused by the Great Recession. Our generation may have followed policies that are inherently unsustainable and need radical changes above and beyond the short-term fiscal adjustments, which are on the books of current governments on both sides of the Atlantic. This point leads us directly into the next issue—namely, how do we reduce budget deficits and chip away at accumulated debts?

How Do We Reduce Deficits?

Given that virtually everyone agrees that sooner rather than later OECD countries will need to reduce deficits and debt over GDP ratios, the next question is how to do it and how costly it will be in terms of induced recessions. This is a topic that, not surprisingly, has received an enormous amount of attention in recent months. There are two critical questions. First, if one needs to reduce deficits, is it better to do it on the spending side or on the tax side? Second, is it possible to achieve large budget consolidations limiting or even eliminating the short-term recessionary costs implied by the basic Keynesian model?

The connection with the first set of chapters of this book is obvious, since the size of fiscal multipliers is a central issue in answering the first question. Chapter 8 by Roberto Perotti, however, follows a different methodology, analyzing in great detail case studies of a few large fiscal adjustments. This allows us to understand in much more detail the policy packages that are more likely to be successful. This chapter is the latest installment in a long series of papers, which, one way or the other, have looked at case studies of large fiscal adjustments. The first in this series was by Giavazzi and Pagano (1990). That paper studied the experience of Denmark in the early 1980s and Ireland at the end of the same decade and argued that these episodes represent clear cases of expansionary fiscal adjustments. The argument was that an increase in consumers' and investors' confidence, associated with the drastic fiscal change and reflected in a sharp fall in long-term interest rates, compensated the Keynesian effect of tax hikes and spending cuts. A large literature has followed that paper, making two points: spending-based adjustments are less contractionary and are more likely to lead to a permanent stabilization or a reduction of the debt GDP ratio. Second, in some cases spending-based adjustments have been associated with no recession at all, even in the short run, thus producing expansionary fiscal adjustments. A survey of this literature is found in Alesina and Ardagna (2010).

One difficult issue in this literature is how to identify episodes of large discretionary policy changes. Until recently the identification criteria was based on observed outcomes: a large fiscal adjustment was one where the cyclically adjusted deficit over GDP ratio fell by a certain amount (normally at least 1.5 percent of GDP). The idea was that such a large adjustment in the cyclically adjusted deficit was unlikely to be driven by the business cycle and was instead an indication of a discretionary active fiscal adjustment package. Assuming that the cyclical adjustment was reasonably done, that did not seem a bad assumption to make. Alesina and Ardagna (2010) confirmed the results of many other papers along the same line: in OECD economies with close to 50 percent of government spending as a fraction of GDP, spending-based adjustments are very likely to be less costly than tax-based ones. A large fiscal consolidation accompanied by a menu of other policies (income policies leading to wage moderation and an accommodating monetary policy leading to a weaker exchange rate) can be much less costly than we normally think, not only in the medium run but also in the short run. In some cases fiscal adjustments can even be expansionary.

A recent paper by economists at the IMF (2010) suggested a different way of identifying large, exogenous fiscal adjustments. Following the narrative approach pioneered by Romer and Romer (2010), they picked cases that (according to their criteria) were discretionary attempts by governments to reduce deficits aggressively. Although the presentation of that paper emphasized the differences with earlier work, the findings were essentially in line with the results summarized by Alesina and Ardagna (2010) in the sense that both agree that spending-based adjustments are superior to tax-based adjustments in terms of their effects on the economy. The IMF study finds that on average, in the episodes their identification technique picks up, adjustment cause modest recessions in the short run. The IMF findings, however, will have to be revisited since a later IMF paper (Devries et al. 2011)[1] using the same methodology came up with a slightly different set of fiscal stabilization episodes (see Favero, Giavazzi, and Perego [2011] for a comparison of the results obtained using the two sets of data).

Chapter 8 sums up this debate. It argues that fiscal adjustments are multiyear complex policy packages and that one can learn a lot from detailed case studies. One lesson is that several accompanying policies favor the success of a fiscal adjustment and can moderate the effects on the economy. For instance, income policies (wage agreements) help, and such policies are helped by fiscal programs that slow down the dynamics of public sec-

1. The data set is available at www.imf.org/external/pubs/cat/longres.aspx?sk=24892.0.

tor wages. Wage moderation, and sometimes exchange-rate devaluation (induced by an accommodating monetary policy) help competitiveness, inducing a temporary export boom that can compensate a slowdown in domestic demand. The behavior of private investment is sometimes central if entrepreneurs react positively to a change in fiscal stance. The bottom line is that this chapter provides a healthy warning against oversimplification in the description of policy packages, which are often complex, multifaceted affairs.

One observation made by many papers that have examined fiscal adjustments, especially in European countries, is that there are two key spending items that need to be tackled by governments who seriously want to chip away at large debts: the government wage bill and public pensions.

Chapter 9, by Pierre Cahuc and Stéphane Carcillo, examines government wages. The interesting finding of this chapter is that what matters for a country's fiscal sustainability is not the size of the public sector per se, and thus its overall wage bill, but the transparency of the government and the freedom of the press. Two countries exemplify this. Greece is a typical example of a country where weak transparency and lack of freedom of the press induce drifts of the public wage bills during booms and election years that governments have no incentive to counteract when economic difficulties arise, with the result that public sector wages eventually result in large overall deficits. At the opposite end of the spectrum, in Denmark the public sector wage bill is higher than in Greece (17 percent of GDP on average between 1996 and 2008, compared with 11 percent in Greece), but the transparency of public institutions and the freedom of the press put pressure on governments to avoid deficit-financed increases in public wage bills. Chapter 9 stresses that it is transparency and freedom of the press that prevent unsustainable increases in the public wage bill. From the standpoint of fiscal balance, it is not the size of the public sector, but whether it contributes to an overall budget deficit, that is the key consideration.

The main message of chapter 10 by Axel H. Börsch-Supan—which provides a careful and very useful review of the state of pension systems in the major OECD countries—is similar. There is no single optimal pension policy since initial conditions (culture, history, and political preferences, all of which have shaped the design of the welfare state) differ so much among countries. Some general lessons can still be drawn from the attempt of several countries at controlling their pension expenditures. The introduction of notional defined contribution (NDC) systems reduces fiscal strain when implemented early and consistently, such as in Sweden and (to some extent) in Italy. It failed, however, in Germany, where, as Börsch-Supan notes, the taste of a funded system seems unpalatable. Automatic stabilizers, such those introduced in the NDC systems in Sweden, Italy, and Poland, and the indexation of pension benefits to the dependency ratio introduced in Germany, may also help to put pension systems on a long-run fiscally sustainable path since they are sheltered from day-to-day political opportunism. One may want to introduce similar automatic rules for the retirement age, such as a proportionality rule that keeps the ratio of time spent in retirement to time spent working constant. The sheltering effect, of course, goes only so far. In Germany, for example, the sustainability factor in the benefit formula has been set out of force through a "pension benefit guarantee," which rules out any nominal benefit reduction, and parts of the dynamic increase in the retirement age have been offset by the introduction of new duration-of-service rules. By and large, however, pension reforms introducing automatic stabilizers have worked better than those without such mechanisms.

What about taxes? How can tax reform help reduce debt and deficits? Chapter 11 by Ruud de Mooij and Michael Keen discusses the tax side of fiscal adjustments. It first explores the idea, prominent in troubled Euro area countries, of a "fiscal devaluation"—that is, shifting from social contributions to the value added tax (VAT) as a way to mimic a nominal devaluation. An excellent theoretical discussion of fiscal devaluations can be found in Gopinath, Farhi, and Itskhoki (2011). The empirical evidence presented shows that in Euro area countries fiscal devaluations could improve the trade balance quite sizably in the short run, though the effects will eventually disappear. The paper then assesses the wider scope for using a VAT to achieve a fiscal consolidation. It is sometimes argued (see, e.g., Gale and Harris 2011) that in the United States and Japan the introduction of a VAT could go a long way toward solving the countries' fiscal problems. But VAT reform faces strong political opposition from two quite different quarters. The argument on the left is that the VAT is regressive. The argument on the right is that it makes raising revenue much easier, thus creating an incentive to inflate government expenditure (see, e.g., Holtz-Eakin 2011). The popular perception of the VAT as inherently regressive is hard to dismantle, impeding both base-broadening in Europe and rate-raising or introduction in Japan and the United States. It would be comforting to believe that resistance of this kind will be overcome by good analysis communicated effectively. But these points have been well-known, to key policymakers at least, for many years and yet no real progress has been made.

In summary, one can draw a few relatively sound conclusions from these chapters. Large fiscal adjustments have occurred in the past. When implemented mostly on the spending side and accompanied by an appropriate mix of policies, their recessionary effect can be minimized or much attenuated. An interesting question is which are the desirable accompanying policies in the current situation. For instance, devaluations are not feasible for individual members of the Euro area, but a devaluation of the Euro itself would help. On the other hand, wage moderation supported by public wage restraint is a feasible avenue to follow. A possibly worrisome feature of the current situation is the fact that contrary to previous experiences of large fiscal consolidation that occurred in individual economies, in the next few years many countries will have to follow restrictive fiscal policies at the same time, on both sides of the Atlantic.

Politics and Institutions

Fiscal policy is much politicized because it has very obvious and large redistributive consequences, both within a generation and across generations. While policymakers have been willing to delegate monetary policy to independent institutions (national central banks or even a super national independent central bank like the ECB), they have kept fiscal policy very close to their chest and thus to day-to-day politics. Delegation of fiscal prerogatives to EU institutions like the Stability and Growth Pact has not worked well because it has proven impossible to force national governments to stick by it. France and (remarkably) Germany were the two countries that first violated it.

An interesting question, then, is whether it is possible for national governments to follow rules of behavior and therefore keep fiscal policy at arms' length from day-to-day politics. There are two key questions. First, which rules should a government adopt? Second, can a supranational entity, like the EU, impose to a national sovereign a rule? Chapter 12 by Charles Wyplosz begins by arguing that national governments do need to be constrained by fiscal rules to correct the externality introduced by the power of interest groups that lead to a deficit bias. The question is, which rules? Unfortunately the simplest one may not be the most efficient, and the most complicated one may not be easily enforceable. The simplest possible rule is a balanced budget law stating that the budget has to be balanced every period. This rule is easy to verify, but it does not allow the necessary budgetary flexibility over the cycle. A cyclically adjusted balanced budget rule would allow such flexibility, but it would be hard to verify. How would we agree on the correct cyclical adjustment? Each government would always try to justify that a deficit is due to a cyclical slowdown. Another rule often discussed is the "golden rule." This is a balanced budget rule that allows deficit financing for public investment. While the general principle that governments, like private corporations, should be allowed to amortize investment expenditure is obviously correct, the point is whether lack of growth throughout the OECD is primarily the result of a lack of public investment. We do not think it is (see Leduc and Wilson 2012). Another arrangement sometimes adopted is fiscal boards. These are independent bodies of economists and public servants that offer opinions on the sustainability of national fiscal policies and sometimes (as in the Netherlands) of political platforms ahead of general elections. Their views should serve as a constraint on governments. The chapter's wise conclusion is that rules are neither necessary nor sufficient to achieve fiscal discipline, yet they help. Similarly, fiscal institutions are neither necessary nor sufficient to achieve fiscal discipline, but they help. In this case we face a delicate balance. Institutions must bind the policymakers without violating the democratic requirement that elected officials have the power to decide on budgets. This argues against assigning wide discretionary powers to fiscal institutions, but it is fully compatible with giving them either the authority to apply legal rules or to act as official watchdogs.

One of the arguments for rules is that a government has a hard time reducing deficits because any such policy would lead to an immediate political defeat in the next election. Chapter 13 by Alberto Alesina, Dorian Carloni, and Gianpaolo Lecce looks at the evidence about this so-called conventional wisdom—namely, that deficit-reducing policies are the kiss of death (electorally speaking) for fiscally conservative governments. This chapter shows that the empirical evidence on this point is much less clear cut than the conviction with which this conventional wisdom is held. The authors find no evidence that governments that reduce budget deficits even decisively are systematically voted out of office. In some cases they are, in some (more often) they are not. The authors address as carefully as possible the issue of reverse causality, namely the possibility that only "strong and popular" governments can implement fiscal adjustments and thus they are not voted out of office despite having reduced the deficits. Even taking this possibility into account the authors find no evidence that fiscal adjustments, even decisive ones, systematically (on average) imply electoral defeats. But then, if fiscal adjustments do not lead systematically to electoral defeats, why do they often seem so politically difficult? The reason is that the political game played around a fiscal adjustment goes above and beyond one-person-one-vote elections. Strikes, contributions from powerful lobbies, and press campaigns are all means by which various groups can use to enforce (or block) policies above and beyond voting at the polls. For example, imagine a public sector union that goes on strike to block a reduction of the public wage bill. They may create disruptions with consequences that may be too costly to bear for a government. Public sector unions may have connections with parts of the incumbent coalition and block fiscal adjustments. Similar considerations may lead to postponements of pension reforms. In many countries pensioners developed a strong political support even within workers' unions. Alesina and Drazen (1990) provide a model that explains delays on deficit stabilization policies not relying on electoral defeats of governments.

In summary, the politics of fiscal policy are complex. National government may have incentives to run excessive deficits and then find it hard to reduce them. If there is a deficit bias in national government policies, then fiscal rules may help. But one must be careful not to oversell what one can achieve with rules. To begin with, the choice of whether or not to adopt a tight fiscal rule is endogenous. That is, societies where an agreement for fiscal tightness is solid are more likely to adopt such rules; societies that have not reached such consensus will not adopt the rules even though these would be precisely the societies that need their hands to be tied by rules. So, paradoxically, more prudent governments will choose to impose rules on themselves and not the other way around! In addition, it is very difficult to impose from abroad fiscal rules on national sovereigns, as the failure of the Stability and Growth Pact highlights. What can be said, we believe, is that a fiscal rule can help a well-intentioned government to hold a fiscally responsible policy, but it will hardly prevent a different type of government from breaking the rule directly or implicitly with some creative accounting. Without a deeply held national political commitment to fiscal responsibility, no rules will be a deus ex machina.

The desirability of fiscal rules has been at the forefront of discussions in the European Union. The rapid accumulations of deficits and debt within the EU have led to an impasse. Northern European countries (Germany above all) feel that any movement toward a centralization of government liabilities (such as introducing Eurobonds) would imply that the German taxpayers would be stuck with the bills arising from the profligacy of Southern European countries. Any rule that would effectively constrain new emissions of fresh debt would not solve the problem of the stock of accumulated debt in countries like Greece or Italy.

To what extent can fiscal policy be coordinated within the European Union to avoid future crises, exploding spreads, default risks, and so on? The answer is not easy, for the reasons discussed previously. Member countries are not ready to give up fiscal independence for two reasons. First, national politicians want to keep domestic fiscal discretion to achieve policy goals sometimes dictated more by politics than good economics. Second, Europe is not a unified country. While in the United States it is relatively accepted that citizens of certain states doing better at a certain point in time (say, Texas) have to redistribute through the federal government to citizens of less successful states (say, Nevada), we are quite far from this situation in Europe. While German taxpayers might have been convinced to help the Greeks in order to save German banks, it is unclear what would have happened if German banks had been less exposed to Greece. Redistributions across national borders remain difficult in Europe. Any attempts at setting up fiscal rules that ignore this fact are unlikely to command the needed popular support.

But perhaps the crisis raises even bigger issues regarding the coordination of fiscal policies above and beyond Europe. Has the crisis highlighted a need for a stronger coordination between major areas to avoid fiscal and commercial imbalances? What rules should we adopt to achieve such an objective? Is it realistic to strive for this goal? These are some of the issues that many economist and policymakers struggle with.

Conclusions

There is much that we do not know about fiscal policy. We believe that this book makes a contribution at taking stock of what we know and making progress in many directions, but many questions are still open regarding both the theory and the practice of fiscal policy.

One important open question regards the size of multipliers. Quite apart from narrowing down their size, we need to know more about welfare. How far above one does a spending multiplier have to be in order for a countercyclical spending policy to be welfare improving? How does one evaluate the costs of accumulated deficits and future taxation versus the benefit of reducing unemployment in the short run? There is a vague sense that multipliers greater than one call for aggressive countercyclical policy, while multipliers smaller than one call for the opposite. We need to deepen our understanding of this point.

Assuming that discretionary countercyclical fiscal policy is needed, is it better to act on the tax side or the spending side? What variables would influence this choice?

A further set of questions relate to whether or not we are underestimating the size of the problem of accumulated debt. How much are we missing by not considering more carefully the accumulated liabilities of this generation versus future ones? Are we truly sitting on a time bomb and kidding ourselves with commonly used data that (although worrisome by themselves) are unable to capture the intergenerational dimension of fiscal policy? Should we expect widespread defaults and inflation, or are public debts manageable? Is there enough room to raise taxes in countries approaching 50 percent of GDP tax burden? If raising taxes is becoming more and more difficult what is the alternative? Can fiscal rules prevent the aggravation of an already dire situation?

We need to better understand how to design fiscal adjustment programs so as to minimize the cost for the economy and maximize the probability of success, defined as a reduction of the debt over GDP ratio. In our view, the literature on this point has reached two relatively solid conclusions: first, cutting spending is less recessionary than raising taxes in OECD economies with already large public sectors. The second is that a well-designed policy package can minimize or, under the same circumstances, even eliminate the recessionary effects of budget cuts in the short run. We need to know more about what can feasibly be cut, how to design the policy package, and how to minimize the possible negative effects on income inequality. We do not know enough about the distributive costs of large fiscal adjustments. The commonly held view is that budget cuts typically hurt the poor, but is this really true in countries with 50 percent public spending over GDP? Presumably the answer depends on how well targeted the welfare system is: it may be possible to reduce spending and the tax burden, preserving welfare coverage for the truly needy.

Finally, and related to the previous point, there are many political economy questions regarding fiscal policy. The most commonly held view is that citizens blindly prefer spending increases and tax cuts and this introduces a deficit bias in democracies. Reality might be a bit more complex. Certain governments have been able to be fiscally responsible and be reelected. What explains, then, the tendency of governments to postpone fiscal adjustments? What is the role of specific lobbying pressures versus the risk of electoral defeats? How do the design fiscal adjustments and their fairness affect the popularity of governments?

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