6

Can Rubinomics Work in the Eurozone?

ADAM S. POSEN

Most European policymakers view the Stability and Growth Pact (SGP) as vital to the eurozone's survival. Fiscal discipline is necessary to preserve price stability, particularly in a monetary union where countries might have the incentive to issue debt as free riders on other governments' credit ratings. According to this view, the Maastricht Treaty targets for public debt and deficit levels required an enforcement mechanism for members of the eurozone once they entered the currency union. Observers noted from the outset that the SGP constrained the ability of fiscal policy to stabilize the economy at the same time that national monetary policies were being yielded to the European Central Bank (ECB)—though estimates of the empirical relevance of this constraint varied widely.

An influential body of research on "expansionary consolidations" (beginning with Giavazzi and Pagano 1990) contributed to the design of the SGP. Drawing on "tales of two small European countries," the research held that there was actually no meaningful trade-off for policymakers between fiscal discipline and economic stabilization. Not only were the stabilizing benefits of fiscal policy (beyond limited automatic stabilizers such as unemployment benefits) exaggerated, but credible fiscal contractions would actually stimulate growth in the near term by reducing interest rates and increasing efficiency.

Adam S. Posen is a senior fellow at the Institute for International Economics. *The author is grateful to his discussants at the conference on which the present volume is based, Jeffrey Frankel and Jürgen Kröger, for helpful comments, and to Daniel Gould for excellent research assistance.*

According to this view, once the initial resistance of elected politicians defending pet programs could be surmounted, economies would quickly benefit from a budgetary consolidation. A virtuous circle would emerge of movements toward public surplus, lower interest rates, increased private-sector investment, and economic growth—in turn further improving government balance sheets. By the time the euro was launched on January 1, 1999, the shining example of such a dynamic was to be found across the Atlantic in the United States' expansion tied to a similar policy of "Rubinomics."[1]

If Rubinomics had been easily transferred transatlantically, and similar investment—and productivity-led expansion—had taken place in the eurozone during the first five years of the euro, the SGP would have been hailed as a masterwork of policy design. At present, however, the expansion has not occurred, and the SGP has come in for sharp criticism. The largest countries in the eurozone (France, Germany, and Italy) are currently in violation of the SGP, as are a couple of others, and only one of the smallest eurozone members, Portugal, has been punished for its SGP violations. The European Union's Council of Ministers was even taken to the European Court of Justice by the European Commission for its lax and uneven application of the SGP's sanctions, in a case setting major precedents for the emerging allocation of power between Brussels and the member states. As might have been expected, the European Court of Justice ducked the issue, ruling on a procedural matter, but a proposal to reform the SGP is near the top of the incoming European Commission's agenda. Perhaps contrary to some assumptions about the vulnerability of the euro to fiscal dominance, all of this has taken place without any obvious harmful impact on long-term interest rates, inflation expectations, or the exchange rate of the euro.

Can Rubinomics work in the eurozone? Would a more strict application of the SGP's rules have yielded the hoped-for benefits for European growth and interest rates? Or does the political resistance to the SGP by the eurozone's member states reflect some underlying inapplicability of this logic to their situation?

This chapter addresses these questions in six sections. First, it reviews the intended purposes and perceived problems of the SGP as seen in the first five years. Second, it considers whether the SGP has altered stabilization policy in the eurozone. Third, it assesses whether the channels that made expansionary consolidation possible in the US economy are operative in the eurozone economy. Fourth, it speculates on the likely impact

1. A far less salutary example in the other direction both geographically and economically was that of Japan—its tax hikes of 1997, and its fiscal policy in the 1990s more broadly. See Posen (1998b) and Kuttner and Posen (2002). As Fischer (2001) notes, the IMF relied in part on the expansionary consolidation argument to support the 1997 tax increases, and it later recognized that this was a mistaken application to Japan. Below, I list reasons for the policy's inapplicability to the eurozone as well, which are only partly parallel.

of current fiscal policies in the eurozone and the United States on the dollar/euro exchange rate. Fifth, it asks whether fiscal policy rules, like the SGP, can be relied upon as a means to better policy outcomes. Sixth, it concludes that Rubinomics cannot be replicated in the eurozone, because there are neither the responsive investment markets nor the incentives for governments present in Europe necessary to make it work—as is clearly shown by the response of Italy to eurozone membership, even though Italy should have been the greatest beneficiary of expansionary consolidation. As a result, reforms of the SGP that tweak the rules may reduce political friction between Brussels and the national capitals, but they will have little impact upon either member states' fiscal policies or the euro's overall stability.

The SGP's Purposes and Problems

The eurozone supposedly needed the SGP for four reasons: one, to prevent profligate national governments from issuing more public debt in hopes of a bailout from the ECB and/or free riding on more disciplined countries' credit ratings; two, to limit the degree to which member countries would expand their public debt after entering the eurozone, having squeezed to meet the Maastricht criteria; three, to maintain long-run price stability and the autonomy of the ECB by preventing fiscal erosion; and four, to encourage national economies to continue with structural reform during contractions rather than relying on the perceived easy out of expanding government programs. Though all of these were worthwhile goals, their connection to the SGP was based on some dubious assumptions.

First, it was assumed that stabilization policy (in the form of expansion during recessions) tends to increase government deficits in a lasting manner, so the expansion had to be limited. The evidence on this connection is far from clear, however, even drawing on the 1970s (Masson and Mussa 1995), so it is equally unclear that constraining stabilization would lead to fiscal discipline over the longer term. Second, it was assumed that financial markets would not differentiate between countries' public debts, once they were all denominated in euros, so rules were required to prevent free riding. Though interest rates initially did converge among the eurozone member states, there are signs that over time—as the euro itself and the independence of the ECB are taken more for granted—there will be more distinction by markets between different members' debt obligations, just as there is between state governments' debt ratings in the United States. Both of these false assumptions simply overstated the need for the SGP but did little to impinge upon its operation.

Other mistaken assumptions, however, proved more directly dangerous to the SGP's viability. Third, it was assumed that punishments for pact violations would be credible, despite their relying on peer review in

Ecofin (the council of economic and financial ministers). But they were not credible, as was amply demonstrated in the first instances where they might apply. Fourth, underlying the previous assumption, in practice, was the assumption that the major eurozone economies would be largely synchronized with the monetary policy set by the ECB for the zone as a whole, thereby minimizing the need for such fiscal deviations and punishments. In recent years, the opposite unluckily turned out to be the case, with Germany and Italy being most visibly out of sync with ECB policy on the side of excessive tightness.

Fifth, and perhaps most critically, the assumption was made that the loss of countercyclical policy by the national governments would be accepted in any event, both because the room allowed for automatic stabilizers would prove sufficient for most downturns and because the benefits of expansionary consolidations would become evident (and buy off opposition). Neither proved to be the case, with a sharp but not historic recession in 2001–03 justifying greater response than the SGP allowed, and no sign of any investment or productivity boom in those countries whose interest rates dropped upon meeting the Maastricht criteria and entering the eurozone.

Thus, by the time of the euro's fifth anniversary in January 2004, the European Commission had brought suit against the Council of the European Union before the European Court of Justice requesting that the Court (in the convoluted prose of the Court's case law) "annul the Council's failure to adopt decisions to give notice [of sanctions under the SGP's Excessive Deficit Procedure] to France and Germany" for their violations of the SGP.[2] The SGP had been de facto suspended in November 2003, when the Council had given the two major countries passes on sanctions, despite their repeated violations of the 3 percent deficit limit and their lack of credible plans to bring the deficits down in the immediate future (France, in fact, openly stated its unwillingness to constrain its budget policy until it was ready to do so). The major fault pointed to by supporters of the SGP, including the Commission and the ECB, was the failure of the SGP to induce member governments to cut budgets during good times, which in theory would have allowed those governments to expand their deficits more during recessions.

Yet there was more to the SGP's breakdown than the supposed asymmetry of government behavior with respect to budget policy and the business cycle. As noted, a severe recession was centered in Germany and Italy, while eurozone monetary policy was only mildly eased in response

2. Press Release 57/04, Judgment of the Court of Justice in Case C-27/04, *Commission of the European Communities v. Council of the European Union*, European Court of Justice, July 13, 2004. Ultimately, the European Court of Justice decided that the EC's desire for giving notice to France and Germany could not be imposed upon the Council, but that the Council could not formally hold the excessive deficit procedure "in abeyance."

to the diminished inflationary pressures continentwide. Moreover, most of the economies in question were undertaking structural reforms, including significant permanent tax cuts and restructuring for efficiency reasons, that made it harder to meet deficit targets. There was also a significant gap between the concerned response of the Commission members, who are the delegated monitors of the SGP, and the tepid responses of the financial markets and the popular opinion, which are the ultimate enforcers of fiscal discipline. Ultimately, the combination of less-than-credible threats and putative benefits of the SGP did not provide sufficient incentive for eurozone member governments to adhere to the SGP under the existing strained, but hardly unlikely, circumstances and the other priorities they had for fiscal policy.

The SGP's Effect on Stabilization Policy

For all the hue and cry about the SGP, has it altered the eurozone economies' fiscal policy behavior, and in particular the response of fiscal policy to the business cycle, from what it had been before the adoption of the euro? The common presumption is that the 12 countries of the eurozone had the worst of both worlds—the SGP had constrained fiscal response to the recent downturn to below desirable levels—but had not constrained policy enough (whether in the upturns or overall) to meet the SGP commitments. This is ultimately an empirical question: Have the eurozone member countries' budget balances responded less to movements in national GDP than they did before Maastricht? The answer to this question gives important information both economically and politically about the SGP: Economically, what is the state of fiscal discipline and its relation to stabilization policy in the eurozone? And politically, were the strictures of the SGP at least partially credible in constraining government behavior?

To make this assessment, I estimate simple fiscal reaction functions of systematic change in public-sector balances in response to variation in economic growth. "Systematic" refers to policies that are undertaken consistently as a result of similar economic conditions, whether or not they would be labeled a priori as formal automatic stabilizers.[3] This builds on earlier work using a similar approach by Bayoumi and Eichengreen (1992) and Posen (1998b). Here, I estimate the relationship between changes in year-over-year GDP growth rates and changes in budget balances for a sample of 18 major economies that belong to the Organization for Economic Cooperation and Development (OECD), including 10 members of

3. In the US context, for example, unemployment benefits are regularly extended by Congress during recessions. Even though only the original legislated duration of unemployment benefits could be said formally to be automatic stabilizers, and the extensions require discretionary authorization (a fact honored in the breach during this past recession), this is part of the systematic response of US fiscal policy to recessions.

the eurozone (excluding Greece and Luxembourg) and the three EU members that are outside the eurozone (Denmark, Sweden, and the United Kingdom). The ordinary least squares regression estimate for each country (not a panel), starting with the earliest available annual OECD data, is

$$\Delta Bal/GDP_t = \beta_0 + \beta_1 \Delta \ln GDP_t + \beta_2 Rev/GDP_t + \beta_3 Bal_{t-1}/GDP_{t-1} + \beta_4 (1992\text{–}2003 \text{ dummy})^* \Delta \ln GDP_t + \beta_5 (1969\text{–}79 \text{ dummy})^* \Delta \ln GDP_t \quad (1)$$

The variable *Bal* is the central government balance, including social security funds. The idea is to compare the fiscal response in each country, controlling for prior deficit levels (on the presumption that higher outstanding deficits would lead to diminished willingness or ability to borrow). *Rev* is central government revenues, meant to control loosely for the amount that taxes move with the cycle, ceteris paribus. The coefficient β_1 on GDP growth is the primary measure of the degree of movement in the government's budget position in response to changes in output. A significantly positive β_1 coefficient would indicate a consistently countercyclical fiscal response.

The two period dummies, for 1969–79 and for 1992–2003, are meant to capture cross-national effects. In particular, these are intended to capture shifts in policy norms over time, toward activist fiscal policy in the heyday of the Keynesian response to the oil shocks of the 1970s, and toward fiscal conservatism during the 1990s. If the eurozone's discipline on members' fiscal policy were to have an effect, it would show up in a significantly negative coefficient β_4 for members only, or rather a significantly larger coefficient for members than for the non–eurozone members (if all countries moved toward discipline during this period). The period of the 1992–2003 dummy variable of course extends beyond the period of the SGP itself (which runs 1999 to present), which had to be done for statistical reasons. That said, because it covers the period from the Maastricht Treaty onwards, it includes the period of putative fiscal consolidation to meet the public debt and deficit targets for entry to the eurozone and so, if anything, should bias towards finding in the results evidence of a shift away from countercyclical fiscal policy and towards discipline. The SGP was always meant to enforce maintenance of these targets once they were attained in the run-up to EMU.

Because the SGP is an adjunct to the Maastricht Treaty, drafted and signed at the same time, it is fair to suggest that the prospect of the SGP's implementation should have been affecting fiscal policy formulation in prospective eurozone members from the time of the treaty's adoption. If anything, this should bias the results toward finding a significant negative β_4 coefficient (i.e., a constraining effect of the SGP on stabilization policy), because it includes the pre-euro years where countries undertook one-time efforts to bring down debt and deficits to qualify for euro membership.

The estimated results are presented in table 6.1. The results are broadly sensible, with most coefficients on revenue/GDP positive (consistent with

Table 6.1 Countercyclical response of fiscal stance; dependent variable: Change in the general government budget balance (percent of GDP)

Country	Change in ln GDP	Revenue/GDP	Lagged government balance	1992–2003 dummy	1969–79 dummy	Adjusted R^2	Years covered
Australia	0.115	–0.003	–0.149	0.237	–0.181	0.1285	1962–2003
Austria	0.189	–0.051	–0.326*	0.064	0.067	0.1886	1964–2003
Belgium	0.272	0.202	–0.144	0.407	0.025	0.0897	1970–2003
Canada	0.460**	0.079	–0.098	0.242	n.a.	0.4992	1981–2003
Denmark	0.739**	0.284**	–0.053	–0.456*	0.023	0.5649	1971–2003
Finland	0.383**	0.016	–0.063	0.261	–0.059	0.3675	1960–2003
France	0.502**	0.040	–0.315**	–0.032	0.058	0.5292	1963–2003
Germany	0.348**	–0.093	–0.570**	0.454*	0.127	0.2049	1962–2003
Ireland	0.240	0.418*	–0.004	–0.039	–0.429	0.3308	1977–2003
Italy	0.460**	0.0875*	–0.109*	0.320	0.039	0.3658	1960–2003
Japan	0.434**	0.000	–0.159*	–0.227	–0.286*	0.3958	1970–2003
Netherlands	0.094	–0.049	–0.396*	0.370	0.226	0.2960	1969–2003
Norway	0.297	0.809**	–0.639**	0.718**	–0.161	0.7631	1975–2003
Portugal	0.136	0.0828*	–0.362**	0.134	0.247	0.3594	1969–2003
Spain	0.259**	0.010	–0.134	0.246*	0.001	0.3186	1964–2003
Sweden	0.756**	0.076	–0.118	0.005	–0.207	0.2803	1963–2003
United Kingdom	0.283	0.331	–0.245	0.558	–0.148	0.3237	1970–2003
United States	0.414**	0.298**	–0.240**	0.307**	0.023	0.6484	1960–2003

*, ** indicates significance at the 5 and 1 percent levels.

Note: A positive coefficient on change in GDP indicates a countercyclical response of the overall fiscal stance. OLS regression estimated: $\Delta(Bal_t/GDP_t) = \beta_0 + \beta_1{}^*\Delta\ln GDP_t + \beta_2{}^*Rev_t/GDP_t + \beta_3{}^*Bal_{t-1}/GDP_{t-1} + \beta_4{}^*$(1992–2003 dummy * $\Delta\ln[GDP_t]$) + $\beta_5{}^*$(1969–79 dummy * $\Delta\ln[GDP_t]$) + error. A dummy was added for 1991 in Germany to take into account the one-time fiscal and data effects of reunification (it was significant at the 1 percent level).

Source: Organization for Economic Cooperation and Development, *Economic Outlook 74.*

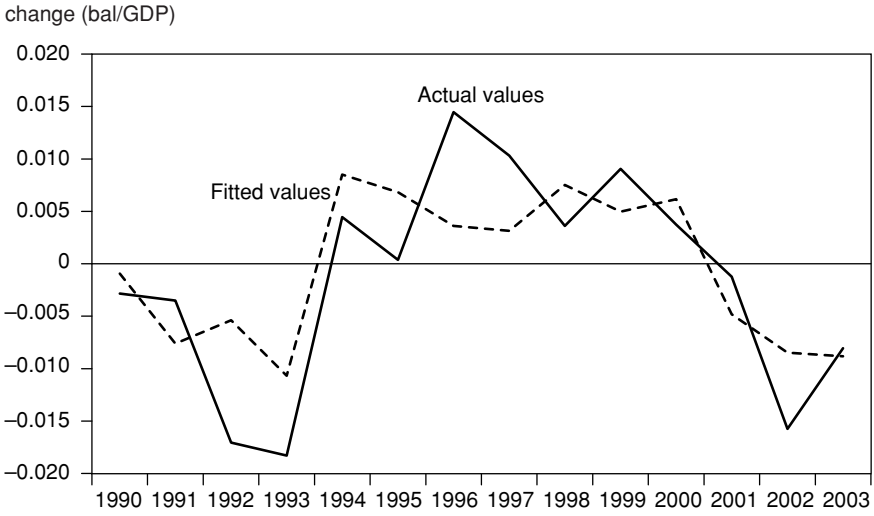
a procyclical variation in tax receipts) and all on lagged government balance negative (consistent with a tendency for recent deficits to constrain current spending). Most important for our present purposes, not a single eurozone member has a significant negative coefficient on the 1992–2003 dummy, which is consistent with no reduction in the countercyclicality of budget deficits post-Maastricht.[4] In fact, the bulk of estimates of β_4, and a majority of the significant coefficients on the 1992–2003 dummy, are positive irrespective of eurozone or even EU membership. Even the United States during the Bill Clinton administration if anything increased its responsiveness to the business cycle while paying down its debt during the boom years (and going into debt during the 2001–03 downturn under President George W. Bush).

Because this includes the mid-1990s, as well as the post-euro-adoption period, this result indicates that even during the run-up to euro membership covering a time of expansion for most EU economies, budget positions did not improve more than would be accounted for by the usual procyclical factors. Figures 6.1, 6.2, and 6.3 bear this out, plotting the fitted versus actual year-over-year change in government balance for the three major eurozone countries. Germany was indeed more countercyclical than forecast for the period 1992–2003, but was symmetrically so on both the up and down cycles. France as well appears to have become more countercyclical than expected based on past behavior since the adoption of the euro in 1999, but again in both directions not simply toward ease. Italy's fiscal behavior after Maastricht is fit well by the estimated reaction function for the entire post-1960 period, only deviating toward surplus in 1997, as one might expect with one-off privatization measures to show motion toward the Maastricht targets. Figure 6.4 plots the debt/GDP ratios of these three economies; relatively steady increasing trends are evident for France and Germany, while Italy has fluctuated around an already high level. In short, the picture that emerges is one in which the Maastricht Treaty and the SGP have had no significant impact on eurozone fiscal policy.[5]

4. In fact, two eurozone member countries, Germany and Spain, have significant positive coefficients on the 1992–2003 dummy, and Italy's is positive and nearly significant. This holds even when knocking out the observation for 1991 in Germany due to the effects of reunification (significant at the 1 percent level). The next section offers a partial explanation for this result.

5. Gali and Perotti (2003), using a different statistical approach, come to a similar broad conclusion: that fiscal policy did not change with monetary integration in Europe, and if anything became more countercyclical. Buti and van den Noord (2003) also conclude that the SGP did not constrain stabilization policy. McNamara (2003) usefully points out that the standard deviation of eurozone member states' deficits has been increasing slightly over time, a fact inconsistent with what was supposed to be a move toward keeping deficits within a common limited range and a more synchronized eurozone business cycle.

Figure 6.1 German fiscal response, 1990–2003: A bit more countercyclical, but symmetrically



Note: Estimated: $\Delta(Bal_t/GDP_t) = 0.021 + 0.348^*\Delta lnGDP_t - 0.093^*Rev_t/GDP_t - 0.57^* Bal_{t-1}/GDP_{t-1} + 0.454^*(1992–2003\ dummy^*\Delta ln[GDP_t]) + 0.127^*(1969–79\ dummy^*\Delta ln[GDP_t])$. A 1991 dummy variable was added to the specification. It was significant at the 1 percent level. Fitted values were calculated for the entire 1960–2003 period, but only the 1990–2003 results are shown here.

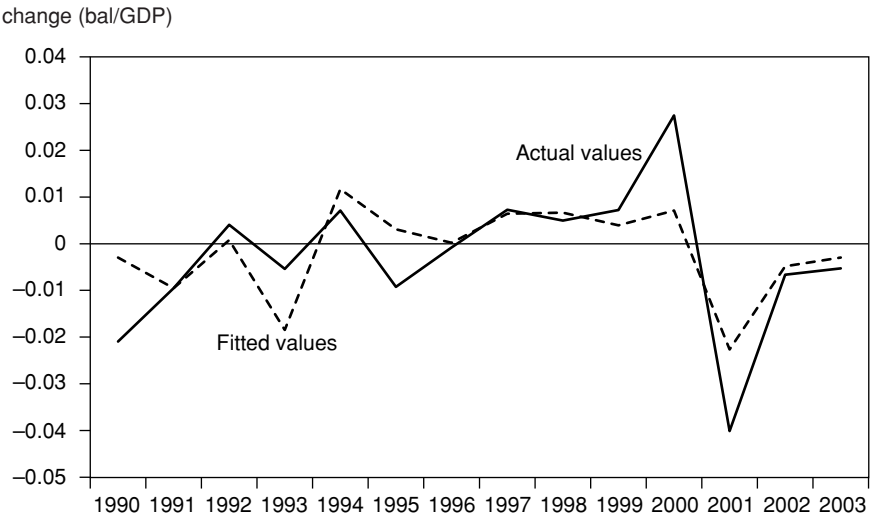
Source: Organization for Economic Cooperation and Development, *Economic Outlook 74.*

Blocked Channels for Expansionary Consolidations

Some supporters of the SGP insist that if only the member governments had carried through on their budgetary commitments, there would have been growth benefits aplenty. As was noted above, the work of Giavazzi and Pagano (1990) gave birth to an influential literature promising such a virtuous circle.[6] Working from the examples of apparent expansionary consolidations in Denmark (1983–84) and Ireland (1987–88)—as well as the infamous converse example of France's contractionary expansion (under François Mitterrand's first term of "Socialism in One Country") and later emerging-market examples championed by IMF researchers—the European Commission drew inspiration for an eventually self-enforcing

6. The European Commission (2003, 99–123) gives a very thorough summary of the empirical and theoretical literature.

Figure 6.2 French fiscal response, 1990–2003: Also did more in both directions



Note: Estimated: $\Delta(Bal_t/GDP_t) = 0.039 + 0.502^*\Delta lnGDP_t + 0.040^*Rev_t/GDP_t - 0.315^*Bal_{t-1}/GDP_{t-1} - 0.032^*(1992–2003\ dummy^*\Delta ln[GDP_t]) + 0.058^*(1969–79\ dummy^*\Delta ln[GDP_t])$. Fitted values were calculated for the entire 1960–2003 period, but only the 1990–2003 results are shown here.

Source: Organization for Economic Cooperation and Development, *Economic Outlook 74*.

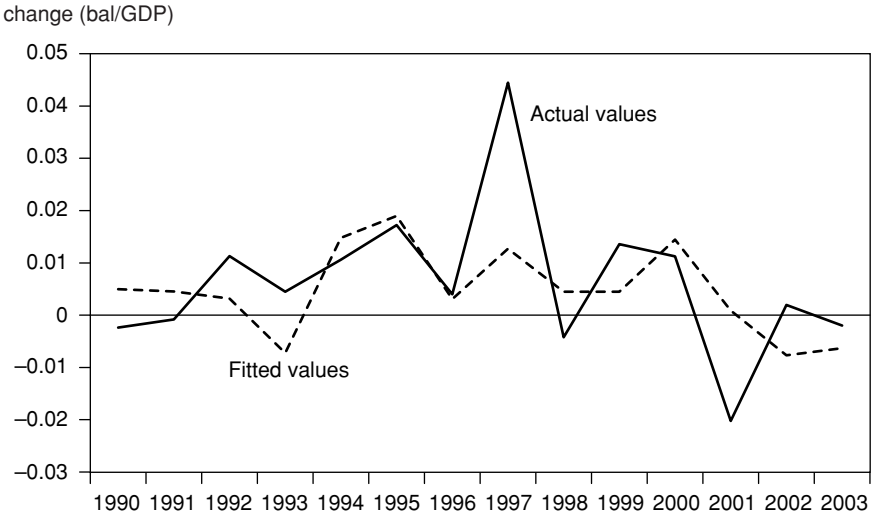
SGP and reform cycle.[7] The greatest exponent and example of such a policy dynamic, however, was Rubinomics in the United States during the Clinton administration:

> The restoration of fiscal discipline reduced or eliminated the possibility that continued fiscal morass would eventually lead either to an effort to inflate our way out of debt problems or to higher taxes to pay debt service. And that increase in confidence affected business decisions about investment, expansion, and hiring, as well as consumer decisions, and produced a greater flow of foreign capital into our savings-deficient nation to finance investment here, lowering our cost of capital . . . a virtuous cycle of debt reduction promoting growth which further reduced the deficit, which then in turn further increased growth, and so on back and forth. (former US Treasury secretary Robert Rubin, in Frankel and Orszag 2002, 132)

Would a similar virtuous cycle have taken hold in the eurozone if only the member governments had abided by the letter and the spirit of the

7. It needs to be noted that even the Danish case has come under scrutiny by experts on that economy as to whether it truly was an example of an expansionary consolidation. See Bergmar and Hutchison (1999).

Figure 6.3 Italian fiscal response, 1990–2003: Only deviated a lot in 1997—toward *surplus*



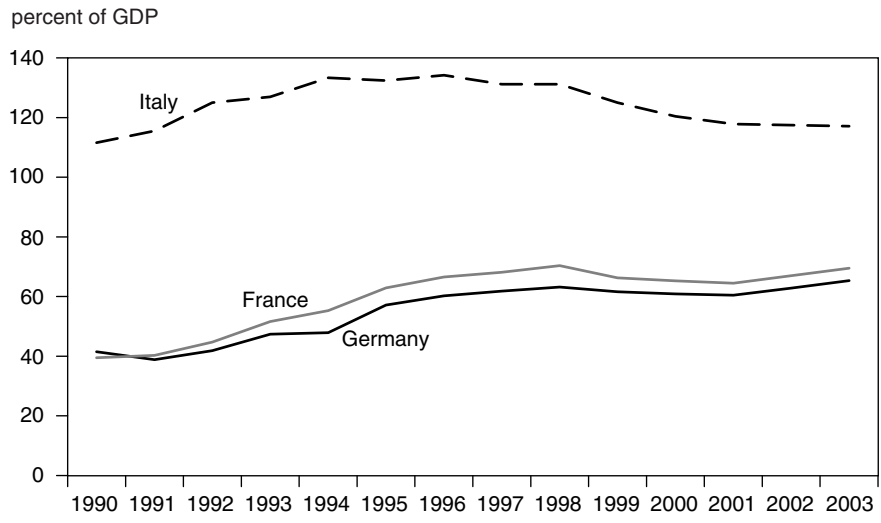
Note: Estimated: $\Delta(Bal_t/GDP_t) = 0.054 + 0.46^*\Delta lnGDP_t + 0.088^*Rev_t/GDP_t - 0.108^*Bal_{t-1}/GDP_{t-1} + 0.32^*(1992–2003\ dummy^*\Delta ln[GDP_t]) + 0.039^*(1969–79\ dummy^*\Delta ln[GDP_t])$. Fitted values were calculated for the entire 1960–2003 period, but only the 1990–2003 results are shown here.

Source: Organization for Economic Cooperation and Development, *Economic Outlook 74.*

SGP? Leaving aside the echoes of those monetarists in decades past who insisted that inflation would have been controlled if only the central banks had adhered to those targets, this hypothesis has to be assessed empirically. Unfortunately, because the governments in question did not follow the SGP even partially, let alone follow more ambitious fiscal consolidation agendas, the eurozone offers few data with which to examine this question empirically. So instead, let us break down logically what is required for an expansionary consolidation cycle to occur:

- Interest rates must respond strongly to fiscal consolidation. This usually requires beginning in a state of low confidence and/or a high debt/GDP ratio. The share of debt owed to foreigners usually must be large enough that consolidation reduces the interest rate paid (i.e., an exchange rate premium).
- Business investment must respond strongly to interest rate reduction. This usually requires forward-looking financial markets and flexible corporations. There should be a shortage of capital funds available rel-

Figure 6.4 Gross government debt/GDP ratios, 1990–2003



Source: Data from Organization for Economic Cooperation and Development, *Economic Outlook 75.*

ative to the number of possible productive investment projects outstanding. It helps if consumers have access to credit and are not dependent upon fixed-rate income if their expenditure response is to feed the dynamic.

- Growth in productivity and in employment must respond strongly to the increases in investment and consumption.
- And, to complete the cycle, government revenue must respond strongly to the increase in growth (e.g., through capital gains taxes on rising equities).

These attributes were all present in the United States, giving rise to the virtuous cycle of the 1990s. But these are not the attributes of the large eurozone economies. They are instead the attributes of the smaller eurozone economies and of the euro "outs" (Denmark, Sweden, and the United Kingdom) to varying degrees.

Only one of the large eurozone member economies (Italy) entered the eurozone in 1999 with high indebtedness and low confidence that its debt would be fully repaid, and thus was a candidate for immediate benefits from fiscal consolidation. France and Germany had the lowest interest rates on their sovereign debt among EU members in the years running up to EMU, and both still have public debt to GDP ratios well under 70 percent even after recent years' SGP-violating deficits. Italy itself still has too

little debt held abroad to see much of an interest rate response on its borrowing, and Germany and France have hardly any foreign-held debt. Domestic saving in all three countries is very high, much higher than in the United States, and in Germany and Italy savers are far more risk averse. The willingness of savers to reallocate their funds in response to interest rate movements is rather low in these countries. All these factors limit the interest rate response to public consolidation.

The transmission channels from interest rate declines to growth are even more dubious for the major eurozone economies. Due to the government-protected overbanking and public-sector financial institutions in these economies, the return to capital is too low and the intermediaries do not tend to invest in risky projects either (Posen 2003). The result is an excess of loanable funds rather than a shortage, as the United States had, and a shortage of productive investment projects because "long-term" banking relationships lock funds up and distort incentives, also the opposite of the US situation.

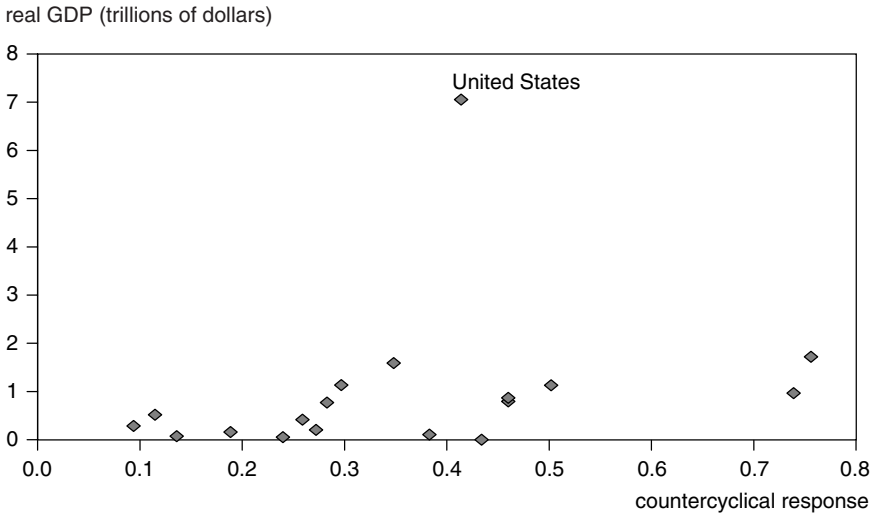
Various other regulatory barriers to best practices and competition limit the productivity or employment response in Europe to even productive investment, as compared with the United States (Baily and Kirkegaard 2004). Thus, what worked for the United States and for (say) Ireland in terms of an expansionary consolidation would probably not work for Germany, France, or Italy. And even if they did begin to work, the effect on government revenues would be lower than in the United States, given the structure of taxation in these countries (including higher dependence on taxation of labor and consumption than of capital compared with the United States) and of the social safety net (including long-term unemployment, which is less responsive to the business cycle than in the United States).

In this light, one begins to see the major eurozone economies' unwillingness to adhere to the SGP or to undertake major fiscal consolidation as more of a rational, if not optimal, response to economic realities than a case of pusillanimous policymakers.[8] On the one hand, these countries are unlikely to reap much in the way of benefits from fiscal consolidation in the near term, unless they are facing crowding-out constraints, which they are not, given their low returns on capital and extensive household savings. These economies are not candidates for Rubinesque virtuous cycles, given their structural problems as well as simply their structures.

On the other hand, being the largest and least open eurozone economies, these three countries give up the most by passing up fiscal stabilization policy after Maastricht. In general, the larger and less open the economic zone

8. This does not refer to the need for all aging societies—especially Italy and Germany, but also including the United States—to take on the long-term fiscal dangers from rising old-age and health entitlements. The reluctance of politicians in almost all countries to confront such distant but real threats is well established. It is also of little relevance to the discussion here, because any fiscal consolidation that might result from adherence to the SGP would be only a partial first step toward balancing the generational accounts. See Peterson (1999).

Figure 6.5 Size and countercyclical response, 1980–2003



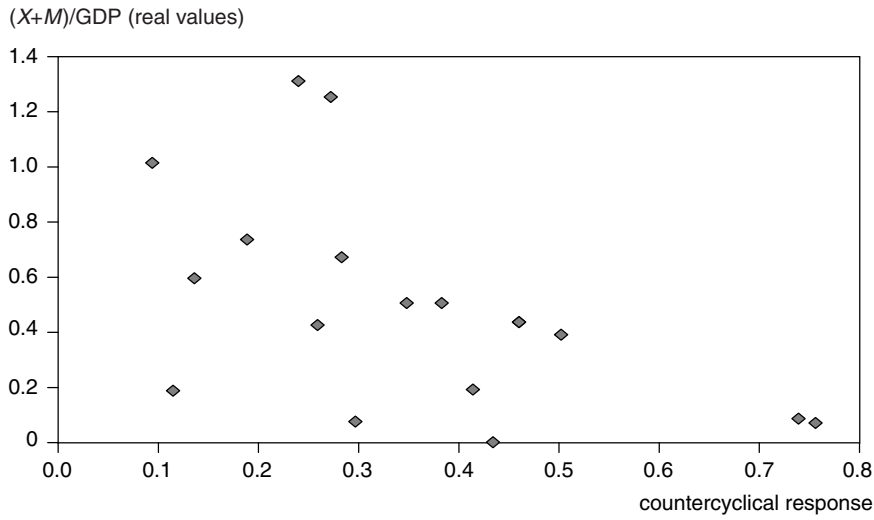
Note: Spearman correlation = 0.69.

Source: GDP data from Organization for Economic Cooperation and Development, *Economic Outlook 74*.

over which fiscal policy acts, the larger the impact of stabilization measures on the economy. This is borne out in the countercyclicality of policies estimated in table 6.1. If one plots the estimated degree of budget response to the cycle versus economic size, as is done in figure 6.5, one finds a clear positive association—the Spearman rank-order correlation (thereby giving equal weight to observations rather than overweighting by size) between the two is 0.69. Similarly, if one plots the estimated countercyclical fiscal response versus openness (defined as imports + exports/GDP), as is done in figure 6.6, there is an obvious negative association; the Spearman correlation is –0.58. Because the relative share of eurozone member countries' exports priced in their own currency has gone up as a result of eurozone entry, the effective openness of their economies is even lower than this ratio, and one would expect the utility of countercyclical policy to increase accordingly.

And given the well-recognized fact that a eurozone-wide monetary policy is inherently less targeted toward Germany's business cycle than the Bundesbank's policy was (when it set monetary policy for the Exchange Rate Mechanism countries), the relative worth to Germany of utilizing countercyclical fiscal policy has increased. To the degree that France and Italy were more synchronized with the German cycle than with the output gaps implied by the ECB's eurozone-wide inflation and monetary targets (which recent years' price and output trends in Italy at least seem to indicate), the same increase in the relative importance of fiscal stabilization

Figure 6.6 Openness and countercyclical response, 1980–2003



Note: Spearman correlation = –0.58.

Source: GDP data from Organization for Economic Cooperation and Development, *Economic Outlook 74.*

holds. If France and Italy were able in the pre-euro times to reset their currencies' parities to the deutsche mark more often than vulnerable small economies—as the historical record seems to reveal by comparison with, for example, Austria's and Belgium's strict adherence to pre–Economic and Monetary Union deutsche mark pegs—that adds to the loss of stabilization from coming under the eurozone's one monetary policy to fit all.[9]

Thus, on all economic counts—their low likelihoods of attaining a Rubinesque virtuous circle, their size and decreasing openness, and their loss of a meaningful degree of monetary stabilization—it is rational for policymakers in the major eurozone economies to ignore the SGP and to increasingly utilize fiscal stabilization policy. And that is in line with the results of our investigation of the direction fiscal behavior has taken in Europe since 1992. It needs to be noted as well that this argument is made without

9. In its excellent meta-study of empirical work on expansionary consolidations in Europe, the European Commission (2003) notes that more than half of expansionary consolidations identified were accompanied by monetary easing. Taking into account the inherent lags of fiscal policy as well—meaning that consolidations often take place when the business cycle has already turned up, so the subsequent expansions are not fully attributable to the budgetary consolidations—the number of "pure" expansionary consolidations is few. This only strengthens the argument that the big three eurozone economies are rational to forswear consolidation or limits on their countercyclical policies in the absence of accommodation by or coordination with the ECB.

reference to political pressures, elections, or politicians' high discount rates, which there is no reason to think would be systematically different in France, Italy, or Germany than in other eurozone member countries.

Fiscal Gaps, Euro Strength, and Dollar Weakness

Does the fiscal behavior of the eurozone economies, and the big three's disregard of the SGP in particular, really matter for the euro and for monetary policy? Most European policymakers—whether at the ECB, at the European Commission, or outside the current governments in question—believe it does matter very much.[10] Some market observers claim to agree, though long-term interest rates for the eurozone have not risen noticeably in response to SGP violations more than cyclical and oil-price factors alone would require. As the IMF's 2004 Article IV Consultation Discussion with the Euro-Area Countries points out in its Concluding Statement, there has been little slippage in the euro area's overall debt position (even though more progress on the long-term sustainability issues would be desirable). Figure 6.7 shows the overall debt/GDP and deficit/GDP ratios of the eurozone. Even with French and German fiscal expansion in recent years, the deficit ratio has remained below its 3 percent target, while the overall debt ratio has been essentially stable at below 80 percent and, thus, below the level when the euro was launched.

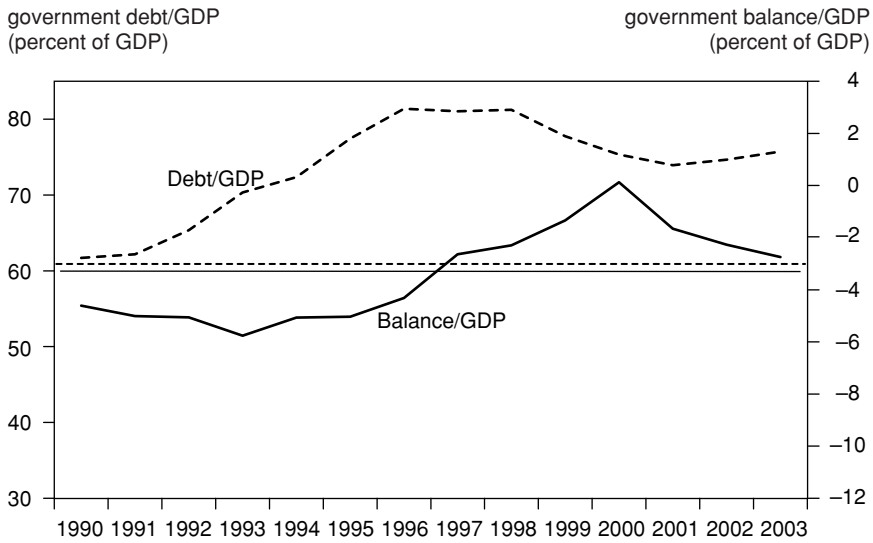
Certainly, by comparison with the erosion of the US fiscal position during the 2000–03 period, a shift from nearly 2 percent of GDP surplus to 5 percent deficit annually, the eurozone economies have little to bemoan—and that fiscal erosion occurred while the Federal Reserve was aggressively easing monetary policy and the dollar was depreciating, both of which should have lessened the need for stabilization policy.[11] The mounting public debt and record deficits of the Japanese government also made the eurozone look good by comparison.[12] If inflation differentials drive ex-

10. See, inter alia, Issing (2003), Tanzi (2003), and of course the European Commission's court case.

11. Of course, countercyclical stabilization was not the primary motivation for the Bush administration's tax cuts or Congress' spending increases, as acknowledged by both the administration's critics and advocates. It merely served as a useful additional excuse for pursuing a policy previously desired. See the discussions by Hubbard (2004) and Frankel (comment in this volume). Muehleisen and Towe (2004) provide an extremely useful and objective analysis of the shift in US fiscal policies.

12. Broda and Weinstein (2004) point out, however, that a fairer and more careful comparison of the Japanese and other OECD members' public accounts puts the level of net Japanese public debt much lower than is commonly recognized. Though I strongly agree with their assessment, there is no question that the decline in Japanese public balances over the post-1992 period was sharp, and the eurozone saw nothing comparable.

Figure 6.7 Eurozone total debt and deficit, 1990–2003



Notes: "Deficit to GDP" limit imposed by Maastricht Treaty (right scale = 3 percent of GDP).
"Debt to GDP" limit imposed by Maastricht Treaty (left scale = 60 percent of GDP).

Source: Organization for Economic Cooperation and Development, *Economic Outlook 74.*

change rate trends toward purchasing power parity, and fiscal overhang drives long-run inflation expectations (assuming central banks equally committed to price stability), Europe's relative fiscal probity should be a recipe for relative euro appreciation over time.[13] Though this may not be of consolation to central bankers concerned about increasing global liquidity and the eventual effect on the world price levels (if such things exist), it should be reassuring to the ECB and European citizens about the relative purchasing power of the euro, even in the long run.

Macroeconomists, however, actually are split in their analysis of the likely impact of fiscal consolidation (or expansion) upon exchange rates in the short to medium run. This is best illustrated by the debate between Laurence Ball and N. Gregory Mankiw on one side, and Alan Greenspan on the other, at the Federal Reserve's annual Jackson Hole meeting in 1995 on "Budget Deficits and Debt." Ball and Mankiw (1995) suggested that a fiscal consolidation would reduce interest rates by reducing crowding out, thereby narrowing interest rate differentials in favor of the home currency

13. Chinn (1997) and Cheung, Chinn, and Pascual (2002) discuss the relevance of such fundamentals to long-term movements (and their irrelevance to short-term movements) in exchange rates.

and leading to a depreciation. Greenspan (1995) agreed that a fiscal consolidation would reduce interest rates, but (foreshadowing Rubinomics) he argued that an increase in confidence and productivity would result, leading to an appreciation. Realistically, both effects are in play for all governments at all times; the question is which one predominates.[14]

In Europe, the more traditional crowding effect cited by Ball and Mankiw should dominate, because the Rubinesque effect is weak for all the reasons offered above. In addition, because financial markets are relatively illiquid in the eurozone, the crowding-out effect should be larger than in the United States.[15] Thus, fiscal laxity in the form of ignoring the SGP should at the margin push up both interest rates and the euro. In the United States, where the economy is much more dependent upon forward-looking asset markets and flows of foreign capital, the confidence effect is likely to dominate. Accordingly, fiscal laxity in the United States should lead to a currency weakening, as expressed by Greenspan.

In addition, the fiscal laxity in the eurozone is being treated by the ECB as a reason to avoid premature loosening, thus emulating for the euro the Paul Volcker–Ronald Reagan monetary-fiscal policy conflict that pumped up the dollar in the early 1980s. By contrast, despite some rhetoric about the need for attention to the long-term growth of entitlements, the current Federal Reserve is accommodating the George W. Bush administration's fiscal expansion, and in particular its tax cuts. This will tend to push the dollar down as well.

These fiscal factors should not be oversold as determinants of exchange rates in the near to medium term. Chinn and Frankel (2003) establish that US interest rates still have a significant effect on eurozone interest rates, without evidence of a complementary influence in the other direction; the US current account deficits require some amount of dollar depreciation to be brought back to sustainability (see Bergsten and Williamson 2003), whatever happens on the fiscal front from here; a lack of savings resulting from fiscal excess is a far greater problem in the United States than in the eurozone. Accordingly, all the fiscal policy factors, even taken solely on their own terms, seem to point over the next few years to a stronger euro versus the dollar, despite the major eurozone economies ignoring the SGP.

14. There is clear evidence of a meaningful but not huge crowding-out effect of budget deficits in the United States, despite the forward-looking markets present. See the recent convergence of empirical results in Engen and Hubbard (2004), Gale and Orszag (2004), and Laubach (2003).

15. However, that has improved significantly since the adoption of the euro, as is documented in the contributions to this volume by the members of the panel on financial markets and by Bernanke.

Are Fiscal Policy Rules Ever-Binding?

The Stability and Growth Pact is widely and properly seen as a use of rules-based fiscal policy.[16] Although macroeconomic policy rules were once primarily the province of monetary policy, such measures as the SGP, the balanced-budget rules in the United States, and the adoption of PAYGO by Congress in the 1990s have brought attention to the use of such rules in fiscal policy as well. This is part of the more general European thrust since the Single European Act toward treating economic problems in the European Union as matters of institutional design, with an emphasis on the creation of "binding commitments" on governments to adopt "time-consistent" policies (see Posen 1998a). Essentially, the idea is that while elected politicians have short time horizons and high discount rates, given their electoral incentives, the economy as a whole is better off if the politicians can be constrained from acting on those short-term incentives. Budgetary rules like the SGP are meant to keep politicians from spending too much or taxing too little in the hopes of immediate gains.

Ultimately, for such fiscal rules to work, there either must be a benefit from adherence to the rules that shows up sufficiently strongly and credibly for some groups in society to insist on enforcing the rules, or the rules must themselves be enforced by threats and if necessary punishments from an outside authority. The declared existence of a rule itself does not become self-enforcing, whatever the claims about reputational effects, if the incentives are not present. Bond markets alone cannot be the enforcement mechanism of the rules, for if those markets' sanctions, such as increases in interest rates in response to budgetary laxity, were sufficiently scary to the governments, there would be no need for the rule in the first place.

As we have seen, the SGP fails on both counts to be a viable fiscal rule: The unlikely benefits of expansionary consolidation in the eurozone context are not credible; whereas the very real benefits for large, less open eurozone members to use countercyclical policy to offset the loss of monetary autonomy are credible. The European Commission (EC) does not have sufficient authority to impose punishments on eurozone member states, and the member states have no interest in punishing themselves. This would explain why, as shown above, the SGP ultimately made no significant difference to the fiscal behavior of the eurozone's major member economies.

This outcome is not peculiar to the SGP, however, or an indication that careful tweaking of the SGP's rules and design would change that outcome. In general, fiscal rules that seem to work are more often indicators that a will to pursue fiscal consolidation exists in a powerful political coalition than that are causal factors of consolidation in and of themselves.

16. See the treatments of the SGP in Brueck and Zwiener (2004), Daban Sanchez et al. (2003), and Sapir et al. (2003) in this explicit framework of "rules-based fiscal policy."

Take the example of PAYGO rules, discussed in Frankel and Orszag (2002). This constituted a useful rhetorical device and means of coordination between the president and Congress over budget issues, once the president and a working majority in Congress agreed that they wanted deficit reduction—but PAYGO was also tossed aside when changing circumstances (and a changed president and Congress) led to less desire for deficit reduction. Though the rule did not leave the books immediately, when the desire for fiscal rectitude waned, tactics to get around PAYGO emerged, such as the "tax expenditures" noted disapprovingly in Rubin (2002), and then PAYGO itself receded.

Two senior veterans of the US budget process, Rudolph Penner and Eugene Steuerle (2004), persuasively make the case for this interpretation of budget rules as an aid when the will is there, but not as an independent causal factor. Looking at the longer view of US budgetary history, Dixit (1996, 121) argues in a similar spirit:

> But the transaction-cost view of the political process points to a need to look deeper and to identify the true underlying political problems, of which the [fiscal] procedures are merely symptoms. Why were the [budget deficit] problems allowed to occur, and why did they last so long? The answer must be that the currently dominant forces in the political process wanted just those outcomes and quite deliberately installed or persevered with those procedures.

Dixit associates the rise in US government spending in the 1870s, 1930s, and 1970s, and the enabling institutional changes in budgeting procedures, with political demands for the expansion of government, and the reversions back to centralized appropriations procedures (more conducive to budgetary constraint) as reflecting periods when the political consensus emphasized fiscal restraint. From a practitioner's viewpoint, Penner and Steuerle (2004) make much the same interpretation of the rise and fall of budget rules and of surpluses, with the desire for the latter in the United States from the mid-1980s to present. Putting it graphically, one may reach for a blanket in bed when one wants to be warmer, and the blanket does help one stay warm, but it will be thrown off whenever one gets too hot—the blanket cannot force the sleeper into staying at the temperature the blanket allows.[17] To extend the metaphor into the current eurozone context, the SGP may be the ECB's and EC's security blanket for fiscal developments, but as with Linus's blanket in *Peanuts*, its only service may be as a psychological comfort, not as a source of security itself.

17. Analogous cases can be drawn from monetary policy. Central bank independence can be seen as evidence of a desire by a powerful political coalition to keep inflation down, and as an instrument in that pursuit, rather than as a cause of low inflation itself (Posen 1993, 1995). As McCallum (1997) and Blinder (1998) point out, central banks appear to have chosen just not to play the time-inconsistent inflationary game, given the ease with which the "inflation bias" disappeared. See Posen (1998a) for a general discussion of whether institutions make better policy and of this approach to political economy.

Without Rubinesque Effects, What Should We Expect from the Euro?

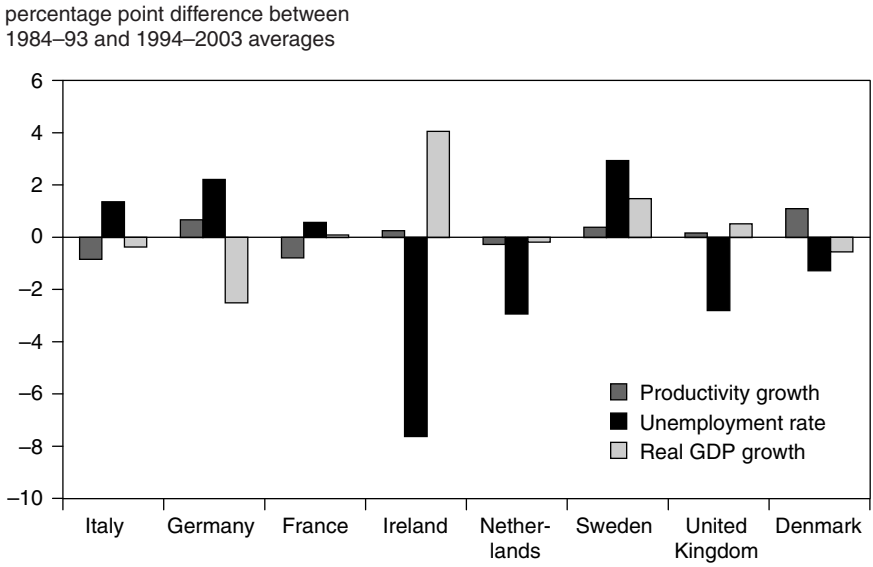
The Stability and Growth Pact apparently has a lot of difficulties, with its design, with its enforcement, and with its credibility, particularly in light of its repeated violation by France and Germany, and the inability of the EC to enforce it over the objections of the member states. As was assessed above, the SGP had no impact on the countercyclical fiscal behavior, or on the long-term term trend of deficits and debt, of the eurozone members—with the exception of little Portugal, the one member state to be sanctioned under the SGP for violating budgetary guidelines. It is important, however, that this appears not to be the result of the SGP's design or implementation. Rather, as was discussed above, the violations of the SGP by the larger eurozone economies are a rational if not optimal response by European policymakers to two factors: first, the absence of direct benefits in the form of expansionary consolidations, given the structure of the eurozone economies; and second, the evidence of direct benefits for larger, less open eurozone economies from using countercyclical fiscal policies to offset the asymmetries of eurozone-wide monetary policy.

This should not erode the relative worth of the euro on international markets, as argued above, in part because the relative predominance of crowding-out versus Rubinesque effects should mean that fiscal expansion in the eurozone should drive up interest rates and the euro exchange rate. It also must be noted that the failure to live up to the SGP does not represent fiscal indiscipline on the scale of that practiced by the United States in the 2000s. Nor should the failure of the eurozone governments and their leading politicians to adhere to the strictures of the SGP be viewed as a unique shortfall of the eurozone membership. It was pointed out above that even in the United States, fiscal rules have largely been endogenous responses to the changing political coalitions for and against budgetary restraint, and there is a good general reason to be suspicious of the independent efficacy of fiscal policy rules in any context. So perhaps the SGP not only fails but also largely fails to matter, as long as the visible credibility gap between the SGP's strictures and the member states' policies is closed.[18]

Yet there remains at least one major policy concern, not so much with the SGP itself, but emerging from one of the reasons why the SGP did not bind. If Rubinomics has not worked and will not work in the eurozone, then one of the major and often-cited motivations for eurozone member-

18. Blanchard and Giavazzi (2004); Fatas et al. (2003); Gros, Mayer, and Ubide (2003); Hallerberg, Ubide, and Walton (2004); and Sapir et al. (2003)—among others—make sensible proposals for technocratic fixes of the SGP to allow for more countercyclical policy, i.e., getting the SGP to better conform to the underlying economic incentives and actual behavior, as well as shifting its focus to longer-term sustainability (with more dubious prospects).

Figure 6.8 Economic performance before and after the Maastricht Treaty for five eurozone members, 1984–93 compared with 1994–2003



Source: Computed from Organization for Economic Cooperation and Development, *Economic Outlook* data.

ship goes away.[19] Numerous eurozone member countries, Belgium and Italy prominent among them, joined the zone in part because of the "binding oneself" logic of Giavazzi and Pagano (1990) and the Italian Political Economy school that followed—if the commitment to the zone forced fiscal discipline upon these countries, they should have experienced a decline in interest rates, a boom in investment, a surge in productivity growth, and ultimately an improvement in GDP growth and reduction in unemployment. Any growth forgone in the process of consolidating budgets to meet the Maastricht Treaty's criteria during the run-up to eurozone membership would be more than compensated for by the credible ongoing improvement in fiscal position, and the resulting Rubinesque virtuous cycle, according to this theory.

Unfortunately, things have not worked out this way. Figure 6.8 compares the economic performance before and after Maastricht for five eurozone members and the three non-member EU nations. The bars compare

19. Of course, there were and are many other motivations for eurozone membership beyond this one, such as France's desire to have more say over European monetary policy than leaving it to Bundesbank control, and Germany's desire to advance European unification and the acceptance of enlargement to the east.

the change in average annual productivity growth, unemployment, and GDP growth rates between the periods 1984–93 and 1994–2003.[20] In 1994, the Maastricht Treaty was signed, including the budget deficit and public debt targets that gave birth to the SGP. This two-period comparison should then give some idea of whether economic performance improved markedly once expectations kicked in for the eurozone, and also for the credible commitment to fiscal consolidation.[21] Such an exercise can be no more than indicative, given the number of factors that feed into overall macroeconomic performance, but it does give some measurement of the positive impact, if any, of fiscal consolidation and eurozone membership.

The record is not reassuring. Italy, which should have had the greatest benefits from getting on a path to fiscal rectitude, saw its productivity growth and real GDP growth decline slightly, and unemployment rise, after Maastricht. The other four eurozone members had mixed records, with Germany suffering on all three criteria, and only Ireland—which completed its expansionary consolidation itself in the late 1980s, well in advance of even discussing the Maastricht Treaty—benefiting on all three counts. Meanwhile, the three non–eurozone EU members (Denmark, Sweden, and the United Kingdom) all improved on at least two of the three measures during the same period versus pre-Maastricht days.

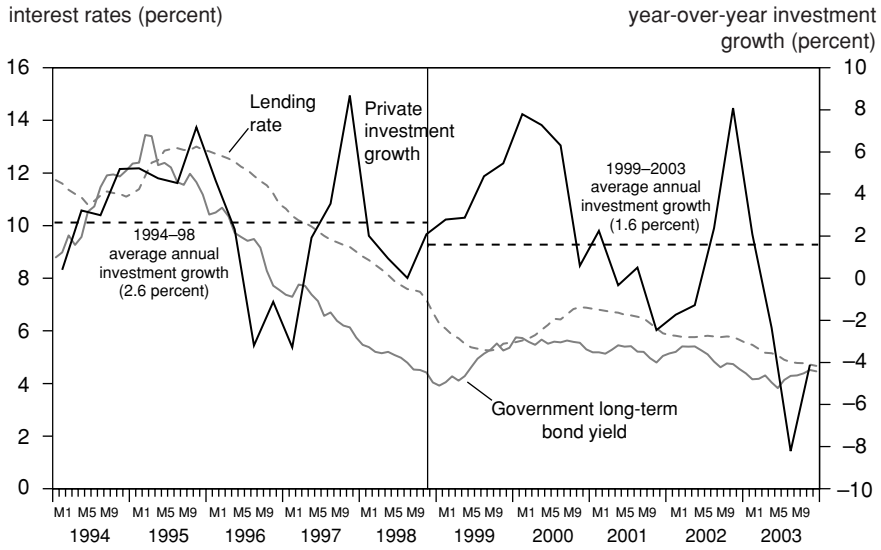
The Italian case merits greater scrutiny, because it should have been the poster child for the benefits of fiscal consolidation through eurozone membership. If ever there was an exogenous interest rate decline on public debt that was likely to be sustained, it was the one Italy enjoyed upon admission to the eurozone. Whether because entry raised the prospect of free riding by Italy on Germany's credit rating, or of greater discipline on Italian fiscal policymakers by tying their hands (the idea that motivated Italian elites' advocacy of the euro from the start), Italy was suddenly able to issue debt at a much lower interest rate. Of course, its very high initial debt/GDP level also made it a candidate for a Rubinesque virtuous cycle, not least because debt-service payments were a nontrivial part of GDP and the government budget, and part of that debt was foreign denominated.

Yet Italy's experience since getting serious about meeting the Maastricht Treaty's fiscal criteria in 1997 and joining the eurozone in 1999 very well illustrates the channels blocking any consolidation from becoming expansionary, at least in the medium term. Figure 6.9 presents the course of interest rates and private fixed investment in Italy during the decade since Maastricht. In accord with what one would expect, Italian govern-

20. The 10-year averages should smooth out the effects of business cycles, though obviously there were one-time shocks, such as German reunification and the exit of Italy from the Exchange Rate Mechanism.

21. One could also split the time sample at the start of 1999, with the launch of the euro. That would, however, not only ignore any beneficial expectation effects for consolidating countries, it would also shorten the sample to just five years, including a global recession.

Figure 6.9 Italian interest rates and investment, 1994–2003

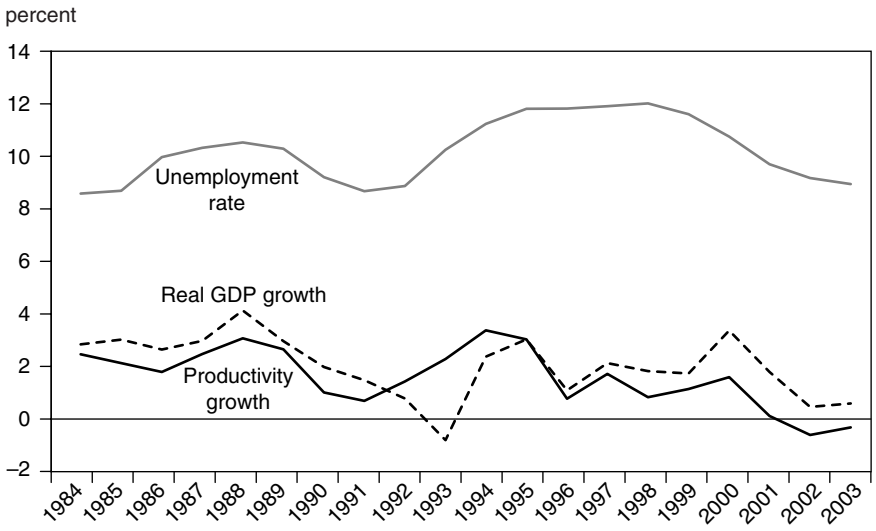


Sources: IMF, *International Financial Statistics,* September 2004, and Organization for Economic Cooperation and Development, *Economic Outlook 75.*

ment bond yields and the average private-sector lending rate declined from the time of the Maastricht Treaty, and they have remained low since the entry of Italy into the eurozone at the time of the euro's launch in January 1999. This came both through the importing of monetary credibility (i.e., the removal of exchange rate and inflation risks) and the deepening integration of eurozone capital markets. No boom in investment, growth, or productivity has ensued, however.

In fact, in accord with the general discussion above, private-sector investment does not seem to have responded to the drop in interest rates, which grew by an annual average of 2.6 percent in the period 1994–98 versus 1.6 percent in 1999–2003. The channels of expansionary consolidation—in terms of translating any interest rate and investment moves into productivity and employment gains—also appear to have been blocked in Italy, consistent with the view stated above (and the spirit of Baily and Kirkegaard 2004). Figure 6.10 shows the limited decline and then plateauing of the Italian unemployment rate, and the slight downward trend of both GDP and productivity growth in Italy during the past 20 years, irrespective of Maastricht and eurozone membership. As shown in figure 6.4 above, the ratio of Italy's gross debt to GDP only fell from a high of 134 to 117 percent, and has since plateaued, despite the marked decline in interest rates reducing outlays for debt service, a lot of one-time asset sales and privatizations (see the 1997 spike of positive change in government balance shown in figure 6.3), and the existence of the SGP. Real GDP growth declined on average in the 1990s after

Figure 6.10 Italian macroeconomic performance, 1984–2003



Source: Organization for Economic Cooperation and Development, *Economic Outlook 74*.

the short-term boost from adjusting the Exchange Rate Mechanism peg in 1992–93, again despite the fact that Italy had more to gain from the credibility bonus of eurozone membership than perhaps any other economy.

This is not to say that Italy or any other EU member economy would have been better off staying out of the eurozone. The point is the positive empirical assessment of whether the Banca d'Italia's and other Italian economic elites' strategy of using euro entry and membership as a means to fiscal reform and improved performance worked. Unless controlling more carefully for the business cycle would radically change these longer-term averages, all indications are that the binding-the-hands policy approach did not work.[22] It was arguably a sensible strategy ex ante, as was the theory of expansionary consolidation in Europe, but upon more practical examination and with the benefit of subsequent data, it is clear that it did not work out ex post.

Thus, we are left with even less hope than before that the creation of the euro, though a major political and monetary accomplishment, will in and of itself lead to improved growth and employment prospects in Europe.[23]

22. Such a controlled assessment of performance would also have to take into account the fact that Italy entered the eurozone with an undervalued currency, particularly against the deutsche mark, given Italy's exit from the Exchange Rate Mechanism and depreciated reentry in the mid-1990s, which should have led to faster growth and lower unemployment, at least for some initial years.

23. This disappointing outcome was predicted in Posen (1999).

The hard work of structural reform beyond bond markets remains independent of the euro's existence—and the relative value of using countercyclical fiscal policy in the eurozone versus pursuing fiscal consolidation in hard times has if anything increased for eurozone members. The worth of the SGP itself and its importance to the euro project, however, come further into question.

References

Baily, Martin, and Jakob Kirkegaard. 2004. *Transforming the European Economy*. Washington: Institute for International Economics.

Ball, Laurence, and N. Gregory Mankiw. 1995. What Do Budget Deficits Do? In *Budget Deficits and Debt: Issues and Options*. Volume on August 13–September 2 Symposium. Kansas City: Federal Reserve Bank of Kansas City.

Bayoumi, Tamim, and Barry Eichengreen. 1992. Restraining Yourself: The Implications of Fiscal Rules for Economic Stabilization. *IMF Staff Papers* 42, no. 1 (March): 32–48.

Bergmar, U. Michael, and Michael Hutchison. 1999. Economic Expansions and Fiscal Contractions: International Evidence and the 1982 Danish Stabilization. In *Macroeconomic Perspectives on the Danish Economy*, ed. Torben Andersen, Sven Hougaard Jensen, and Ole Risager. New York: Macmillan.

Bergsten, C. Fred, and John Williamson. 2003. *Dollar Overvaluation and the World Economy*. IIE Special Report 16. Washington: Institute for International Economics.

Blanchard, Olivier J., and Francesco Giavazzi. 2004. Improving the SGP Through a Proper Accounting of Public Investment. CEPR Discussion Paper 4220 (February). London: Centre for Economic Policy Research.

Blinder, Alan. 1998. *Central Banking in Theory and Practice*. Cambridge, MA: MIT Press.

Broda, Christian, and David Weinstein. 2004. Happy News from the Dismal Science: Reassessing Japanese Fiscal Policy and Sustainability. Columbia University, New York. Photocopy (August).

Brueck, Tilman, and Rudolf Zwiener. 2004. Fiscal Policy Rules for Stabilization and Growth: A Simulation Analysis of Deficit and Expenditure Targets in a Monetary Union. Deutsches Institut für Wirtschaftsforschung, Berlin. Photocopy (March).

Buti, Marco, and Paul van den Noord. 2003. Fiscal Policy in EMU: Rules, Discretion and Political Incentives. Paper presented at a conference on rethinking economic and social policies, Madrid (November).

Cheung, Yin-Wang, Menzie Chinn, and Antonio Garcia Pascual. 2002. *Empirical Exchange Rate Models of the Nineties: Are Any Fit to Survive?* NBER Working Paper 9393. Cambridge, MA: National Bureau of Economic Research.

Chinn, Menzie. 1997. *Sectoral Productivity, Government Spending, and Real Exchange Rates: Empirical Evidence for OECD Countries*. NBER Working Paper 6017. Cambridge, MA: National Bureau of Economic Research.

Chinn, Menzie, and Jeffrey Frankel. 2003. The Euro Area and World Interest Rates. Paper presented at a conference on the euro area as an economic entity sponsored by the Centre for Economic Policy Research, Frankfurt (September).

Daban Sanchez, Maria T., Enrica Detragiache, Gabriel Di Bella, Gian M. Milesi-Ferretti, and Steven A. Symansky. 2003. *Rules-Based Fiscal Policy in France, Germany, Italy, and Spain*. IMF Occasional Paper 225. Washington: International Monetary Fund.

Dixit, Avinash. 1996. *The Making of Economic Policy: A Transaction-Cost Politics Perspective*. Cambridge, MA: MIT Press.

Engen, Eric, and R. Glenn Hubbard. 2004. *Federal Government Debts and Interest Rates*. NBER Working Paper 10681. Cambridge, MA: National Bureau of Economic Research.
European Commission. 2003. Can Fiscal Consolidations in EMU Be Expansionary? In *Public Finances in EMU 2004: Part IV, European Economy 2004,* no. 3, ed. Directorate General for Economic and Financial Affairs. Brussels: European Commission.
Fatas, Antonio, Andrew Hughes Hallett, Anne Siebert, Rolf Strauch, and Juergen von Hagen. 2003. Stability and Growth in Europe: Towards a Better Pact. *Monitoring European Integration* 13. London: Centre for Economic Policy Research.
Fischer, Stanley. 2001. Comments on "The Great Recession." In *Brookings Papers on Economic Activity.* Washington: Brookings Institution Press.
Frankel, Jeffrey, and Peter Orszag, eds. 2002. *American Economic Policy in the 1990s*. Cambridge, MA: MIT Press.
Gale, William, and Peter Orszag. 2004. Budget Deficits, National Saving, and Interest Rates. Brookings Institution, Washington. Photocopy (September).
Gali, Jordi, and Roberto Perotti. 2003. *Fiscal Policy and Monetary Integration in Europe*. NBER Working Paper 9773. Cambridge, MA: National Bureau of Economic Research.
Giavazzi, Francesco, and Marco Pagano. 1990. Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries. In *NBER Macroeconomics Annual 1990*, ed. Olivier Blanchard and Stanley Fischer. Cambridge, MA: MIT Press.
Greenspan, Alan. 1995. General Discussion: What Do Budget Deficits Do? In *Budget Deficits and Debt: Issues and Options*. Volume on August 13–September 2 Symposium. Kansas City Federal Reserve Bank of Kansas City.
Gros, Daniel, Thomas Mayer, and Angel Ubide. 2003. *The Nine Lives of the Stability Pact: Rapid Reaction Report of the CEPS Macroeconomic Policy Group*. Brussels: Centre for European Policy Studies.
Hallerberg, Mark, Angel Ubide, and David Walton. 2004. How Should the Stability and Growth Pact be Reformed? *Finance & Development*, June, 26–28.
Hubbard, R. Glenn. 2004. Remarks on the Panel on Policy Coordination. In *Stabilizing the Economy: Why and How*, ed. Adam Posen and Benn Steil. Oxford: Blackwell.
Issing, Otmar. 2003. Standpunkte/Stabiles Geld und solide öffentliche Finanzen gehören zusammen/Durch die gröbliche Verletzung des Stabilitätspaktes steht die Glaubwürdigkeit der europäischen Institutionen insgesamt auf dem Spiel. *Frankfurter Allegemeine Zeitung*, December 6, 12.
Kuttner, Kenneth, and Adam Posen. 2002. Fiscal Policy Effectiveness in Japan. *Journal of the Japanese and International Economies* 16: 536–58.
Laubach, Thomas. 2003. New Evidence on the Interest Rate Effects of Budget Deficits and Debt. Board of Governors of the Federal Reserve System, Washington. Photocopy (May).
Masson, Paul, and Michael Mussa. 1995. Long-Term Tendencies in Budget Deficits and Debt. In *Budget Deficits and Debt: Issues and Options*. Volume on August 13–September 2 Symposium. Kansas City Federal Reserve Bank of Kansas City.
McCallum, Bennett. 1997. Critical Issues Concerning Central Bank Independence. *Journal of Monetary Economics* 39, no. 1: 99–112.
McNamara, Kathleen. 2003. Globalization, Insights, and Convergence: Fiscal Adjustment in Europe. In *Governance in a Global Economy: Political Authority in Transition*, ed. Miles Kahler and David Lake. Princeton, NJ: Princeton University Press.
Muehleisen, Martin, and Christopher Towe, eds. 2004. *U.S. Fiscal Policies and Priorities for Long-Run Sustainability*. IMF Occasional Paper 227. Washington: International Monetary Fund.
Penner, Rudolph, and Eugene Steuerle. 2004. Budget Rules. Urban Institute, Washington. Photocopy (May).
Peterson, Peter. 1999. *Gray Dawn: How the Coming Age Wage Will Transform America and the World*. New York: Random House.

Posen, Adam. 1993. Why Central Bank Independence Does Not Cause Low Inflation: There Is No Institutional Fix for Politics. In *Finance and the International Economy* 7, ed. Richard O'Brien. Oxford: Oxford University Press.
Posen, Adam. 1995. Declarations Are Not Enough: Financial Sector Sources of Central Bank Independence. In *NBER Macroeconomics Annual 1995*, ed. Ben Bernanke and Julio Rotemberg. Cambridge, MA: MIT Press.
Posen, Adam. 1998a. Do Better Institutions Make Better Policy? *International Finance* 1, no. 1: 173–205.
Posen, Adam. 1998b. *Restoring Japan's Economic Growth*. Washington: Institute for International Economics.
Posen, Adam. 1999. Why EMU Is Irrelevant for the German Economy. Public lecture, Frankfurter Volkswirtschaftliches Kolloquium, Frankfurt (May).
Posen, Adam. 2003. *Is Germany Turning Japanese?* IIE Working Paper 03-2. Washington: Institute for International Economics.
Rubin, Robert. 2002. Comments on Elmendorf et al. In *American Economic Policy in the 1990s*, ed. Jeffrey Frankel and Peter Orszag. Cambridge, MA: MIT Press.
Sapir, Andre, Philippe Aghion, Giuseppe Bertola, Martin Hellwig, Jean Pisani-Ferry, Dariusz Rosati, Jose Vinals, and Helen Wallace, eds. 2003. *An Agenda for a Growing Europe: Making the EU Economic System Deliver*. Oxford: Oxford University Press.
Tanzi, Vito. 2003. Role and Future of the Stability and Growth Pact. Cato Institute, Washington. Photocopy (November).

Comment

JÜRGEN KRÖGER

I share Adam Posen's view that the mere observation that in many cases fiscal consolidation has coincided with high economic growth does not imply causality. He refers to monetary policy, which can support this desirable combination. A broader perspective would also include exchange rate movements, which if appropriately managed may support fiscal adjustment, as witnessed for example by the Italian fiscal consolidation path after 1995. And in many cases, fiscal consolidation was supported by a market-driven monetary stimulus in the run-up to Economic and Monetary Union (EMU).

But a comparison of US and European fiscal policy effectiveness is difficult, for at least two reasons. First, because the public-sector share in GDP is much larger in Europe than in the United States, the automatic stabilizers smooth the cyclical volatility to a greater extent than in the United States. Second, given the greater rigidities in most EU countries, the output costs of reducing inflation are higher. In Europe, each cycle has tended to raise the nonaccelerating inflation rate of unemployment. Therefore, given the lags involved, discretionary fiscal policy may have longer-term adverse effects on growth and employment.

It is useful, however, to try to assess the fiscal policy framework of EMU. Where do we stand after five years? I offer 10 observations. First, my old undergraduate textbooks on fiscal policy distinguished three functions:

Jürgen Kröger has been the director for economic studies and research at the European Commission in Brussels since 2002.

- allocation of resources toward public spending;
- stabilization of output in the presence of demand shocks; and
- redistribution of income (or wealth), according to social (national) preferences.

Membership in the EMU potentially has a profound influence on all three functions, depending among other things on the institutional arrangements.

Privatization and liberalization, the development of the single internal market, and the integration of the EU economies into a global market economy have had an impact on the optimal size of the state and the optimal degree of redistribution. There is a general recognition in the European Union that from an economic point of view both of these probably lie below the present level, and that there are potential gains to be made by all the EU states moving together in that direction.

However, it is also the case that national preferences differ, and that coordination takes the form of broad orientations and learning from best practices, and is therefore not very binding.

I concentrate my remarks here on the stabilization aspect of fiscal policy, because this is where the existing rules-based framework has inspired discussion.

Second, the experience of EU members has shown that the policy of countercyclical activism has often resulted in an increase in the size of the state, persistently higher deficits, and an accumulation of public debt. In some cases, this has resulted in a threat to fiscal sustainability. The consolidation of public budgets, including the gradual reduction of debt levels, has become a policy priority in Europe. In the run-up to monetary union, the Maastricht criteria clearly helped to make fiscal discipline politically more acceptable and substantially accelerated the process of budgetary consolidation before the introduction of the euro. The question was, however, would fiscal discipline prevail once entry into the EMU was accomplished?

Third, it is difficult to say a priori whether a country's incentives to run excessive deficits would increase or decrease after joining a monetary union such as the EMU. The risk premium on interest rates over some benchmark rates that a member state has to face for its debt is likely to be significantly lower in the EMU than before it.

This is inviting moral hazard. The currency risk disappears—by definition—completely. The default risk is also likely to decrease, because of intra-EU solidarity. In other words, the "non-bail-out clause" is not (fully) credible. At least, this seems to be the perception of markets. Financial markets have up to now only partly distinguished between fiscally good and bad performers. However, the interest spreads vis-à-vis Germany have been reduced markedly and even become negative in some cases (e.g., Finland).

On the optimistic side, it has been argued that the loss of the option to finance public deficits by printing money would impose a hardened budget constraint on countries. The experience of five years of EMU suggests that the discipline imposed by financial markets has been reduced while the "hardening of the budget constraint"—the inability to finance deficits by printing money—plays only a minor role, as long as deficits remain sustainable.

Fourth, why is it in the European Community's interest to have binding deficit rules? The most important argument in favor of common deficit rules is based on the risk to the sound functioning of EMU, which would emerge if public debt in some (even small) member states became too high for their public finances to remain sustainable. Unsustainable public finances would likely impose hard choices on the European Central Bank's monetary policy, possibly threatening its prime objective of price stability.

Obviously, debt sustainability is a long-term concept, and it is easier to reduce the debt/GDP ratio for a country with high average potential growth like Finland (4 percent) than for a low-growth country like Germany (1.8 percent). Therefore, an evaluation of debt sustainability cannot be made on the basis of today's debt ratio alone. The dependence of fiscal debt sustainability on trend growth is one criticism that some observers put forward as an argument against a simple deficit benchmark.

In addition, the risk premium required by financial markets on euro areawide interest rates may depend on credible fiscal rules. From the Community's viewpoint, binding deficit rules appear justified because of the risk of free riding and the potentially adverse effects on real interest rates. Free riding—a moral hazard problem—is typically more tempting to smaller countries, because their fiscal expansion will likely have only a minor effect on areawide interest rates (including the European Central Bank's policy rate). The adverse effect on areawide interest rates—a negative externality—will, conversely, be stronger after a fiscal expansion in larger countries, or in a group of countries.

Fifth, another question discussed at the time the fiscal rules for EMU were negotiated was: How binding, or how flexible, should such rules be? (Or how can strict rules be applied flexibly?) We are currently witnessing a renewed debate on this issue. Strictly binding rules clearly have enforcement problems; there are strong incentives to circumvent them by moving items off budget, using the flexibility of accounting rules, one-off measures, and the like.

The empirical evidence taken from existing monetary unions (e.g., the United States and its constituent states) was not very encouraging. And in the run-up to EMU, the European Union has gained some experience of its own. The European Commission has made progress in limiting these kinds of problems through surveillance, clarifying and tightening of accounting rules, and other means. Unfortunately, the Community rules are

currently facing enforcement problems, which are in many ways more fundamental and more difficult to tackle.

Sixth, the four main shortcomings and weaknesses of the Stability and Growth Pact (SGP), as they appear to us, can be summarized as follows. The first is that the SGP appears static. In particular, the definition of medium-term balance should take account of country-specific characteristics. A country with a high rate of growth can sustain a somewhat higher deficit than one with a low rate of potential growth. Also, the initial debt level has an impact on the desired medium-term deficit. Furthermore, countries differ in terms of the size of the automatic stabilizers. Countries in which the automatic stabilizers are large (e.g., the Scandinavian countries) should seek to have a medium-sized surplus so as not to breach the 3 percent ceiling during an economic downturn. Finally, medium-term sustainability also depends on factors like population aging, which should be taken into consideration in defining the fiscal policy strategy.

The second shortcoming is that the SGP has worked asymmetrically over the cycle. In periods of high economic growth, fiscal discipline has been insufficient to preserve the room for maneuver to let the automatic stabilizers work during the downturn. Therefore, one condition for improving the SGP's workability must be stronger enforcement during times of high economic growth.

The third shortcoming is that the quality of public finances is an important factor in assessing a country's medium-term growth performance. The Broad Economic Policy Guidelines should put greater emphasis on growth-enhancing structures in public finance. And the fourth shortcoming is that the enforcement of commonly agreed-on rules has become more uncertain, which may have undermined the credibility and predictability of the European Union's policy framework.

Seventh, what is the way forward? It would seem that, given the current political climate, any decision about changes to the European Union's fiscal rules will have to wait until more legal certainty is established by the forthcoming European Court of Justice ruling on the SGP's implementation procedures. However, the court's ruling is primarily about interinstitutional responsibilities and procedures rather than about the economic rationale for the SGP.

In any case, changes to either the SGP or its interpretation would try to improve on the weaknesses described above. However, any change of the Maastricht Treaty in this area should be avoided. Let us consider several options for appropriate changes.

One option could be to introduce more flexibility into the definition of medium-term balance, taking into account the level of debt, growth performance, and special characteristics like population aging.

Another option, when applying the Maastricht Treaty procedures, should be envisioning compliance with both the reference values of 60 and 3 percent of GDP for the debt and the deficit, respectively, rather than focusing

unduly on deficit targets alone. A stronger focus on debt developments should reduce the current short-term bias shown by member states, thus increasing the incentive to lower high debt levels.

A third option that should be pursued is ambitious action in good times and prudent and symmetric-over-the-cycle behavior. The enforcement mechanisms (including early warnings) should be used promptly, with a view to preventing the 3 percent reference value from being breached.

In addition, the European Commission should be able to use its capacity for intensified surveillance. Past experience has shown that member states are unwilling to apply the rules of the SGP against each other. The authority of the institutions involved needs to be strengthened to permit a more flexible and nuanced interpretation of the rules. The Commission should therefore have greater independence in launching excessive deficit procedures.

Eighth, however, more flexible rules are difficult to implement. In particular, the principle of equal treatment of member states—a political necessity in Europe—makes it very hard in practice to take account of the subtle differences in the specific economic situation of each country. Differences in economic circumstances, such as the fiscal cost of German unification or the direct-deficit-reducing effects of interest rate convergence in the run-up to the euro in some other member states, represent a very variable environment in which fiscal consolidation has to take place. The principle of equal treatment, as it is implemented in practice, leaves very little room for discretion.

In addition, experience has shown that it is very hard to get agreement among all the member states on methodological issues. For example, it took years for the Community to agree on a common method for the measurement of output gaps. In the end, a fairly crude formula was found: the same form of the production function (Cobb-Douglas), the same inputs (aggregate capital stock, employment) filtered with the same method and parameters (Hodrik-Prescott). This necessarily excludes any additional information that is available for individual countries over and above the agreed-on data inputs. Therefore, no element of reasoned judgment is allowed, something for which the method is often criticized.

Ninth, conversely, a strong case can be made for the Commission to gain a more independent role in the enforcement process. The present arrangement has its weaknesses, as we have seen. The Commission is well placed to take a Community position, and it is independent of the political realities in individual member states. It is therefore in a unique position to advance good economics, even in a difficult political environment.

Tenth and finally, as we have learned from the optimum currency area literature, a monetary union should have either fully flexible markets, with complete price and wage flexibility, or a very high degree of factor—in particular labor—mobility. In the absence of a very high degree of flexibility, which is certainly the case in EMU, some degree of fiscal transfers

to compensate for the impact of asymmetric demand shocks might in principle be required, although the asymmetry of demand shocks may be greater within countries than between them.

However, the European Community's budget is certainly too small to serve this purpose, and it is not very well designed to do so. Other forms of automatic income transfer have been discussed, including a common areawide unemployment insurance scheme. However, there is little hope, in today's political climate, that rapid progress toward a bigger fiscal union will be made any time soon.

Comment

JEFFREY FRANKEL

American economists' skeptical predictions regarding the Economic and Monetary Union (EMU) were in some respects too pessimistic, in light of experience so far. But two predictions have turned out to be accurate. First, *a permanent 3 percent ceiling on deficits, without flexibility (e.g., for recessions) would not be fully enforceable*. The provision for monetary penalties against countries that violate the limits does not increase the credibility of enforcement; it may reduce it. At the same time, the continuing contradiction between word and deed undermines the credibility of other agreed-on aspects of the European unification project—for example, vis-à-vis the accession of the 10 new EU members.

Second, members of Euroland would suffer from occasional asymmetric shocks. In that light, *discretionary fiscal policy would become more, not less, necessary now that monetary independence has been lost*.

Adam Posen's chapter contains a number of very interesting findings. Perhaps his primary conclusion is that the Stability and Growth Pact (SGP) has not in fact limited countercyclical responses of fiscal policy among EMU members since 1999. That is in part due to the willingness to violate the limits of the SGP, especially on the part of the larger countries. He concludes that the countries that are smaller and have high ratios of trade to GDP have found the SGP less onerous, for several reasons. First, fiscal policy has less of an effect on the domestic economy

Jeffrey Frankel is a professor at Harvard University.

in a country where much spending leaks out: some of the increased spending, that would otherwise have shown up as purchases of domestic goods, instead goes into imports or other purchases of internationally tradable goods. Thus, these countries are giving up less when they give up some flexibility of fiscal policy.

Second, the larger countries—Germany, France, and Italy (and perhaps Spain should be added)—felt the loss of monetary autonomy more keenly, and they felt the need to compensate with active fiscal policy, whereas most of the smaller countries had already given up monetary autonomy to Frankfurt years ago and had come to terms with this change. Actually, Posen finds that even the smaller countries did not have a statistically significant decrease in countercyclicality in fiscal policy during the period 1999–2003, despite the SGP. But with so few observations, we may have to settle for point estimates rather than statistical significance. He finds that three of the larger countries—Germany, Spain, and Italy—actually show an *increase* in countercyclicality under EMU. This is consistent with the idea that they have relied more on the fiscal policy tool now that the monetary policy tool is gone.

Third, the larger countries can get away politically with breaking the rules in a way that the less powerful countries cannot. These are all important points, some of which are not widely recognized.

Is Europe Less Well Suited to Expansionary Consolidation than the United States?

The United States is even larger than the large European countries, and it has a correspondingly lower ratio of trade to GDP. If Posen's generalizations are correct, why, then, did the United States pursue and achieve fiscal discipline during the 1990s? That question can be broken down into two questions, one concerned with politics and the other with economics. The political question is: Why were tough fiscal measures—raising tax revenue and cutting the rate of growth of spending—taken in the United States? The economic question is: Why did the new fiscal policy apparently succeed in helping to raise the growth rate—the "expansionary consolidation" of Giavazzi and Pagano (1990)?

These two questions are more closely linked than is at first apparent. If fiscal policy is defined in terms of tax revenue or the budget balance, then of course an important component of the improvement was the result of rapid growth; in other words, causality goes in both directions. But assume that we limit our definition of fiscal discipline to specific policy measures. An important reason why President Bill Clinton and Treasury Secretary Robert Rubin took the measures they did was that they believed it would help the economy. Given that this turned out to be right, one

does not need to say a lot more about the politics.[24] So the main question concerns economics: Why did Rubinomics work in the United States and not in Europe? Here, my view diverges a bit from Posen's. And so it is to this question that I will devote most of my comments.

Posen's answer to the question posed in the title of his chapter is, essentially, "No, Rubinomics cannot work in Europe." He argues that the main channel of Rubinomics runs from fiscal consolidation to lower interest rates and thereby to higher investment, and that this channel is less operational in continental Europe. One reason he gives is that the United States, unlike Europe, is a large net debtor internationally, so there can be a large default premium built into the interest rate, which fiscal consolidation then works to reduce.

I see two problems with this argument. First, high domestic debt (and unfunded future pension liabilities), which the Europeans have, can in theory drive up the default premium as easily as high foreign debt. Second, the United States—despite its debts, both domestic and foreign—has never (as yet) had to pay a perceptible default premium on its debt. Even when its fiscal policies have been at their most irresponsible, the dollar has retained its status as premier reserve currency, and the US Treasury bill market has retained its extra attractiveness to international investors.

Perhaps a better argument for why the interest rate channel does not work in continental Europe is that the money markets and securities markets are less well developed and less flexible there. Interest rates are traditionally considered to be less responsive to a given reduction in national saving, and investment is not as adversely responsive to a given increase in interest rates.[25] In other words, the *LM* curve is flatter and/or the *IS* curve is steeper in Europe, so crowding out is less of an issue. But this argument will not necessarily get you there either. The national saving identity must hold one way or another. There are other channels of crowding out besides the interest rate channel that has long been emphasized by the macroeconomics textbooks, including stock markets and the exchange rate. In the case of continental Europe, there may be channels that work through the quantity of credit extended to firms—without showing up in interest rates or other price measures. For instance, if banks are lending to Airbus, then they are not lending to private start-up companies.

24. No less interesting is the story of how, after the 1992 election, the Rubin view came to win out over the priorities of other Clinton advisers—Clinton (2004), Rubin (2002, 131), and Woodward (1994). The most effective argument was that the bond market would react negatively, if investors heard that all the spending programs contemplated during the campaign were to be carried out in full.

25. Posen's example of Italy is particularly interesting here. As he points out, some combination of EMU and fiscal discipline did succeed in sharply reducing real interest rates in Italy, and yet there was no investment boom.

Table 6.2 Determinants of long-term interest rates, United States and Europe, 1988–2002

Determinant	United States	Germany	France	Italy	Spain	United Kingdom
Constant	–0.001	–0.122***	–0.022	–0.081	–0.043*	–0.034
	(0.008)	(0.038)	(0.027)	(0.041)	(0.023)	(0.030)
Inflation	1.00	1.00	1.00	1.00	1.00	1.00
Debt ratio	0.060**	0.182***	0.027	0.109	0.031	0.067
	(0.019)	(0.047)	(0.040)	(0.062)	(0.051)	(0.044)
Expected change in debt ratio	0.144**	0.112***	0.177**	0.324**	0.289***	0.066
	(0.061)	(0.032)	(0.073)	(0.106)	(0.048)	(0.110)
Output gap	0.388**	0.608**	0.252	0.297	0.218	–0.316
	(0.174)	(0.219)	(0.202)	(0.484)	(0.223)	(0.324)
Foreign interest rate	0.096	1.529***	0.923***	0.390	1.204***	0.815**
	(0.122)	(0.327)	(0.241)	(0.446)	(0.145)	(0.348)
Number of observations	15	15	15	15	15	15
Adjusted R^2	0.32	0.51	0.82	0.77	0.82	0.55
DW	2.24	2.50	2.47	1.70	2.47	1.44

*, **, *** = indicates significance at the 10, 5, and 1 percent level.

Note: Ordinary least squares regression using annual data, in levels (Newey-West robust standard errors in parentheses). Percentage variables are defined in decimal form. DW is Durbin-Watson statistic.

Source: Chinn and Frankel (2003).

Furthermore, the generalization that the interest rate channel is not fully operational in continental Europe may no longer be true**.** Table 6.2, from Chinn and Frankel (2003), reports estimates of an equation for the determination of the long-term real interest rate in the United States and five European countries. The estimated effect of contemporaneous debt is stronger in Germany than in the United States, though weaker in the other four European countries. The more striking result is that the estimated effect of the *expected future* change in debt is statistically significant in all four large countries of the euro zone, and the effect is actually stronger than in the United States—in magnitude, significance, or both. This is important, because the possibility of expansionary consolidation lies in expected future deficits, not in contemporaneous deficits. Though in standard textbook theory contemporaneous deficits drive up short-term interest rates and lead to the crowding out of investment and other sectors, this effect can only partially offset the expansion in government spending and consumption. The net contemporaneous effect is expansionary. Only future deficits can be contractionary. (We look more at the two effects below.)

Three Regimes That Have Been Proposed to Achieve Fiscal Discipline

In any case, I do not accept the premise that expansionary fiscal consolidation is rendered possible by some structural feature in the United States that is absent in Europe. The most powerful pieces of evidence are the fiscal records of the 1980s and the 2000s. The fiscal consolidation of the 1990s was the exception, not the rule. By this I mean not just that the George W. Bush administration in 2001 launched an irresponsible fiscal expansion, which in many respects was modeled on that of the Ronald Reagan administration's first term in 1981. I mean also that there has not been an economic price paid in higher interest rates and slower growth, at least not yet.

In other words, as with the achievement of fiscal discipline in the 1990s, there is both an interesting political question (How have they been able to do this, politically?) and an interesting economic question (Why have financial markets not yet responded?). Although expansionary consolidation seemed to work, both politically and economically, in the United States in the 1990s, the converse approach, the return during the period 2001–04 of a "cut taxes and spend" philosophy, failed to have both the political and economic consequences that one would have predicted. This suggests that there was something different about US policy in the 1990s, more than that there is something permanently different about the United States.

I suggest that the key lies in the political economy regime that is adopted to achieve fiscal discipline. Everyone at least pays lip service to fiscal discipline, even when seeking to justify large deficits. The question is how it is achieved, in a world where there are always interest groups clamoring to receive benefits in the form of specific tax cuts and spending.

I see three categories of regimes that have been proposed as mechanisms for achieving fiscal discipline. The first is "Starve the Beast," the rationale that the Republicans gave to the regime that I call "cut taxes and spend," in the first Reagan term and the George W. Bush administration. (More precisely, in both cases, it is the rationale they began to give in the second or third year of these terms, after the clear failure of events to bear out their initial rationale—that reductions in tax rates would lead to so much economic growth that the budget would get better rather than worse.) Starve the Beast is the argument that large tax cuts, though they will create temporary deficits, will soon force cuts in spending because "Congress cannot spend money it does not have."

The second category of proposed mechanisms is "rigid rules." Two prominent examples are the balanced-budget amendment that was rejected in the United States (the proposal was part of the Contract with America in the Newt Gingrich revolution of 1994) and the SGP that was adopted in Europe.

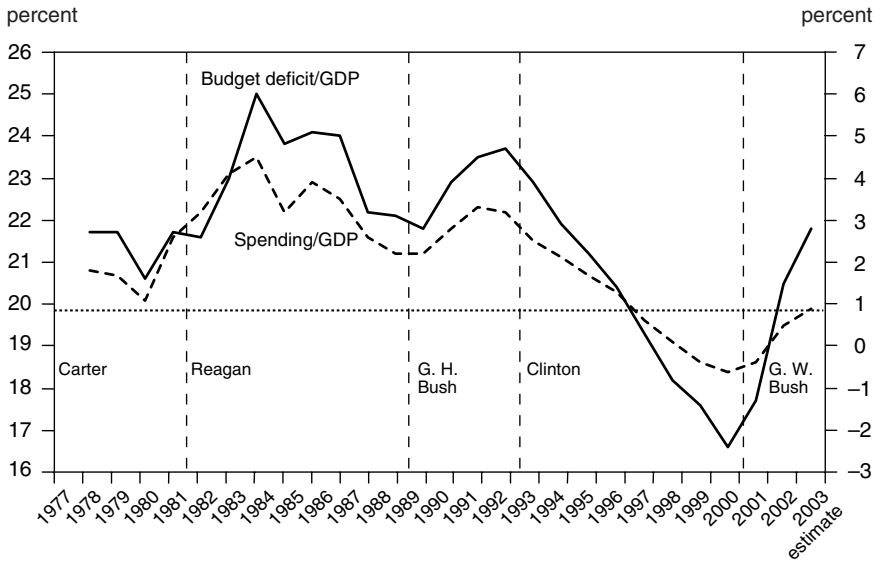
The third regime is the one that was actually in place in the United States in the 1990s, which I will call the "regime of Shared Sacrifice." This category of mechanisms includes laws and guidelines to facilitate fiscal discipline by spreading the pain relatively broadly. Three of the important mechanisms used in the 1990s were (1) caps on the rate of growth of discretionary spending (which were adopted in the Budget Enforcement Act of 1990 and extended by the Clinton administration in 1993); (2) "PAYGO" (the "Pay as you go" rule, also legislated in 1990 and 1993, which said that any member of Congress proposing a tax cut or entitlement spending increase had to show how to pay for it); and (3) the principle of preserving the new on-budget surplus, under the slogan "Save Social Security First" (proposed by Clinton in his State of the Union message in 1998, and accepted by both parties until George W. Bush assumed office in January 2001). My claim is that what was different about the 1990s in the United States is that the regime in effect, Shared Sacrifice, is one that works, whereas the others do not.

Let us begin with the rigid rules, and why they do not work. As everyone knows, any gain in credibility that is achieved through a rigid rule carries a loss in flexibility. With rigid monetary rules such as a currency board, for example, the government loses the ability to respond to recessions or overheating by mitigating moves in monetary policy. With rigid fiscal rules, such as a balanced-budget amendment, the government loses the ability to respond to such disturbances by mitigating moves in fiscal policy.

Less often appreciated is that commitments to ever more stringent rules eventually run into negative returns, even when the payoff is measured solely by credibility. This is especially true when the commitment is made by an elite that may not have democratically sought or received a sign-off from the people. Which is more credible: a statement by a central banker that he will resign if he misses a particular monetary target, or a statement that he will shoot himself? The latter commitment is less credible, precisely because it is a stronger statement than the first, and is too strong to be believable. The same is true of a balanced-budget amendment and the SGP. A severe and inflexible commitment not to step over a particular line with respect to the budget deficit carries such high costs that it is not credible in the first place. This is the underlying explanation for Posen's important finding that the SGP has in fact not reduced the fiscal activism in Euroland by even a little.

Let us consider, next, why Starve the Beast does not work. It is not literally true that a government cannot spend money it does not have. Governments do it all the time, and on a very large scale. (Only under a rigid balanced-budget rule would it be true, and that we have just considered.) The claim is that cutting taxes and creating budget deficits puts strong political pressure on the government to cut spending, because people do not like the deficits. But "strong pressure to cut spending" compared with

Figure 6.11 US federal budget deficit and spending, 1977–2003
(percent of GDP)



Source: US Office of Management and Budget data.

what? For the claim to be meaningful, it should be stronger pressure than under the alternative of the 1990s regime, the one I have called Shared Sacrifice.

In support of my claim that Starve the Beast is a sham, I offer four exhibits: figure 6.11, econometric citations, an a priori argument, and a fascinating fact. Figure 6.11 illustrates the US budget during the terms of the past five presidents. The first striking lesson is: When a Republican president comes in, the budget deficit takes off. It may sound surprising, but there it is. Ronald Reagan becomes president in 1981—and the budget deficit shoots up. George H.W. Bush takes office in 1989—and the same thing happens. George W. Bush arrives in 2001—the same. In between, during the Clinton administration, the budget deficit is eliminated and is replaced with a record surplus.

Now, you might think this pattern was entirely because of Republican tax cuts and Democratic tax increases. That is, you might think that if you fell for the line that the Republican Party is the party of small government. But the striking pattern in the budget is not entirely, or even primarily, due to taxes. Figure 6.11 also shows federal spending, by presidential term. When a Republican becomes president, spending increases sharply. It was true when Reagan became president, when George H. W. Bush became president, and when George W. Bush became president—in 1981, 1989, and 2001. The deficit-spending correlation casts doubt on the claim

that their tax cuts were part of a plan to reduce the rate of growth of spending.

Niskanen (2002) and Gale and Kelly (2004) have conducted more formal econometric tests, and they reject the Starve the Beast proposition statistically. It appears that, rather than a positive correlation between tax revenue and spending, there is a negative correlation. The reason is that the historical data exhibit two regimes, one in which budget discipline is achieved through tax increases and spending cuts simultaneously (Shared Sacrifice), and another in which budget profligacy is achieved through the reverse policies. The hypothesized combination of tax cuts followed closely by spending cuts just does not describe American history. Only after presidents have reversed their low-tax campaign platforms (Clinton also originally had one in the 1992 campaign) has progress been made at cutting both government spending and the deficit.

Consider now the a priori case. What is the mechanism through which, in theory, the Starve the Beast approach is supposed to restrain spending? The mechanism is that if you create huge deficits, citizens will worry so much about the national debt that they will come complaining to their representative in Congress: "I'm worried about raising taxes on my grandchildren." The representative will then be less likely to vote higher spending. Maybe people do worry about the national debt, about taxes on their grandchildren. But surely they do not worry about such uncertain prospective future taxes (as hypothesized in the Starve the Beast paradigm) *more* than they worry about *certain taxes today* (as they must, in the Shared Sacrifice paradigm). Unpopular taxes today must surely put more pressure on representatives in Congress. Thus, as a political economy argument, Starve the Beast just does not make sense, if the alternative is the regime of the 1990s.

Starve the Beast is an ex post rationalization that some Republicans have found convenient to use in some circles and not in others, but it does not describe the motives of those who passed George W. Bush's tax cuts. How can such an assertion be supported? One final piece of evidence (also from Gale and Kelly 2004) is that almost half the members of Congress, together with President Bush, have signed a "no new taxes pledge"—which, based on the Starve the Beast rationale, would make the new tax cuts permanent and prevent most tax increases. But an examination of the voting records of the congressional pledge signers shows that they have been *more prone to vote for spending increases* than have the nonsigners. It is thus hard to believe that their motives are genuinely to force their colleagues to cut spending.

The Shared Sacrifice mechanisms of the 1990s—spending caps, PAYGO, and Save Social Security First—have in common budget neutrality as a criterion for future changes relative to the baseline. The strategy comes from the logic that to achieve budget balance, the country must recognize the need for sacrifice and agree to share the burden. It is the idea that "I

will agree to forgo my tax cuts, if you agree to forgo your spending increases." The only way the country will ever get budget discipline, in the long run, is through a common spirit along the lines "I would like to get my pork-barrel project funded for my constituents, but I will hold back if everybody else is holding back."

The 1990s showed that the principle of Shared Sacrifice works. Notice the difference from the principle of Starve the Beast. The first is "I will give up the tax cut I want if you give up the spending you want." The second is "I will take the tax cut I want, and in return you give up the spending you want." Which sounds like a more politically plausible route to a deal in Congress?

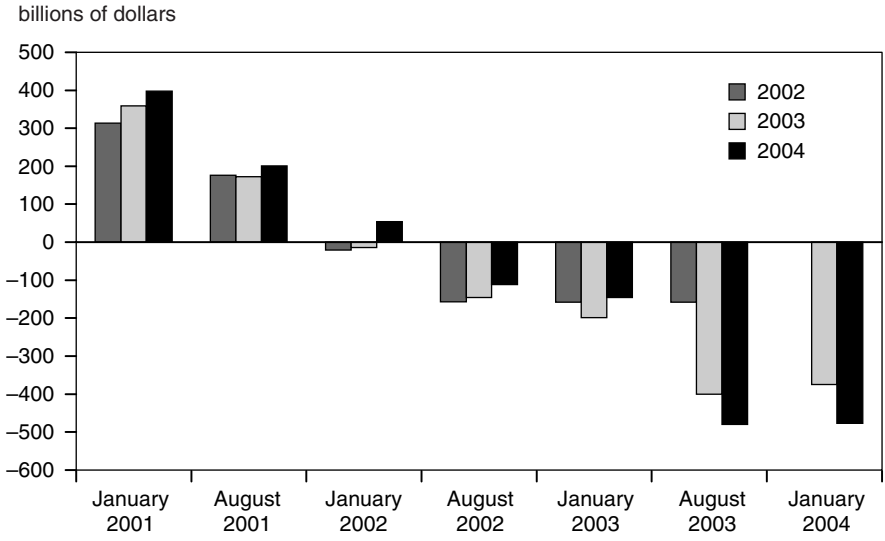
The problem is that the caps and PAYGO expired in 2001 and that there has been no effort to restore them, at least not from the White House.

How Has Bush Achieved Such Large Deficits? Pointers for European Politicians

I have discussed how Clinton achieved a surplus by the end of the 1990s. How has George W. Bush been able to achieve such big deficits in the 2000s? The 2001 recession helped. And it is always easier to give away money than it is to collect money—an important principle of political economy. But there is a third factor: The government made forecasts of future budgets that were overly optimistic, and predictably so. This enabled the White House to say that the country could afford these huge tax cuts. The forecasts were part of the mechanism that allowed the fiscal mess to come about. Officials release their budget forecasts twice a year and, to date, every time they have been forced to admit that last time they were wrong. And then, every time, they have done it again—"they" being both the Congressional Budget Office (CBO) and the Office of Management and Budget (OMB). (A qualification: CBO has little choice but to base its projections on current legislation, even when administration policy and informed prediction both call for costly future changes in legislation, such as new tax cuts.)

When the new administration came to power in January 2001, it boosted the revenue estimates, helping it to claim that we were going to have record surpluses rising as far as the eye could see. The first set of three bars in figure 6.12 illustrates this. In May 2001, the administration admitted that the surpluses were not going to be quite as big as it had said four months earlier, but it still saw substantial surpluses, and still ones that rose in the future. In January 2002, the same thing happened: It was admitted that the surplus was small now but still positive and still supposedly rising in the future. (This forecast came after the recession and September 11, 2001.) Then, in August—whoops!—we were in deficit after

Figure 6.12 Three years of budget forecasts that soon proved overly optimistic, 2002–04



Source: US Office of Management and Budget data.

all, but it was going to go away gradually in the future. Each time, the administration was forced to revise its estimates.

CBO is still forecasting deficits for the next few years but a path to a surplus by 2013. (OMB has decided to stop forecasting at the 10-year horizon.) That is still overly optimistic, for many reasons.[26] It is surprising that the press goes on reporting these forecasts, largely at face value. But the misleading forecasts might help explain why voters and market participants alike do not yet seem to have fully understood the magnitude of the coming deficits.

To justify their large deficits, in violation of the SGP, European leaders might increasingly want to rely on the George W. Bush defense: Yes, we are running high deficits at the moment, but our projections indicate that the fiscal situation will improve in the future. It may be helpful for them to consider some elaboration on the tricks that the American authorities have found useful:

- Make unrealistically optimistic economic assumptions. If forecasting record real growth is too obvious—this trick has been used so often in the past that even the American press will sometimes report it—instead

26. Frankel (2003, 37–45) lists 10 reasons, and also discusses the coining of the word "Rubinomics" by Glenn Hubbard.

play with other, more obscure, parameters that affect tax revenues. For example, in January 2001 OMB raised the predicted share of income going to wages and salaries, a subtle way to achieve this effect.

- Assert that you will cut spending in the future—even in absolute terms, even if it has been rising sharply as a share of GDP during the past four years, and even if you are proposing expensive new programs. When spending turns out to be higher than your budget forecast, you can always pretend it is a surprise and ask for a "supplemental appropriation." If you pretend it is part of the national defense or homeland security, the public is unlikely to question it.
- Keep pension funds in the budget while they are running a surplus. (When the baby boomers start to retire during the next decade, move these funds back off the budget.)
- Whenever you reduce a tax, always give the legislation a phony sunset a few years in the future. If politically important constituents complain that they want a permanent tax cut, reassure them that this is entirely your intention. That does not mean that you have to put it into the budget forecast.
- Switch among 1-year forecasts, 5-year windows, and 10-year windows, depending on which, at a particular moment, allows you to claim that the trend is in the right direction.

Rubinomics, and Expansion Versus Contraction

Rubinomics is supposedly the claim that fiscal consolidation has a positive effect on growth. To answer the question of whether fiscal contraction can be expansionary, we must consider two offsetting effects: the contemporaneous effect and the confidence effect. They are the same two effects that Posen identifies with Larry Ball and Greg Mankiw, on the one hand, and Alan Greenspan, on the other.

In the short run, fiscal expansion is expansionary. But at the same time, market expectations that the economy is on a future path of a rising debt/GDP ratio can put a lot of upward pressure on long-term interest rates today, and that in itself is contractionary. The two effects go in opposite directions—the contemporaneous Keynesian expansionary effect and the contractionary effect via long-term interest rates. In practice, it is hard to separate the two. This is because actual moves toward fiscal discipline, rather than rhetoric alone, are usually required to influence expectations and achieve credibility.

Table 6.3 is a stylized account of recent fiscal history in this light. It covers four presidential terms, two for Clinton, and two for George W. Bush. (The years 2005–08 would have been heavily influenced by the Bush legacy

Table 6.3 Stylization of the two channels of fiscal policy, by presidential term

	Clinton administration		Bush administration	
Effects on growth	**1st term, 1993–96**	**2nd term, 1997–2000 and beyond**	**1st term, 2001–04**	**2nd term, 2005–08 and beyond**
As, over time, the numbers show the promises of fiscal responsibility . . .		To be increasingly credible		To be less and less credible
(1) Effect of contemporaneous fiscal stance, via demand ("Keynesian effect")	Mild contraction	Mild contraction	Positive stimulus	Approximately neutral
+ (2) Effect of expected future fiscal path, via long-term interest rates ("confidence effect")	Mild expansion	Strong positive effect	Mild contraction	Strong negative effect
= Overall impact of fiscal policy on growth	Approximately neutral	Positive	Weakly positive	Strongly negative

of debt whether he was the president again or not.) The effects of contemporaneous fiscal stimulus appear in the first Clinton column and the first Bush column. Clinton's mildly contractionary fiscal policy had a mildly contractionary effect contemporaneously, and Bush's expansionary fiscal policy had a modestly positive stimulus contemporaneously.

Now, however, let us look at expectations—the effects on the economy of expected future fiscal paths—which come through long-term interest rates. They are illustrated in the second and fourth columns of table 6.3. Both Clinton and Bush claimed to be on a good long-term path. Initially, it was not entirely credible on either part. But Clinton even in his first term got some credibility benefit. In his second term, when the markets saw that these promises were coming true, interest rates declined, the stock market rose, investment boomed, and the economy achieved a record expansion.

Clinton set numerical goals to cut the deficit by the end of his first term and then again in his second one. These claims of fiscal responsibility became increasingly credible over time, so long-term interest rates fell (with the help of accommodation from the Federal Reserve). I think that in Bush's second-term presidency, we will once again see the emergence of deficit numbers far larger than are currently officially forecast, and that this has not yet been properly absorbed by the public and the markets. Meanwhile, the Fed is beginning to withdraw its extraordinary monetary stimulus of 2001–04. Interest rates will go up, which will start to have a negative effect on the economy.

How Might Europe Salvage the SGP?

But let us return to the fiscal problems of Europe, the topic of this volume. What is to be done, if neither Starve the Beast nor a rigid rule works? How can Shared Sacrifice be formalized and institutionalized?

Some proposals for a balanced-budget amendment or SGP do introduce much-needed flexibility, allowing cyclical adjustment of the targets while maintaining an average balance of zero. But if you allow more flexibility in the form of cyclical adjustment, then you will lose even more credibility; governments will always claim that their budget shortfalls are due to temporary bad luck in the economy (bad weather, terrorist attacks, the dog ate my homework). They will always be tempted to use the tricks that US policymakers have used so effectively in recent years.

I do like, more than Posen, a proposal that is a formalized version of an institution in Chile. The rule is a cyclically adjusted budget balance of, say, zero. But to enforce this rule, you appoint an independent fiscal authority or commission of experts—analogous to the Federal Reserve and other independent central banks—which has the responsibility to say what constitutes deviations from potential output, to compute the cyclically adjusted budget, to make forecasts, and to announce whether this year's budget satisfies the rule. The rest of the government still has the responsibility to allocate spending and taxes within the total, as it should in a democracy. I see this proposal as offering the flexibility that the regimes of the balanced-budget amendment and SGP lack, while preventing the abuse that the regime of Starve the Beast has so abundantly experienced.

References

Chinn, Menzie, and Jeffrey Frankel. 2003. *The Euro Area and World Interest Rates*. Paper 03-17. Santa Cruz, CA: Santa Cruz Center for International Economics.

Clinton, Bill. 2004. *My Life*. New York: Alfred A. Knopf.

Frankel, Jeffrey. 2003. What an Economic Adviser Can Do When He Disagrees with the President. *Challenge*, May–June, 29–52.

Gale, William, and Brian Kelly. 2004. *The No New Taxes Pledge*. Washington: Brookings Institution and Tax Policy Center.

Giavazzi, Francesco, and Marco Pagano. 1990. Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries. In *NBER Macroeconomics Annual 1990*, ed. Olivier Blanchard and Stanley Fischer. Cambridge, MA: MIT Press.

Niskanen, William. 2002. Comments on Tax Policy. In *American Economic Policy in the 1990s*, ed. Jeffrey Frankel and Peter Orszag. Cambridge, MA: MIT Press.

Rubin, Robert. 2002. Comments on Fiscal Policy. In *American Economic Policy in the 1990s*, ed. Jeffrey Frankel and Peter Orszag. Cambridge, MA: MIT Press.

Woodward, Bob. 1994. *The Agenda*. New York: Simon & Schuster.