

General Discussion: Monetary Science, Fiscal Alchemy

Chair: Arminio Fraga

Mr. Elmendorf: Eric's paper is very thought-provoking, but potentially misleading in some important ways. Let me make three points quickly.

The first thing is I want to be very clear about the purpose of the Congressional Budget Office's (CBO) projections, which Eric sometimes does not find useful and other times in the paper uses to their appropriate effect. The goal of our projections is to illustrate what would happen if current policies were continued. It is explicitly not an effort to forecast what future policies would be, any more than the staff of the Federal Reserve System publishes its forecast for what policy actions the FOMC will take over time.

We are trying to illustrate the effects of current policies. The reason there is more than one scenario is it is not so clear just what current policies constitute. Especially in the United States, current law includes the expiration of important tax cuts and other changes that many policymakers have said they will not let take effect. So, we have different scenarios because different people have different senses of what constitutes the current state of fiscal policy. But we're not trying to predict, and we're certainly not going to be useful in predicting what fiscal policy actions will ultimately be taken.

The second point I want to make is that Eric greatly overstates the potential for fiscal policy to be *made* in a scientific way. Fiscal policy is intrinsically about distributional choices, even on the question of what the overall deficit should be. When Greg Mankiw and I wrote the chapter on government debt for the *Handbook of Macroeconomics*, we explained there was no scientific basis for saying just how large the government deficit should be—that is, what the level of saving by the government should be any more than one could say scientifically just what my level of saving should be—to provide bequests for my children. I don't think you are ever going to surmount that.

Even the macroeconomic impact of the current levels of government spending and revenue depends not just on the overall magnitudes, but on the ways in which revenue is collected and the sorts of spending that occur. That is, even the short-run macroeconomic impact of fiscal policy, which one might as a central banker care particularly about, depends not only on overall budget levels, but also precisely on those microeconomic budget decisions that are so political.

I am not sure fiscal policy is as completely different from monetary policy in this regard as Eric suggests. Our preceding session talked about monetary policy, and it seems that everybody in the room agrees on what should be done except for small issues like whether policy should lean against asset bubbles or not, whether there should be purchases of long-term assets or not, and whether ad hoc interventions to prevent collapse of certain financial institutions is appropriate or not. So, there is a fair amount of open scientific questions for both fiscal policy and monetary policy, but I wouldn't overstate how far one could ever get in *making* fiscal policy scientific.

The third point that I think Eric understates is the extent of economic science applied in the analysis of fiscal policy. Eric and Francesco both noted correctly there is no single answer to the question of what the effect on the economy is of a dollar of extra government spending or a dollar of lower revenue. Eric, in his paper, talks very helpfully about a number of important factors, particularly, as Francesco emphasized, people's expectations for future policy.

Once a year, the CBO produces an analysis of the president's budget, where we use a number of models of the sort that Eric would approve, and we produce and report different answers to the question of the economic effects of the president's budget, depending on whether people expect short-term deficit to ultimately be offset through changes in future spending or changes in future taxes. We are providing that analysis. How it affects policymaking is less clear, but the analysis is there.

In addition, the CBO's long-term budget outlook, from which Eric produced the charts showing what happens on an accounting basis under current policy, includes comparable pictures showing what happens when we incorporate economic feedbacks from that policy. There is certainly accounting in the report, it's a very important part of what we do, but it is not all of what we do. As another example, when we look at the effects of the stimulus legislation, we try to adjust those estimates for the various features we've just discussed—for future expectations, for the response of monetary policy, and so on. We do that admittedly in an ad hoc way, and I don't mean to suggest we couldn't do it better.

More research of the sort Eric recommends, and I am all for, would help. We are always trying to make more effective use of the existing research. I don't mean to suggest that job is done; we don't think it is done, and we are always trying to do better. But it is a hard road. And I would say when I worked on the Federal Reserve Board staff, when we looked at the effects of fiscal stimulus measures such as tax rebates in some past recessions, we incorporated those into the staff forecast in an ad hoc way, notwithstanding all the modeling that has been done. There is more science that is being applied and more that we can apply. It will be harder to reach the nirvana that Eric perceives now for monetary policy.

Mr. Fischer: I don't know whether this is science or alchemy, but I thought I'd put a fiscal rule that was adopted as legislation in Israel on the agenda now. The rule is the rate of growth of government spending is a certain fraction, which I'll specify shortly, multiplied by the average rate of growth of the economy for the past 10 years. That fraction is 60 over the current debt ratio, which is now 80 percent.

So, three-fourths of the growth rate of the economy is the permitted growth rate of government spending, which is clearly a stabilizing rule. Then there is a separate rule for the deficit, which has a recession rider, which is allowed to change with a recession. It is an attempt to at least describe it algebraically, it has been passed into law, and it will likely be observed for a few years at least, until it is replaced by another related rule.

Mr. Zoellick: I have two observations, perhaps a little bit more from a policymaker's perspective.

First, my friends in the natural science community would certainly lift their eyebrows at the assertion that all of you have reduced monetary policy to a science. I'll share with you the practical experience Axel, Jean-Claude, and I have had with Chancellor Merkel, when she looks at the economic issues from a scientific perspective and we try to explain the economic view but can't necessarily have the degree of certainty people have developed in the field of physics.

Having said that, I really applaud your attention to fiscal policy. Here I take a little different approach than Doug Elmendorf did. Indeed, if there were one sentence I would have added to Ben Bernanke's otherwise very useful speech, it would have been to add, after the fine exposition of the monetary policy tools, a recognition that there is another important tool beyond the realm of the Federal Reserve, which is fiscal policy. At least in the case of the United States, the executive branch and Congress are going to need to turn their attention to this after the midterm elections. For those of us looking at this, Social Security would be a very reasonable place to start, both financially and to demonstrate the capacity for institutional reform.

The fiscal policy challenges I see are of a different order of magnitude from anything I either observed or dealt with over the past 25 years. Some research in trying to develop principles in this area could be immensely useful. Of course, it involves politics, but sometimes economists seem to think there is just a binary model—economics or politics—where in fact there is a need to combine technical analyses with politics.

Certainly the two can blend. In this case, the critical area some of your questions are focusing on—I would encourage you to think about them more—is the mixture of institutional structures with the empirical aspects. I would hope this would have been a lesson drawn from past experience in financial markets where nice theory didn't necessarily fit with institutional arrangements.

There is an analogy here on the political and fiscal side. Let's just take baselines, which have come up. Baselines build in huge assumptions. Doug touched on current policy versus current law. These are very tricky things to build in, but they very much shape policy debate because you can find yourself in an unusual situation where you are actually increasing spending five or six percent, but it looks like a reduction of two or three percent from a baseline. So the press reports a big policy cut even though you are actually increasing spending a considerable degree.

There are other issues you've seen—for example, there is research done on whether committees that do the spending but also do the taxing behave differently over time and the role of supermajorities. You touched on this in the paper, and I would encourage you and others to develop this more: There are a number of countries that have developed institutional structures to try to shape this policy. How do they work? This would be immensely valuable for people over time.

You also identified some interesting questions. If I could connect this with the title of the conference, fiscal policy is going to be the big issue for the next decade. Ben outlined the best he can try to do on monetary policy, so I think it would be an abdication of this profession not to engage on some of these questions that are going to be the core questions.

Here is a real, practical example. There is a budget commission people have developed in the United States that is trying to address this. I'd be willing to bet all their work hasn't looked at anything related to these rules or structural aspects. I talked about this a little bit with Maya MacGuineas. It would be immensely valuable, whatever

they do in terms of particular policy suggestions, to put this on the agenda. So, I compliment you for starting to flag it.

Mr. Hubbard: My first observation is that it is a little unfair, as was suggested earlier, to think of fiscal policy as “alchemy” and monetary policy as “science.” Monetary policy has a well-agreed-upon macro framework. But there are many micro questions to which we do not have a good answer—for example, what is the effect of the Fed’s mortgage backed security purchases on risk spreads?

By contrast, we know a lot about a wide range of micro questions about fiscal policy—for example, effects of tax policy on saving and investment—but for all the political reasons that have come up in discussion, we lack, perhaps, an overall framework. This paper did a very good job in teeing up the issue of long-term adjustment. Before there were Doug Elmendorf’s great exploding budget pictures, there was Herb Stein, who said something to the effect that something that is unsustainable will stop. That is interesting as far as it goes, but as *economists*, what is more interesting to us is *how and at what cost*.

Toward this end, looking at variables like deficits and debt is not altogether helpful. A deficit is an accounting variable. It is the difference between two economic variables: taxes and spending. Debt is an integral of the deficit accounting variable. It would be much more interesting to look at the *process* of adjustment—what are the economic costs of tax adjustments and spending adjustments. But that analysis simply cannot be carved out in models with lump-sum taxes or nondistortionary taxes. A more profitable research program is the development and measurement of long-run tax gaps, as in the work of Alan Auerbach and Bill Gale, then try to look at the costs of closing those gaps on alternative policies.

The other point I wanted to make—already articulated by Bob Zoellick and Francesco Giavazzi—is that there is much we can learn from institutional case studies. I would put U.S. states and budget rules in that category, and some international episodes as well.

Mr. Padoan: Just add myself to the list of speakers who suggest we maybe are moving away from alchemy more rapidly than we think. Let me mention two areas that are in need for further research. A very

promising one is the role of fiscal rules and institutions, which has been dealt with more in Europe perhaps than in the United States for obvious reasons.

We do not know which is the optimal fiscal institution yet. We may also think there are several good institutions that deliver the same results. In some cases—I have in mind the case of Canada—you simply do not need fiscal institutions to generate major fiscal adjustment as happened in the 1990s in that country. What authorities would tell us is that it was the political drive that did it.

There is a lot of research that can be done, including the question that is now coming up: What if multiple institutions are set up? The example I have in mind is in Europe where alongside the Stability and Growth Pact we now see flourishing national fiscal institutions. One noteworthy example is Germany, where there is now the requirement by constitutional law to have a balanced budget. This example may be followed by other countries in the near future.

The other point, which is related, is that we perhaps know more than we think about the micro dimensions. At the Organization for Economic Cooperation and Development, we've been developing analysis of what different tax policies do on growth and therefore on debt sustainability. We might want to think about incorporating those aspects in how fiscal expectations are modeled.

Mr. Collins: Eric, if I could just push you a little bit to further elaborate on or at least clarify what you ask central banks in the room. The first issue, of course, you've raised is the paucity of analytics in the field of fiscal policy and improving on that framework and interrelationship between monetary policy.

The second step is a little less clear, and that is the role in terms of either communicating that and communicating those analytics or beyond the communication of those analytics. It can be, for example, one of the things you point out in your paper is the need to anchor fiscal expectations and whether there should be a role for central banks in communication along those lines.

It is really about the viable strategy for central banks to prevent the slide from M to F. Is there a role? Stan Fischer, for example, suggested one, which is the fiscal rule. Chile has one of the best fiscal rules I've seen, and it has worked for a decade in both recession and growth periods. To go back and look at the role of the central bank in crafting the analytics around those rules, just dump some clarity on what you are proposing.

Mr. Weber: Let me congratulate Eric first for the long-run focus he puts into the paper. Any stabilization of a crisis has the long-run consequences on debt that are really strong, and we need to look at that. I fully endorse most of the paper's propositions. I also agree with Francesco on the stabilization role that fiscal policy can play only if its long-run sustainability is unquestioned.

Let me just correct one fact slightly because the Schröder government in Germany in your example looks too bad. The Kohl government, just to explain, focused on entitlements of pensions and on pension payments only; they didn't create a second funded pension pillow, which is vital for sustainability now, and they also didn't focus on the pension age, which is the long-run issue that Schröder addressed. Thus, the Schröder government in Germany has to be viewed more positively from today's perspective than comes out in your paper. Changing the pension entitlement and increasing the pension age is a major thing if you want to align more clearly long-term liabilities and long-term entitlements.

Mr. Berner: Just a comment and a question or a challenge. The comment is in support of Doug Elmendorf. He does have an outside panel to vet their analytical capabilities. Many people in this room are on that panel, including me. I can assure you the debates and discussions in those meetings are just as aggressive and intrusive as they are right here.

Second, and related to institutional frameworks, I wonder if a topic for future research is to look at the fiscal federalism we have in the United States. Glenn Hubbard raised that, but one of the particular areas for research is the way in which we have institutional frameworks set up specifically in Medicaid, for example, a program that is funded

jointly by the federal government and by the states. It always appears that in crisis, the states have a put-back to the federal taxpayer to get that funding done when the Medicaid roles expand dramatically.

There are similar things going on in the fiscal union in Europe. The nature of those relationships will be important to explore.

Mr. Giavazzi: I will just make one point that Stan made at the beginning about fiscal rules. I want to put a word of caution on fiscal rules. It is not surprising the two examples that have been raised—Israel and Chile—are both countries that don't face the huge aging problem like some of the European countries or the United States.

Fiscal rules that look at expanding the deficit year by year are not in my view the right way to address the problem of an aging population. Take Spain: Spain is adding 5 percent of GDP per year in 15 years and is not going to address this by adjusting year by year by 0.5 percent. You have to sit down and address the deficit issue once and for all. It is only if you do this that you are going to stabilize fiscal expectations in the future. I think fiscal institutions can be important, but yearly fiscal rules are not.

There is one point in the United States. Often one looks at the work of Henning Bohn. Henning Bohn finds U.S. fiscal policy is stabilized. If you look at the response of tax and spend to the debt, you understand that it is stabilizing. Many people conclude from Henning Bohn's work that you should not worry. At some point, Congress will stabilize fiscal policy here, a similar concern as in the case of yearly fiscal rules. The data from which Bohn finds his stabilizing effect comes from a period where rapidly rising entitlements were not the central issue, and I am not sure you can use that *de facto* stabilizing result for fiscal policy going forward.

Mr. Leeper: A lot of people seem troubled by my assertion that monetary policy is science. Of course, this is a hook. It is also a bit of a jab. In boxing, I think you are supposed to do both of those. "Science" doesn't mean you have all the right answers, but it does mean you are asking some of the right questions. I don't see that happening in fiscal policy.

Science also means you have a methodology and you have a systematic approach to what you're doing. Central banks do that. Obviously, in crisis times, they can't just fall back on the research that has been done. But, in fiscal policy, that is *never* done.

I have only a couple of minutes. Let me just say a few more things about this. I don't want to get into a food fight with Doug, but conditioning on current policies remaining fixed is an almost completely uninformative exercise. We all know that it is unsustainable. Showing us pictures with debt going to 500, 600, 800 percent of GDP doesn't tell us anything we don't already know.

Central banks used to do projections conditional on interest rates remaining constant over the three-year horizon. The CBO's exercise is like holding interest rates constant over a 50-year horizon. Nobody would do that. They would build in some feedback rules. There is no reason why fiscal analysis can't do that.

I want to elaborate a bit on what central banks might be able to do here. Central bankers talk a lot about unsustainable policies, but I don't think that is all that useful. The first thing is central banks need to study the analytics of this because what's going on in fiscal policy is going to affect the macroeconomy, and they need to understand that. These effects arise because there is so much uncertainty about future fiscal policies, which affect the macroeconomy in very subtle ways and are going to be really hard to track in the data. That is where the analytics will be critical.

Secondly, once they have these analytics, central bankers can communicate clearly about what effects fiscal policy is having on the economy. We all know unsustainable policies are a bad thing. But you can actually say something more specific than that, if you have the research behind you. You can say, "Gee, we're seeing inflation creep up because" or "People are increasing savings and not consuming much because ... they are worried about entitlements reform." That is the sort of thing central bankers could be doing.

Let me just make one more statement. We do have to think a lot more about institutional things. The fiscal policy councils in Sweden and Hungary are good examples. Sweden has been extremely

successful because they are given a forum. The chair of that committee testifies before Parliament, the government then responds, and it has raised the level of discourse in Sweden. That doesn't happen here. Things like the White House Budget Commission are just alchemy as usual. If you look at the groups testifying before them, nobody is talking about macroeconomic consequences of alternative adjustments to future policies. That is what's missing in this analysis.

Mr. Fraga: On that note, we end this important discussion. I tend to agree. This is *the* issue for the next 10 years.

