The Economics of Achieving Fiscal Sustainability

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Academic Consultants Meeting on Fiscal Sustainability
Board of Governors, Federal Reserve. April 9, 2010.

Abstract. The recent increase in debt-to-GDP ratios for governments in most advanced economies has been a wake up call to deal with unsustainable budgetary plans. These budget imbalances are the result of policies implemented over the last decades and are likely to get worse in the future with increasing expenditures associated to demographic changes and health care costs. This note looks into the possible fiscal adjustments that governments could adopt as well as their macroeconomic consequences. It also discusses some international evidence on similar adjustments with special emphasis on the potential role of fiscal policy rules.

The recent evolution of government debt in advanced economies.

The current crisis has sharply increased government debt in advanced economies to levels that we had not seen since the end of World War II. In the US, debt held by the public will reach 66% by 2014 (and gross debt will be above 100%), almost twice as much as before the crisis started (CBO (2010), IMF (2010a)).[1] Among the advanced economies of the G-20, the gross debt-to-GDP ratio will reach 118% in 2014 up from 78% in 2007 (IMF(2010a)). By 2014, there could be eight advanced economies where their gross debt-to-GDP ratio would be around or above 100%, these eight economies account for more than 60% of the advanced economies' GDP. For emerging economies we see a much more stable pattern, despite some increases due to the current economic environment.

While this increase in debt is partly the result of the depth of the current recession it is also a continuation of a trend that started much earlier. With very few exceptions, all OECD governments increased their level of indebtedness during the period 1980-2007.[2] In that sense, the increase in government debt associated to the crisis is a

[1] In this note, I will refer to both net and gross measures of government debt. Net debt (debt held by the public) is probably a more meaningful measure of the indebtedness of governments but there are some concerns about the validity of net-debt figures for some countries. Also, while the difference between the two can be significant (in Japan gross debt is about twice as much as net debt) and varies across countries, the evolution over time of both series is quite similar.

[2] In fact, this period can be broken into several subperiods: a large increase in debt during 1980-1995 followed with decreases, in some cases significant, during the 90s. After that we see a combination of

wake up call for governments to improve fiscal discipline and address long-term sustainability issues that had been debated, and largely ignored, since the late 80s. The temporary improvement in public finances during the 90s, which in some cases led to overoptimistic scenarios of adjustment, was partly behind the relaxation of fiscal discipline in the years that followed. The inability of governments to accumulate large enough surpluses during the good years creates a trend towards increasing debt. Of course, the fact that the current recession was much deeper than what anyone would have anticipated made matters worse.

Finally, if we add to this picture the fact that the future liabilities faced by governments are large, there is no question that there is a need for a significant fiscal adjustment in the near horizon for most advanced economies. The only question is how large it needs to be, the timing, its macroeconomic effects and the institutional framework that will ensure its success.

How large is the required fiscal adjustment? The overall budget balance perspective.

We first take a simple numerical approach to debt dynamics and ask about the effort in terms of budget surpluses that is necessary to keep the debt-to-GDP ratio at a given level. Running this exercise, we find that many advanced economies require reductions in the structural budget deficit over the near future, which is likely to have macroeconomic consequences.

To produce a sense on the magnitude of the adjustment we can think about two scenarios that are defined in terms of a target for the debt-to-GDP ratio and a date on which that target should be met.[3] One baseline scenario is the effort that it takes to stabilize debt around current levels. Another one is to bring debt back to what it was before the crisis. This second, more ambitious, scenario is in line with a recent study of the fiscal affairs department at the IMF (IMF, 2010a) using as a target 60% (gross government debt to GDP). Why 60%? This level is clearly arbitrary but it is

stability (or further decreases for some countries) until the current crisis, which has reversed the effects of the good years, and sent debt levels to historical records. The US case fits this pattern; after an increase in debt during the 80s and early 90s, there was a sharp decrease in government debt that was stopped in the early 2000s.

[3] There is no claim that these are the right scenarios or that they are optimal in an economic sense. We discuss them as illustration of the potential adjustment that will be required in the future government budgets.

not far from the average of advanced economies before the crisis and it also happens to be the reference for the countries in the European Monetary Union.[4] The fiscal consolidation that we are likely to witness over the next decade heavily depends on which of these two scenarios we consider:

1. If we want to keep the debt-to-GDP level at the current (2010) level, The US government will need to bring the primary balance (the overall balance excluding interest payments) towards a 1% deficit, or the overall balance around 3% (CBO(2010)).
2. If we intend to reduce the debt-to-GDP ratio to pre-crisis levels by the year 2030 (this is the IMF(2010a) scenario), then the US government primary balance needs to move slowly towards a surplus of 4% by 2020 and then keep it at that level for the decade that follows. A similar adjustment is required for other advanced economies: structural primary balances need to move from current levels (about -4%) to a surplus of close to 4% by 2020 and this surplus has to be maintained over the next 10 years. This represents, for advanced economies, an average adjustment of 8 percentage points of GDP over the next 10 years. This effort ensures that the debt-to-GDP ratio converges to 60% in 2030. In the case of the US, the required effort is larger, about 10.6 percentage points of GDP in total.

In summary, both of these scenarios require significant adjustment to the structural budget balance (between 7 and 10 percentage points of GDP) over a short horizon. We know that some of this adjustment will happen naturally as the temporary measures built into stimulus packages are removed. But while this will certainly help in the short term, it is a small effect compared to what is needed. For advanced economies, IMF (2010) estimates that this will only account for 1% or 2% of GDP.

How large is the required fiscal adjustment? Beyond the budget balance.

A second way to look at the adjustment is to look not only at the budget balance but also at its components, spending and taxes, and how they will need to change relative to current policy. For the US, but also for most advanced economies, current

[4] EMU (European Monetary Union) countries are required to keep deficits under 3% of GDP and debt under 60% of GDP. 60% was the average level of debt for potential members of the Euro area when the decision to launch EMU was made. Under the assumption of 5% nominal growth rate for GDP, a 3% deficit will maintain the debt-to-GDP ratio constant if the level of debt is 60%. There was never a sense of optimality attached to this value.

policy is likely to deliver significant budget deficits in the next decade or decades. For the case of the US, Auerbach and Gale (2009) estimate that the fiscal gap is above 5%.[5] In other words, the US government needs to increase taxes or cut spending by 5% (of GDP) during the next (eight) decades to stabilize debt. What this means is that there is a second level of the fiscal adjustment that is not visible when we simply look at the budget balance: the adjustment of spending and tax levels to achieve the required surplus (or deficit).

If our focus is on the budget balance and how it will change relative to current values, we can argue that this second adjustment is irrelevant from a macroeconomic policy point of view; the fiscal policy stance will not change once the budget balance is stable. But this is not correct, future changes in spending and taxes will have a macroeconomic impact. In addition, these changes, even if they might take place years from now will have an impact today as they will affect both the expectations of economic agents and the credibility of the short-term consolidation.[6] As we will argue below, these effects are important to understand the macroeconomic effects of fiscal consolidations.

"Cold shower" or gradual adjustment?

We have outlined two scenarios for adjustment that translate into different paths for the debt-to-GDP levels. What level of debt should governments target? Should they attempt to reduce debt faster? Choosing between these scenarios requires an understanding on the cost of living with high debt as well as on the macroeconomic effects of the speed of adjustment.

Let's start with a fundamental question: Is there an optimal level of government debt? From the point of view of economic theory government debt does not have a well-defined economic meaning, what really matters is the path of taxes and government spending. In that sense, it is not easy to talk about an optimal level of debt or a path of adjustment to that level. In the extreme case where taxes are lump sum and Ricardian equivalence holds, financing spending via taxes or debt is equivalent; debt does not matter (Barro (1999)). If we introduce distortionary taxes

[5] Where the fiscal gap is defined as the required increase in taxes or decrease in spending relative to current policy to stabilize the debt-to-GDP ratio over a long horizon (until 2085).
[6] An important issue is whether economic agents are internalizing these future changes. Are households and companies aware of the future changes in spending and taxes that will be required to bring debt to a sustainable path? How these expectations are formed and managed over the coming years will have an impact on macroeconomic outcomes.

then, once we agree on a path of governments spending (given political demands or economic arguments), taxes should be as smooth as possible to avoid increasing distortions.[7] Government debt just becomes the vehicle through which governments smooth taxes over time.

I we apply the logic of smooth taxation to the current situation, and assuming that some of the adjustment will require higher taxes, the principle of tax smoothing calls for a gradual adjustment from the current levels of high debt towards a debt level that is acceptable and stable. There is less clarity on the timing of adjustment to spending, as it will depend on the type of spending that needs to be cut and how it meets different economic, political or social goals.

What about the potential crowding-out effects of high debt or its effects on interest rates? From an intertemporal point of view, what matters for crowding out is the overall level of resources that the government requires (government spending) and the way those resources are being used. Of course, an initial higher level of debt is bad news from the perspective of the intertemporal budget constraint of the government given that, to satisfy that constraint, you need higher taxes, which might displace private savings and investment (as argued in Elmendorf and Mankiw (1999) or Engen and Hubbard (2004)). This could affect interest rates if the level of capital stock is affected.

Also, it is important to remember that if we move from an intertemporal model to a static Keynesian model (such as the textbook IS/LM), what matters is the level of the deficit and not the level of debt. Interest rates are determined by the yearly flow of spending and income and it is an increase in government borrowing that will lead to an increase in interest rates and crowding out of investment. In those models, debt does not matter.

Given some of the theoretical ambiguities about the connection between debt and macroeconomic outcomes, much of the literature has followed an empirical approach. In those studies, we find that debt and deficits tend to increase interest rates although the effects are some times difficult to see and not as large as expected. Ardagna, Caselli and Lane (2004), Laubach (2009), Engen and Hubbard (2004) find that increases in debt-to-GDP ratio by 1% raises interest rates by 3 to 4 basis points and in some cases the effect only appears after debt levels are very high.

[7] See Barro (1979 and 1999), Bohn (1990) or Aiyagari and McGrattan (1998).

While these effects might seem small, the total effect on interest rates could be large if we assume a persistent and large increase in debt, a point made by Gale and Orszag (2004) and Shapiro (2004).[8]

But even if we agree that there is a significant cost to high debt, we cannot simply conclude from here that a fast adjustment of debt is optimal. In other words, from the point of view of the intertemporal budget constraint of the government, a quick adjustment does not change the overall tax revenue that the government needs to raise, it simply moves taxation forward. We might conclude that past policies leading to high debt are suboptimal, but now we find ourselves with a high level of debt and we need to understand the tradeoffs between a quick reduction in debt (which could depress aggregate demand or increase distortions trough taxes) and waiting for a slow adjustment (which could put upward pressure on interest rates).

One interesting feature of many of the empirical papers is that deficits seem to matter more than debt, which could provide some support to the traditional Keynesian view of the effects of deficits on interest rates, via the spending effect. This is an important insight because assuming the fiscal adjustment will take place in advanced economies we are likely to see low deficits even if debt levels remain high for years to come. In an environment where deficits are being translated into surpluses in some of the largest economies and assuming saving rates remain high in emerging markets, high government debt levels could have a very small effect on interest rates.

There are two possibly stronger arguments for a "cold shower" approach to the adjustment. First, the level of debt cannot simply keep growing forever (because of sustainability concerns or because some of the interest rate and growth effects become much larger). If this is true, we need to maintain a level of debt that will allow for accommodation of future recessions or other events that might raise this level. So it is not so much the costs associated to the current level of debt that matter but the cost of not being able to run larger deficits in the future. As an illustration of these costs, in the current crisis we have seen some of the countries

[8] Gale and Orszag (2004) find stronger effects of future deficits on current levels of interest rates and saving, supporting an intertemporal approach to understanding these effects. Reinhart and Rogoff (2009) look at the growth consequences of high debt. In their analysis, debt only has significant growth effects after it reaches a high threshold (around 90% of GDP).

with the largest level of debt being unable to react as much as the others (e.g. Italy or Belgium).

The second argument for a quick adjustment is about credibility. One thing that we know from the experience of developing countries and some advanced economies is that government debt crisis are triggered by a loss of confidence that increases risk premia and could even make the default option a self-fulfilling prophecy.[9] Given that the current levels of debt are high by historical standards and that they are very high in many advanced economies, it might be that markets will soon ask for a strong signal of commitment and, in its absence, risk premia on government bonds will increase. To avoid an increasing cost of rolling over the debt, governments could be better off with a strong early adjustment.

In summary, while the economic arguments or the empirical evidence supporting a "cold shower" approach to a fiscal adjustment are not very strong, once we consider the need to plan for future crises and the issue of credibility, a more ambitious target for debt and a speedier adjustment seem justified. Of course, when thinking about the actual timing, we need to consider the potential macroeconomic effects of the fiscal consolidation, taking into account the cyclical position of the economy. This is what we do in the next section.

The economic effects of a fiscal consolidation: Fiscal policy multipliers in reverse.

In this section we discuss the macroeconomic consequences of a fiscal consolidation. By fiscal consolidation we have in mind one of the scenarios discussed above where the budget deficit is significantly reduced relative to current levels in order to stabilize the debt. What will be the macroeconomic effect of such a reduction?

The question on the effects of fiscal policy on macroeconomic variables is a source of debate among academics and policy makers. The debate is in many cases driven by strong views on the role of governments and, unfortunately, the empirical evidence on fiscal policy multipliers is ambiguous enough that the debate remains open. The evidence can be grouped into two strands of the academic literature: the

[9] As an example, Cole and Kehoe (2000) discuss the possibility of self-fulfilling debt crisis and Reinhart, Rogoff and Savastano (2003) show that "debt intolerance" is a function of the historical record of a country or government to meet its debt obligations and manage its economy.

study of fiscal policy multipliers that focuses on small and frequent changes in the fiscal stance and the analysis of large fiscal policy changes, either expansions (such as during wars) or contractions (such as fiscal consolidations).

Fiscal policy multipliers are normally analyzed in the context of fiscal expansions, as in the recent debate on the effects of the ARRA stimulus package, but the evidence is generated treating expansions and contractions symmetrically so its conclusions should apply to contractions as well. My reading of the empirical literature that measures fiscal policy multipliers using VAR (Vector autoregression) techniques is that fiscal policy changes have significant effects on economic activity (GDP, unemployment) and fiscal multipliers are likely to be larger during recessions.[10] The estimated size of the multipliers is much lower when we look at evidence using large fiscal policy changes such as those during war times (Ramey and Shapiro (1998) or Ramey (2009)).

There is less consensus on the effects of changes in different components of the budget. There is some evidence that tax changes can have a larger impact on economic activity than spending changes (Romer and Romer (2009)), although we also know from the current recession that at certain times changes in private savings will eliminate a good part of the potential demand effects of a tax cut (Shapiro and Slemrod (2003 and 2009)).

There are also some potentially interesting interactions between fiscal and monetary policy when thinking about multipliers and optimal timing of adjustment. There is an argument for fiscal policy to be the one that moves first relative to monetary policy, because if does not affect monetary policy and because it requires more time. Monetary policy should start second, contingent to the path of fiscal adjustment. (IMF (2010b)). But we also know that fiscal policy can be more powerful when interest rates are zero (Eggerston (2009)). This argument suggests that the negative effects of a fiscal contraction could be larger if action is taken while the interest rate remains at zero. This could be an argument to delay the current adjustment at least until interest rates are above zero.

Setting aside some of the disagreements about the exact size of the multipliers, the above insights suggest that a fiscal consolidation could have a negative effect on

[10] Fatás and Mihov (2001), Blanchard and Perotti (2002), Perotti (2008), Gali, Lopez-Salido and Valles (2007), Romer and Romer (forthcoming).

overall growth, possibly leading to below-normal growth for the years ahead. The effect might be larger if this is done in a coordinated fashion across many countries. But do these insights developed to understand macroeconomics effects of fiscal policy in "normal" circumstances apply to the current situation? Maybe not. There is strong evidence that during periods of high debt or "fiscal stress", fiscal policy multipliers tend to be smaller (and even negative) and, what is more important, composition effects matter more during those periods.[11] This evidence becomes even stronger when we look at episodes of large fiscal consolidations.

The economic effects of a fiscal consolidation: Evidence from previous events

There is an academic literature that has focused on events where there is a large, conscious and identifiable improvement in either the budget balance or the debt-to-GDP ratio over several years. This literature provides the closest examples to what we might witness over the coming years. Fiscal consolidations among OECD countries have come in different flavors and here are some examples:

a. Denmark after 1983: After an almost doubling of the debt-to-GDP ratio in the previous years, a quick and large adjustment in budget balance (about 10% of GDP) that stabilizes the debt-to-GDP ratio (around 55% of GDP).
b. Large adjustment in budget balances that combined with fast growth reduced the level of debt. Such as in Ireland after 1986.
c. Reductions in government debt with smaller adjustment in spending or budget balances but through a combination of growth and lower interest rates. Spain and Canada after the early or late 90s.

Do these fiscal consolidations lead to a strong contraction in GDP as predicted by the literature on fiscal multipliers? No, in fact there are a good number of cases where a fiscal consolidation led to an acceleration of growth.[12] Alesina and Ardagna (forthcoming) study 107 fiscal consolidations out of which 27 are labeled as expansionary.

[11] Perotti (1999), Favero and Giavazzi (2007) and Ilzetzki, Mendoza, Vegh (2009).
[12] The first examples studied in the academic literature were those of Ireland and Denmark in the eighties (Giavazzi and Pagano (1990)). The literature has later extended the analysis to include all fiscal consolidations of advanced economies and, as a recent example, Alesina and Ardagna (forthcoming) provide a thorough analysis of all fiscal consolidations of OECD countries from 1970 to 2007. Other papers include: Alesina and Perotti (1995), Alesina and Ardagna (1998), Ardagna (2007), Guichard, Kennedy, Wurzel and Andre (2007) and Larch and Turrini (2008).

How can fiscal consolidations be expansionary? From a theoretical point of view a large decreasing government spending (current and future) can lead to increases in consumption and investment because of wealth effects and decreases in distortions; the fiscal policy multiplier becomes negative. [13]

Empirically, we find support from this intuition as composition matters for the effects of the adjustment: expansionary fiscal consolidations tend to be associated to decreases in government spending and in particular decreases in transfers. While contractionary fiscal adjustments tend to be the outcome of increases in taxes and stable spending. In addition, the factors that determine the expansionary nature of fiscal consolidations are similar to the factors that determine their success. In other words, fiscal consolidations that are driven by the reduction in expenditures are likely to be more successful than those driven by increases in taxes.

The US case: Lessons from international fiscal consolidations

How do international experiences of fiscal consolidation help us think about the current fiscal policy choices of the US government?

There are several lessons that can be learned from the experience of other countries:

a. Large fiscal consolidations over a short period of time are possible and they can even result in acceleration of GDP growth rates. This is good news as there might not be a trade off between sustainability of budgetary outcomes and macroeconomic stability.
b. Successful and expansionary fiscal consolidations are generally associated to reduction in expenses, in particular entitlements, transfers and wages.
c. Growth matters: Countries where consolidation was combined with significant reforms that provided growth opportunities made the adjustment process easier. [14]
d. Interest rates matter as well: Countries where risk-premium decreased during the consolidation required a much smaller adjustment in current spending and taxes. As an example, Belgium reduced government debt from

[13] This is also consistent with a strong view on crowding-out effects of government spending. Especially in periods where the economy is doing well and close to full employment, the resources not utilized in government activities are easily reallocated to activities undertaken by the private sector.
[14] Larch and Turrini (2008).

120% in 1996 to about 86% in 2006. While growth was around trend, interest rates kept coming down (as Belgium joined EMU). If Belgium had faced the same interest rates as in 1996 the level of debt would have increased to 125% by 2006.

While the first lesson is encouraging for the US ("painless" fiscal consolidations are possible) the other three are not. The current level of government spending in the US is much lower than the level of government spending in some of the European countries that delivered quick and painless fiscal consolidations so cutting spending is likely to be a more difficult task (as an extreme example, Sweden was close to 70% when the process of fiscal consolidation started). In addition, the growth prospects for the US make it difficult to imagine an acceleration of growth rates.[15] While there is still the need to focus on changes on spending and taxes that improve growth, there is less room than in those other countries to improve growth through structural reforms. In many of the OECD economies where fiscal consolidations were expansionary, reforms and wage agreements (public and private) were key to the success. Also, in some cases, a devaluation (within a fixed exchange rate system) facilitated the adjustment, something that is not a policy option for the US. Finally, interest rates are currently low in the US and, if any, they will go up and possibly fast if either domestic or international conditions change. This means that all the adjustment has to come from reduced spending or increases in taxes.

The role of fiscal policy institutions and processes.

Budget processes and institutions matter for the outcome of fiscal policy. The recognition of these positive effects have led to an increasing number of countries adopting policy rules that constrain the behavior of fiscal policy and to an increasing emphasis on designing better budgetary processes. In 2009 there were 80 countries with national or supranational fiscal policy rules.[16] It is very likely that this trend will continue given the current need to deliver a significant fiscal adjustment and the fact that issues of credibility will remain central to the dynamics of interest rates and debt levels.

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[15] Of course, the US economy is currently at levels of production below potential with an employment-to-population ratio that is very low. Any policies that could help bring employment to the peak levels of 2001 would have a significant positive effect on the debt-to-GDP ratio. This is the experience of Sweden in the 90s where labor market reforms and policies that encourage an increase in the labor force participation were key to the success of the reduction in government debt.
[16] IMF (2009).

What is the empirical connection between institutions, budgetary processes and fiscal policy outcomes? This is not an easy question to answer because measuring the quality of fiscal policy institutions is likely to remain a subjective process and, in addition, until recently we did not have many examples of countries that had adopted numerical limits on their budgets.

The quality of budgetary processes can be identified by a set of principles that adhere to theoretical models: transparency, the role of the legislature, the degree of centralization of budget processes or multi-annual planning horizon. The literature has also focused on a narrower set of institutions, those that relate to numerical limits on budget balances or expenditures. As an example we have the balanced-budget constraints of most US states and the current limits on deficits and debt that countries in the European Union must respect.

Here is a quick summary of the empirical evidence:

a. Good fiscal policy governance and the existence of constraints is generally associated to increased fiscal discipline. In particular, von Hagen and Harden (1994) and Von Hagen et al. (2009) find a strong correlation between an index of fiscal policy institutions and the sustainability of budgetary plans. Alesina et al (1996) show that better institutions lead to lower deficits for a group of 20 Latin American countries in the years 1980-1992. Alt and Lassen (2006), in a sample of OECD countries, show that transparency reduces the level of debt. These results are confirmed in a larger sample of 62 advanced and emerging economies by Fatás (2009). For US states, Bohn and Inman (1996) find that the stringency of the balanced-budget rules improves fiscal policy discipline.
b. Good fiscal policy governance and the existence of constraints have a positive effect on the likelihood of success of fiscal consolidations as shown in Larch and Turrini (2008) for EMU countries, Guichard et al (2007) for OECD economies and IMF (2009) for a broader sample of advanced and emerging countries.
c. The existence of explicit or implicit constraints on fiscal policy tends to produce less volatility in terms of discretionary changes in fiscal policy. While this is not directly related to the question on sustainability, a more stable macroeconomic environment and possibly a higher growth rate can also contribute to improved fiscal discipline. In particular, Fatás and Mihov

(2006) show that the strictness of balanced-budget rules among US states produces less volatility in fiscal policy. And Fatás and Mihov (2003) show that in a large sample of countries, implicit constraints on governments produce less fiscal policy volatility and as a result, less macroeconomic volatility and higher growth.

While some of these results have to be taken with great care given the limitations of analyzing the quality of institutions and the potential problems of endogeneity, the evidence is very consistent and points towards the benefits of improved fiscal policy governance and some type of fiscal policy rule (or constraint).

The potential costs of constraints: towards efficient fiscal rules.

There are, of course, concerns about the potential costs of constraints on fiscal policy (such the inability to respond to cyclical events). The detailed analysis of some of the historical experiences provides some additional insights on what makes a fiscal policy rule effective.

The characteristics of fiscal policy rules that lead to a more effective rule are flexibility, simplicity, transparency and enforceability. Flexibility to deal with business cycles is important for the success of the rule. Transparency in budgetary processes has been shown to lead to better outcomes and this is also true for fiscal policy rules. Enforceability is necessary for the rules to be meaningful, and the European experience is a perfect example of this. The rules associated to the Maastricht Treaty (which led to the current European Monetary Union) were instrumental in producing large fiscal policy consolidations in many European countries during the early 90s. One of the reasons behind the success was the strong incentive associated to entry in the EMU. In fact, once the incentive disappeared (after membership was decided) we witnessed a relaxation of discipline and many countries remained close to the deficit limit of 3% or surpassed it without significant consequences.

The area where there is less clarity is about the advantages of simple rules. The argument in favor of simplicity is that simple rules are easy to communicate, implement and enforce. But in practice simple rules might be “too simple” and subject to more political pressure to be avoided. In the case of EMU the 3% limit on budget deficits was revealed very early to be inappropriate. Not all countries had the same initial conditions or expected growth rates plus the rule did not provide

clear guidelines on where to go once above 3%, in other words, the rule did not provide enough discipline in good times. After a series of crisis of the fiscal policy framework, there was a reform that made the rule less simple (e.g. allows for adjustment of cyclical conditions) and imposed additional considerations on long-term sustainability to handle the "good years". While the current crisis has been used as an "exceptional circumstance" to allow countries to go well above the 3% limit on deficits, it is unclear how the current framework will be able to provide the right environment for fiscal consolidation.

In the EMU example we see a clear trade off between simplicity, which is generally focused on long-term debt sustainability, and the need to enforce a reasonable policy on an annual basis that leads to a sustainable outcome in the long run. A numerical limit of deficits and debt is not informative enough to decide on budgets on an annual basis; there is still judgment required to assess budget proposals: Are the macroeconomic forecasts accurate? Are the assumptions about tax revenues correct?[17] You need answers to these questions to support the implementation of a simple rule. This has led to an academic debate on the need to add "judgment" to numerical rules.[18] This literature includes proposals to create institutions, some times called "independent fiscal policy councils", that provide some of the judgment necessary for the implementation of the rule outside of the realm of politics. Some countries have institutions that go in that direction (CBO in the US, independent expert panels in Chile or the recently created Swedish Fiscal Policy Council). In general, the experience of these institutions is positive and it is likely that some of them will play a stronger role going forward, in combination with some numerical rules that provide guidance to the annual budget process.

Concluding Remarks

Many advanced economies find themselves with levels of government debt at historically high levels. Stabilizing government debt and reducing it to levels which are closer to those prior to the crisis is a major challenge; it will require discipline

[17] One might argue that making the rule sophisticated enough will solve this problem. But there are limits to how we can account for all possible sources of uncertainty. As an example, even in the case of Chile, that uses a "sophisticated" rule, the current crisis has led to the need to suspend/modify the rule.

[18] Von Hagen and Harden (1995), Fatás, von Hagen, Hughes Hallett, Strauch and Sibert (2003) or Wyplosz (2002).

and possibly a combination of spending cuts and increases in taxes as large or larger than previous consolidation efforts.

This note argues that from an economic point of view while the current levels of debt might not be optimal, there are no strong arguments for a quick adjustment towards substantially lower levels. The current level of debt is manageable and a slow transition away from current levels might be the best path forward. However, the current situation is special in several respects: we have a large number of advanced economies suffering the same problem. In addition, some of what we see today is a consequence of the failure of the previous consolidation efforts, which weakens the credibility of governments. And, finally, the years ahead will be difficult as governments struggle with demographic changes and increasing health care costs; the consolidation efforts will need to continue for decades. Given all these considerations, there is the need to send a strong signal of commitment early in the process. This signal needs to take the form of either a quick reduction in debt or a commitment to discipline over a long horizon.

The experiences of previous fiscal consolidations in other countries show that a quick and painless reduction in debt is possible. If the adjustment takes place in a favorable economic environment and it takes the form of restraints on spending rather than increases in taxes, the macroeconomic tradeoff (in terms of low growth) might be small or inexistent. However, from the perspective of the US, matching some of these historical experiences is difficult because expenditure levels are not high (by international standards) and because there is less room for overall pro-growth reform. This means that the US will have to rely more on tax increases, which are likely to make the adjustment more costly and push the government towards a delay in the adjustment period. In that environment, a signal about the credibility of future budgetary plans can be highly beneficial. As the experience of other countries show, fiscal policy rules (and institutions) can help provide the necessary anchor in terms of credibility, commitment and discipline.

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