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The Political Economy of Budget Deficits

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Abstract

This paper provides a critical survey of the literature on politico-institutional determinants of the government budget. We organize our discussion around two questions: Why did certain OECD countries, but not others, accumulate large public debts? Why did these fiscal imbalances appear in the last 20 years rather than before? We begin by discussing the "tax smoothing" model and conclude that this approach alone cannot provide complete answers to these questions. We will then proceed to a discussion of political economy models, which we organize in six groups: (i) models based upon opportunistic policymakers and naive voters with "fiscal illusion;" (ii) models of intergenerational redistributions; (iii) models of debt as a strategic variable, linking the current government with the next one; (iv) models of coalition governments; (v) models of geographically dispersed interests; and (vi) models emphasizing the effects of budgetary institutions.

We conclude by briefly discussing policy implications.

JEL Classification Number:
H6

Contents

Summary

In the last 20 years, several, but not all, OECD countries have accumulated large government debts. In some countries, debt-to-GNP ratios have reached levels typically associated with wars, rather than peacetime. Other countries, on the contrary, have low and stable debt-to-GNP ratios. What explains these large cross-country differences within a relatively homogeneous group of economies? Why did these fiscal imbalances appear in the last 20 years rather than before?

Purely economic explanations of budget deficits, such as the "tax smoothing" model, cannot answer completely these two questions, particularly the first one. Purely economic differences among OECD economies are unlikely to be sufficient to explain the extremely large cross-country differences in debt/GNP ratios. Therefore, this paper reviews the literature on politico-economic determinants of the government budget. It discusses the two questions highlighted above using six different approaches: (i) models based upon opportunistic policymakers and naive voters with "fiscal illusion;" (ii) models of intergenerational redistributions; (iii) models which emphasize the strategic incentive of today's government to "bind" its successor's fiscal policy by leaving a high deficit; (iv) models in which deficits result from political conflicts of social groups or political party members of the same coalition government; (v) models of geographically dispersed interests and of "pork barrel" politics; and (vi) models emphasizing budget institutions and procedures, or determinants of fiscal outcomes.

Although every one of these different approaches has something to contribute, the paper finds that models of type (iv) and (vi) probably contribute more than others.

The authors conclude with a discussion of institutional reforms which can enhance "fiscal responsibility." In particular, they focus on procedures for budget approval, on budget balance laws, on the relationship between the treasury and the central bank, and on different types of electoral systems.

I. Introduction

Several, but not all, OECD economies have accumulated large government debts in the last 20 years. Why did it happen? Why certain countries, but not others, have experienced large budget deficits for several years? What explains these large cross-country differences?

Figures 1 and 2 highlight the dimension of this problem. Figure 1 shows the debt to GNP ratios in seven countries where this measure sharply increased in the last 20 years. In three of these countries (Belgium, Ireland, and Italy), this ratio is beyond 100 percent. Figure 2, instead, shows the debt to GNP ratio in seven countries where this measure appears relatively stable, compared to the countries of Figure 1. The United States is included in Figure 2, but even in this country the increase in the debt to GNP ratio in the 1980s has caused much concern. Figure 3 plots the debt to GNP ratio of the United States: the downward trend which started at the end of World War II, reversed in the last decade.

The difference between the debt to GNP ratios among this group of countries in the 1990s is very large: from more than 100 percent in Belgium and Italy, to less than 30 percent in Australia and Germany, even leaving aside Japan.

It is difficult to explain these large cross-country differences using economic arguments alone: these countries are all advanced industrial democracies, all members of the OECD, all at very high levels of per capita income. We believe, instead, that politico-institutional factors are crucial for understanding budget deficits in particular, and fiscal policy in general. While the economies in the OECD group of countries are relatively similar, their institutions (such as electoral laws, party structure, budget laws, central bank laws, degree of decentralization, political stability and social polarization, etc.) are quite different.

The purpose of this paper is to discuss how the political economy literature can answer the two crucial questions sketched above:

(i) Why do we observe large and persistent deficits in peace time and why now?

(ii) Why do we observe large debts in certain countries and not in others?

Any explanation that can answer the first, but not the second question is not entirely convincing. For instance, any theory which implies that democracies are <u>always</u> in fiscal deficits is incomplete if it does not explain why <u>certain</u> democracies, but not others have experienced fiscal imbalances.

The literature on the political economy of fiscal policy is very large and dates back to the nineteenth century with the "Italian school" to public finance. We do not attempt to cover systematically all of this literature; instead we remain focused on the two questions highlighted above and we emphasize recent research, for two reasons. First, recent contributions are generally less well known. Second, in the last five or six years the political economy literature has shown a renewed impetus: the "new political economy" is, in fact, one of the most active fields in economics.

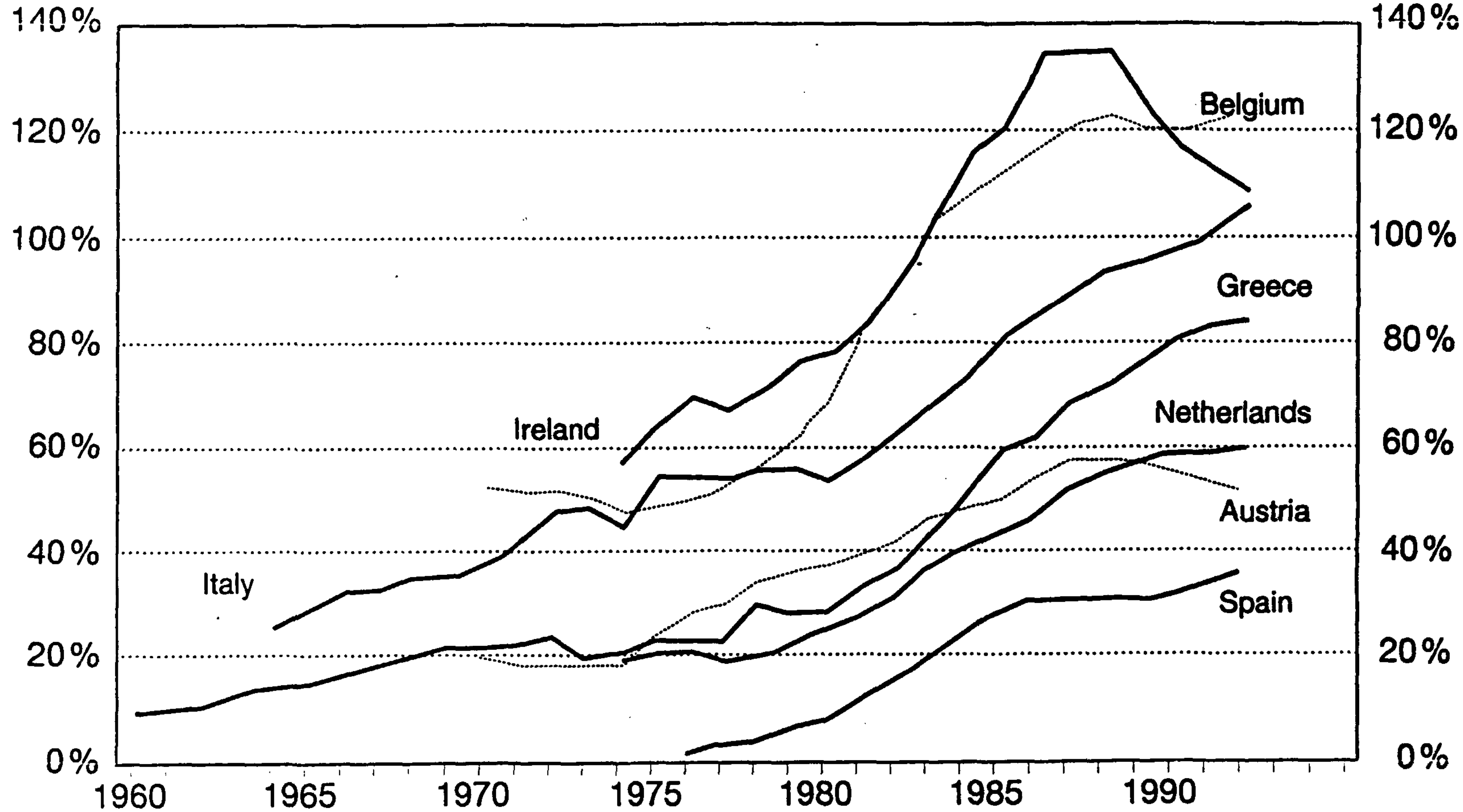
We begin our discussion with a review of the "tax smoothing" theory of the government budget (Barro (1979) and Lucas and Stokey (1983)). This approach serves as a normative benchmark from which political economy models depart: in fact, most of the recent political models are "positive" explanations of observed deviations from tax smoothing. Furthermore, the proponents of this theory (for instance Barro (1985, 1986, and 1987)) view it not only as "normative," but also as "positive," that is as a description of actual fiscal policy.

We will then proceed to a discussion of political economy models, which we organize in six groups: (i) models based upon opportunistic policymakers and naive voters with "fiscal illusion;" (ii) models of intergenerational redistributions; (iii) models of debt as a strategic variable, linking the current government with the next one; (iv) models of distributional conflicts within social groups and/or political parties in coalition governments; (v) models of geographically dispersed interests; and (vi) models emphasizing the effects of budgetary institutions.

Our review will be critical and opinionated: we do not believe that all of these models have the same explanatory power, and we will make it clear. After this review we briefly discuss the policy implications of this research, for institutional reforms.

Figure 1

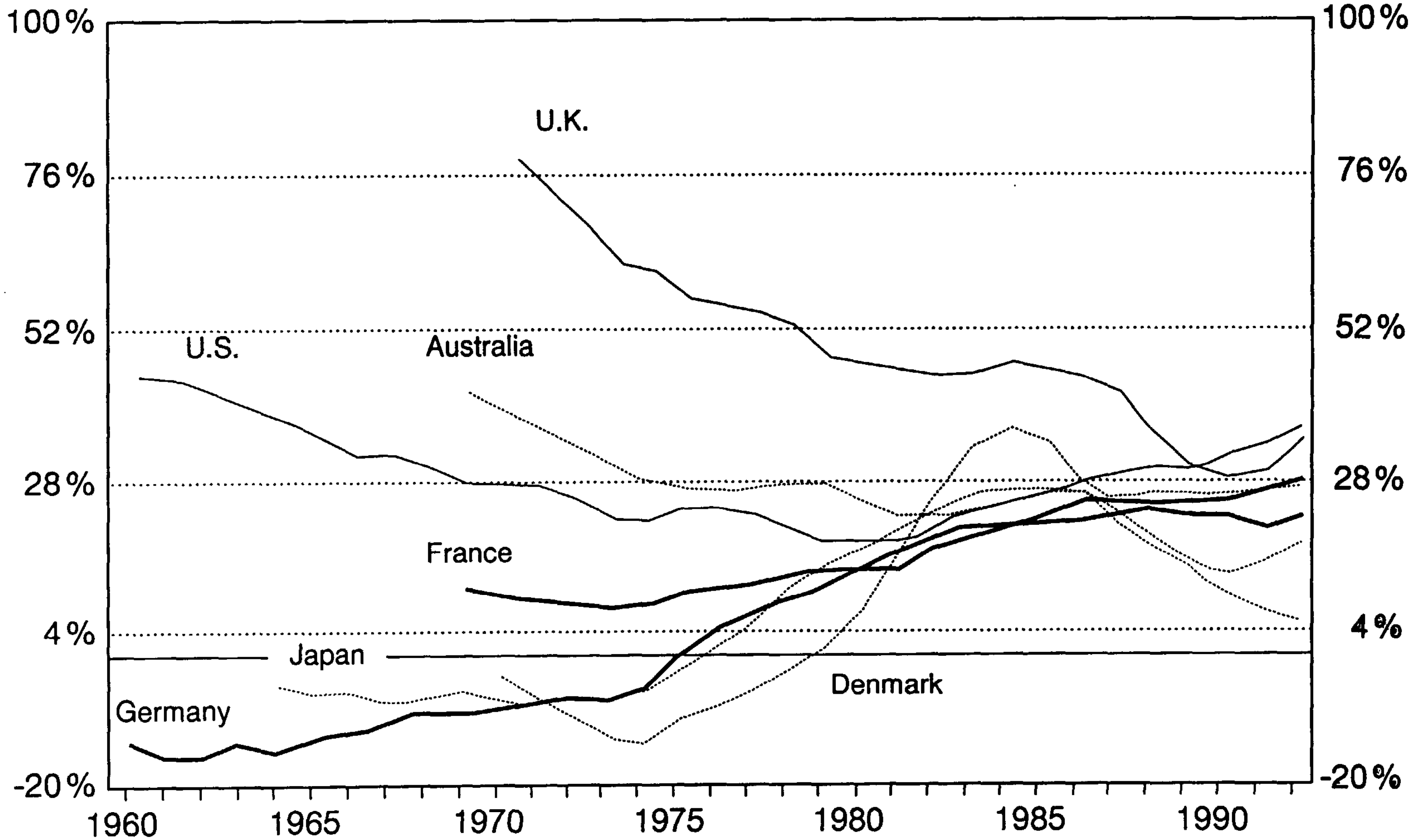
RISING DEBT TO GNP RATIOS



Source: R. Barro and V. Grilli (1994).

Figure 2

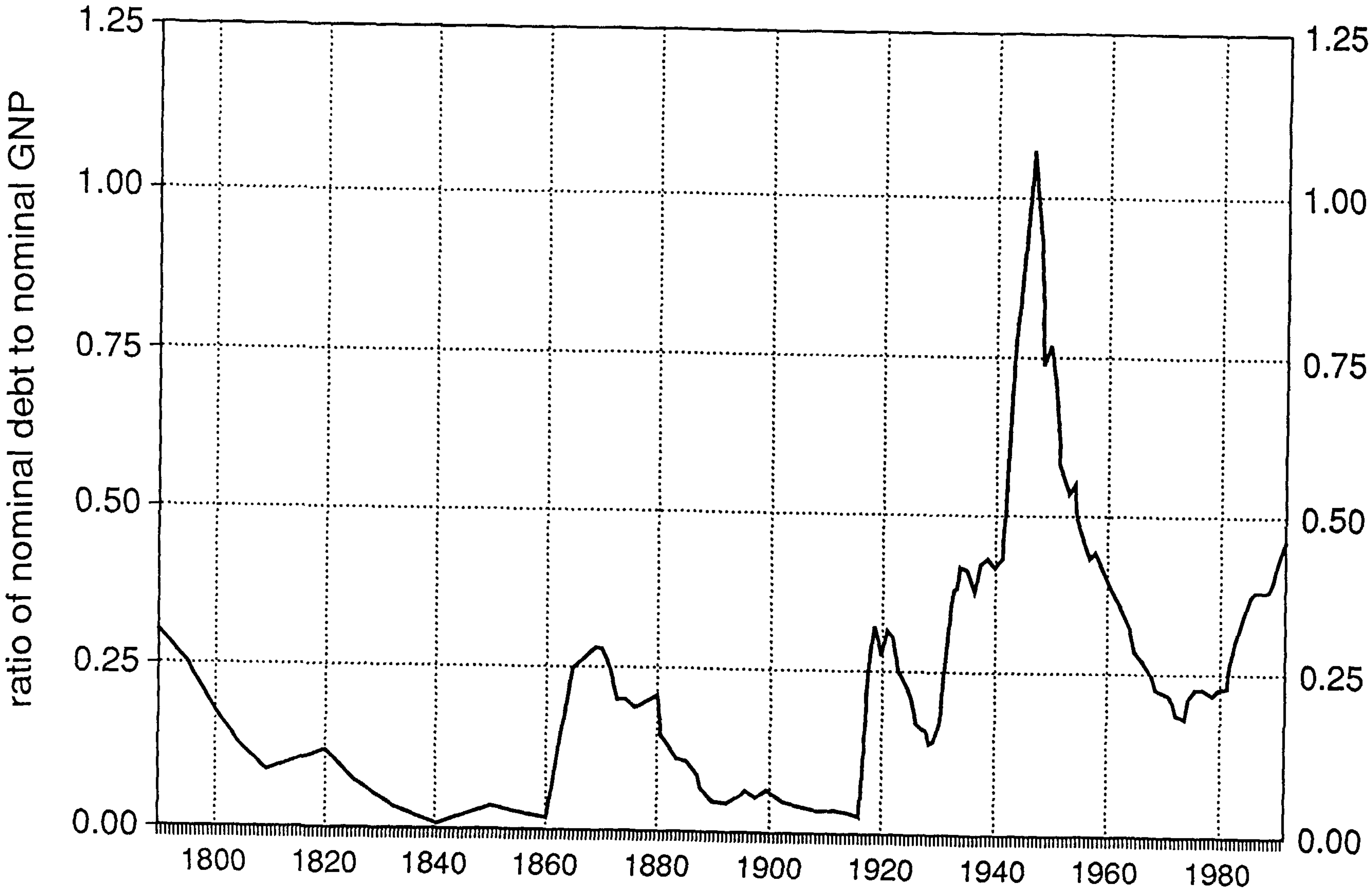
STABLE DEBT TO GNP RATIOS



Source: R. Barro and V. Grilli (1994).

Figure 3

Behavior of the U.S. Public Debt, 1790 - 1991



Source: R. Barro and V. Grilli (1994).

II. Optimal Budget Policy

The "tax smoothing" theory of the government budget considers a closed economy without capital in which a representative agent consumes, works, and saves. The government is a "benevolent social planner" who maximizes the utility of the representative agent. Both the representative agent and the government have the same time horizon, which, for simplicity is infinite. The theory abstracts from intergenerational aspects and from finite terms of office for governments.

The government needs to finance a certain amount of spending in every period by means of taxes on labor income, which are distortionary since they affect labor supply. The representative agent's utility function depends upon private consumption and leisure; but not on the amount of public good, which we can, for simplicity, define as "defense spending." 1/ The crucial result (Barro (1979) and Lucas and Stokey (1983)) is that the social planner should keep the tax rate constant. The level of taxes is determined by the intertemporal budget constraint, which implies that the present value of spending (which is exogenously given) has to be equal to the present value of taxes. Therefore, budget deficits and surpluses are used as a buffer; deficits occur when spending is temporarily high and surpluses when it is low.

These results directly follow from the concavity of the individual utility function. Suppose that government spending has to be "high" today and "low" tomorrow. A balanced budget policy implies high tax rates today and low tax rates tomorrow. The tax smoothing policy, instead, prescribes constant tax rates, a deficit today and a surplus tomorrow which (in present value terms) compensates for today's deficit. The second policy dominates because the additional tax distortions today more than compensate (in utility terms) for the welfare gains of the lower tax rates of tomorrow, due to decreasing marginal utilities.

This simple principle has far reaching implications for fiscal policy, which a few examples highlight.

Example 1: Suppose that government spending is constant, throughout the planning horizon. The optimal policy prescribes a balanced budget every period.

Example 2: Suppose that from period zero to period t government spending is constant, and is expected to be constant forever. In period t, an unexpected "war" 2/ occurs and the "war" is known to last until period

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1/ The case in which the public goods enter in the utility function of the representative agent introduces some complications which are immaterial for our purposes.

2/ The term "war" is used as a shortcut for a period of temporary high level of government spending.

(t+n). The optimal policy implies a balanced budget until period t, a "small" permanent tax increase at t, a deficit between t and (t+n), and a surplus afterward. Figure 4A illustrates the implications of this policy.

Example 3: Suppose that at time t government spending unexpectedly increases forever. The optimal policy implies a balanced budget in every period with a permanent increase in taxes at time t.

Example 4: Suppose that at time t government spending unexpectedly increases temporarily, then at (t+n) falls permanently below the original level, so that in present value terms we have a reduction of the total amount of spending. (That is, the permanent reduction after (t+n) more than compensates the temporary increase.) The optimal policy implies a reduction of taxes at time t, a deficit between t and (t+n), and a surplus after (t+n). Figure 4B illustrates.

The principle of tax smoothing is quite clear: budget deficits and surpluses are used optimally to minimize the distortionary effects of taxation, given a certain path of spending. 1/

An important extension of this model concerns the cyclical fluctuations of tax revenues due to the business cycle. For essentially the same reasons discussed above, the principle of tax smoothing implies that tax rates should be constant over the business cycle; therefore, one should observe deficits during recessions compensated by surpluses in expansions. Therefore, the case of example 1 extended to a model with cyclical fluctuations of output, implies a cyclically adjusted, balance budget rule: the budget should be balanced over the business cycle, but not every fiscal year. In this model, there is no role for a Keynesian stabilization policy, since output is not demand-determined. In a model with stabilization policies, cyclical fluctuations of the budget should be even more pronounced.

In summary, the key punch line is that budget deficits should be observed during "wars" and recessions.

As a normative theory, the tax smoothing model is extremely valuable. Any positive model of fiscal policy has to take the tax smoothing as a benchmark. As a "positive" theory of budget deficits, this model is insufficient to answer our two questions.

Barro (1985, 1986, and 1987) has tested the tax smoothing model on 200 years of American and British data. Figures 3 and 5 show that Barro's exercise is, up to a point, quite successful. Both the American and British experiences are, broadly speaking, consistent with the basic principles of

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1/ The theory becomes formally more complex if government spending is stochastic, but the basic principles of tax smoothing are unchanged (Lucas and Stokey (1983)).

Figure 4

THE TAX SMOOTHING POLICY

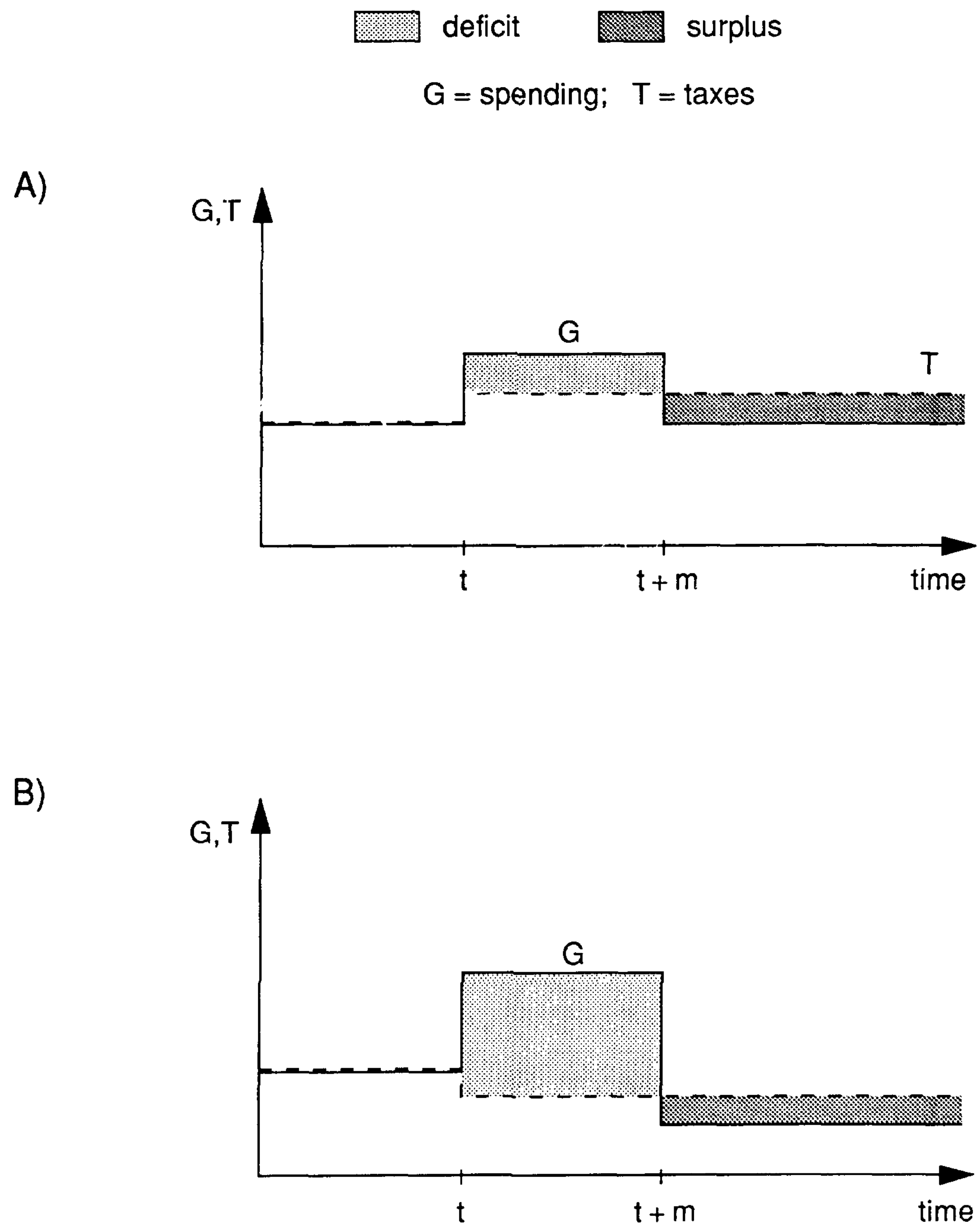
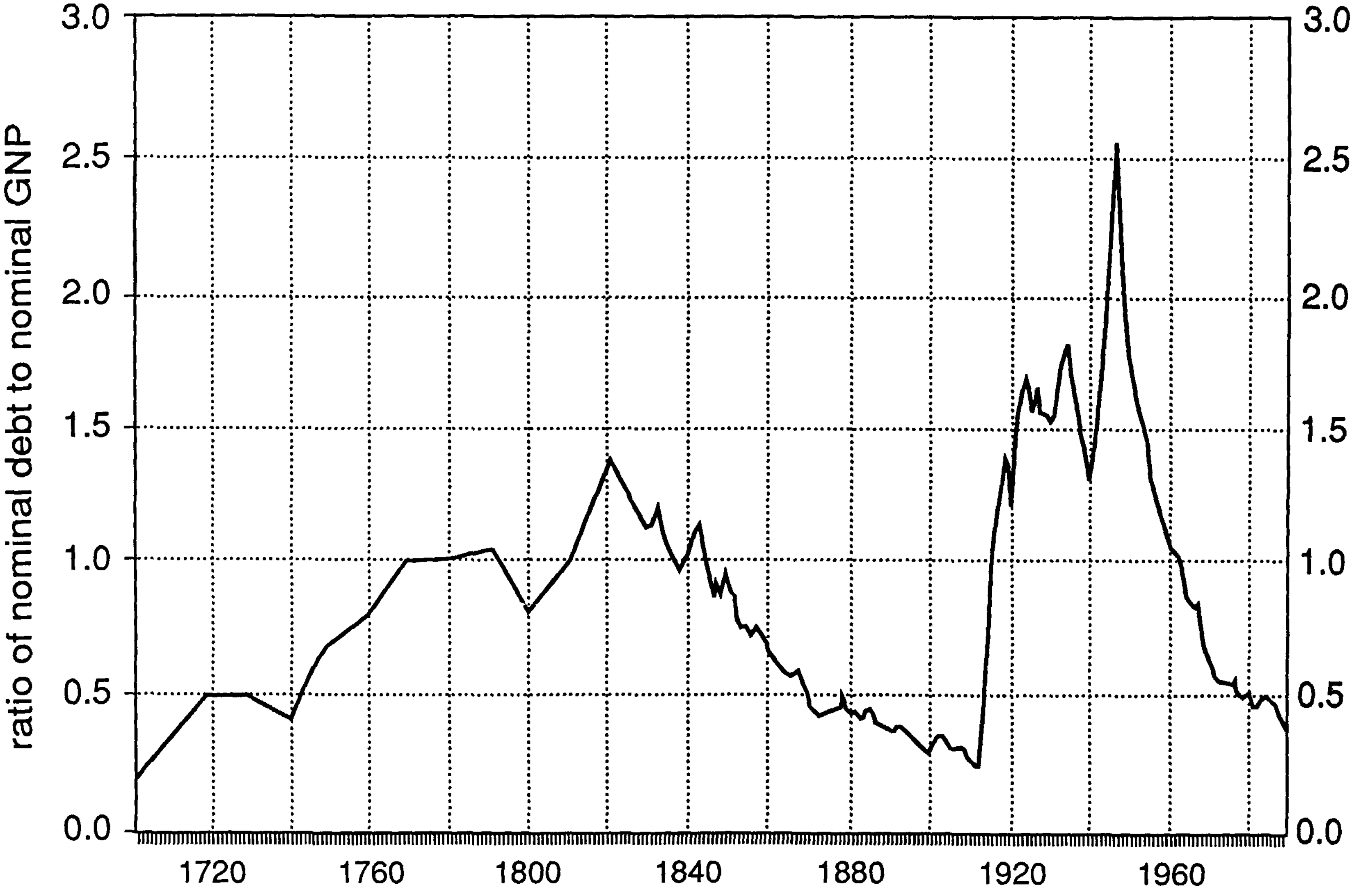


Figure 5

Behavior of the U.K. Public Debt, 1700 - 1990



Source: R. Barro and V. Grilli (1994).

tax smoothing: the debt to GNP ratios increase during wars, decrease in peacetime, and fluctuate with the business cycle. However, one can identify periods in which fiscal policy appears inconsistent with this theory. For example, the sharp increase in the debt/GNP ratio in the 1980s in the United States is, at least at first sight, inconsistent with the tax smoothing model.

To be sure, the tax smoothing theory could explain even this decade (Barro (1991)). Suppose that in the early 1980s it became known that, with a temporary increase in military spending, the "cold war" could have been won and, by the 1990s military spending could be cut below the initial level in 1980. This is essentially the example 4 given above: the optimal policy in this case is to cut taxes and increase military spending in 1980s and run deficits in the 1980s and surpluses in the 1990s.

This explanation is not entirely convincing because it relies too heavily on specific assumptions about expectations held in 1980. In some sense, any fiscal policy can be rationalized from a tax smoothing perspective, if expectations are a "free" variable. If one takes this argument to the extreme, it becomes impossible to reject empirically the tax smoothing model.

More generally, this model does not provide totally convincing answers to our two questions on OECD economies. First, why now? The tax smoothing model can certainly explain why debt/GNP ratios started to increase as a result of the 1973-74 recession. One can also argue that policymakers underestimated the need for a fiscal adjustment, since the rates of growth in the decade that followed (1974-84) were generally lower than in the previous decade. However, it is hard to imagine that these miscalculations alone can explain the skyrocketing debt/GNP ratios observed, for instance, in Belgium, Ireland, and Italy.

Second, the tax smoothing theory has very little to say in response to the second question: why in certain countries the debt/GNP ratios increased, but not in others? Certainly, different countries may have been hit differently by different shocks and their expectations of future spending might have been different, but with shocks and predictability of revenues and expenditures we find it quite difficult to explain the variance in the data displayed by Figures 1 and 2.

Therefore, we now move to politico-institutional approaches.

III. Fiscal Illusion

The "public choice" school which flourished with the work of Buchanan, Tullok and associates, has made the discussion of excessive deficits and lack of fiscal discipline in modern democracies one of its central themes. 1/

It goes beyond the scope (and the space constraints) of the present paper to provide a detailed analytical survey of this literature; instead we emphasize two crucial ideas that underlay much of the work of this school.

(i) "Fiscal illusion;" and

(ii) Asymmetric stabilization policies.

In a nutshell, the idea of fiscal illusion is that the voters do not understand the intertemporal budget constraint of the government. When offered a deficit financed expenditure program, they overestimate the benefits of current expenditures and underestimate future tax burden. Opportunistic politicians who want to be reelected take advantage of this confusion by raising spending more than taxes in order to please the "fiscally illuded" voters. One of the most forceful discussion of the concept of "fiscal illusion" and its crucial role for the "public choice" approach is in Buchanan and Wagner (1977). 2/

According to this school, Keynesianism has also contributed to excessive deficits and the abandonment of the "responsible" budget balance rule. Keynesian stabilization policies become asymmetric: politicians are always willing to run deficits in recessions, but never willing to run surpluses when recessions are over. The "fiscally illuded" voters do not punish this behavior. 3/

These explanations of budget deficits are not totally convincing for several theoretical and empirical reasons. First, they crucially rely on the notion of "fiscal illusion;" without it, we do not have a theory of persistent deficits. The problem is that this notion goes well beyond the reasonable idea that it is very difficult for the electorate to understand the complexity of the government budget. There is a crucial difference between "errors" and "illusions." If voters make uncorrelated errors, on average they do not overestimate or underestimate the costs and benefits of

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1/ Buchanan (1959) in an important paper acknowledges the intellectual connection between the "public choice" school and the Italian school of public finance of the nineteenth century. On this intellectual connection, see also Alesina and Tabellini (1992).

2/ For an early treatment of fiscal illusion, see Puviani (1903). See also Wagner (1976).

3/ See Buchanan and Wagner (1977) and several chapters in Buchanan, Rowley, and Tollison (1986).

taxes and spending. An "illusion" implies a systematic bias in these errors. While it is uncontroversial that voters make mistakes and are imperfectly informed, it is not at all obvious why the mistakes should be biased in a certain direction, that is, underestimation of the tax burden relative to the benefits of spending.

Second, this theory does not adequately answer the question of "why now?" The deficit problem in the countries of Figure 1 appeared after the early 1970s, and in the United States in the early 1980s; Roubini and Sachs (1989a and 1989b) argue that, up to that point, the post war experience of the OECD countries does not reveal significant deviations from a "tax smoothing" policy. So, why does the "fiscal illusion" create problems starting in the 1970s but not before? 1/

Third, how do we explain cross country differences? Are voters more "illuded" in certain countries than in others? Are politicians more opportunistic in certain countries than in others?

Buchanan and Wagner (1977) suggest that different tax structures and fiscal institutions may lead to more or less fiscal illusion. For instance, they argue that a more complicated tax structure sends noisier signals to the taxpayers concerning the true level of the tax burden. 2/ However, we are not aware of comparative studies of OECD tax structures which establishes a link between the size of public debt and the amount of fiscal illusion created by different institutions. Moreover, a recent empirical paper by Peltzman (1991) casts some doubts on the argument that the American voter rewards administrators who are big spenders.

An argument somewhat related to the "fiscal illusion" approach is put forward in the "political business cycle" model by Nordhaus (1975). The idea is that in election years politicians follow expansionary policies. The voters reward the politicians without understanding (nor learning from the past) that pre-electoral expansionary policies will have to be "paid" by post-electoral recessions. Even though the Nordhaus' model is developed in terms of an inflation-unemployment trade-off, it can be easily applied to budget deficits.

The literature on "political business cycles" is large and would deserve a separate treatment. 3/ The point which concerns us is that political business cycles models are not well equipped to explain long-run trends in the debt to GNP ratios, while they can explain short-term

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1/ Note that Keynesian stabilization policies were more in vogue in the 1960s than in the 1980s.

2/ Actually, it is not a priori obvious why a noisier signal implies a systematic bias downward in the perception of the true tax burden.

3/ For a recent survey of this literature, see Alesina (1993).

fluctuations of spending and taxes around elections. For instance, Alesina, Cohen, and Roubini (1992 and 1993) find electoral cycles on the budget in a sample of OECD democracies. However, their magnitude is small and cannot explain the pattern of debt/GNP ratios shown in Figure 1.

IV. Intergenerational Redistributions

The intertemporal nature of fiscal decisions creates links across generations. However, if each generation cares enough about its offspring, the finite horizon of each generation is immaterial. In particular, the "Ricardian equivalence" result (Barro (1974)) implies that, given enough intergenerational altruism, the choice of how to finance a given level of spending is irrelevant. 1/ In particular, the distribution of tax burden across generation is not influenced by the size of the debt: changes in public debt are compensated by changes in private bequests.

In models where the Ricardian equivalence does not hold, public debt may instead generate intergenerational redistributions, if the generation that is alive today leaves the burden of the debt to future generations. There is a critical difference between the current generation and future generations (including children currently alive): only the current one votes. Thus, in principle, a selfish generation could vote for policies which shift the burden of taxation to the future. An obvious limit to this behavior, is given by intergenerational altruism: parents do care about their children.

Cukierman and Meltzer (1989) propose an interesting political model of intergenerational redistributions. Their crucial idea can be summarized briefly as follows. Suppose that in the current generation we have "rich" and "poor" parents: The former are individuals who plan to leave positive bequests to their offsprings and for whom "Ricardian equivalence" holds: they are indifferent to the debt policy since they can compensate any change in current taxes and deficits with adjustments in their bequests. 2/ The "poor" are individuals who would like to leave negative bequests. Since, however, the latter is not permitted (one cannot borrow from his offsprings), the "poor" would like to run government deficits: as a result, they indirectly borrow from future generations. Therefore, one group of agents (the "rich") is indifferent to any debt policy, the other group (the "poor") favors public debt. Therefore, the social choice is likely to lead to debt. Although Cukierman and Meltzer (1989) emphasize a social choice reached by majority rule, even a benevolent social planner would choose to issue debt. 3/

The idea that public debt redistributes in favor of the current generation of voters, while future voters have no "voice" is, in principle, quite powerful. However, a closer inspection of it reveals that it is not sufficient to provide a complete answer to our two questions.

1/ Taxes are nondistortionary in this model.

2/ Taxes are lump sum in this model.

3/ In fact, one group of agents is indifferent to debt, while the other benefits from it, since it removes the nonnegativity constraint on private bequests.

First, why now? Why these intergenerational redistributions through the government budget have increased so sharply in the last 20 years and not before? 1/ Second, why in certain countries and not in others? Is intergenerational altruism stronger in certain countries than in others? Third, high public debts have often been accumulated and sharply reduced within the lifetime of one generation (Alesina (1988)).

Fourth, why future generations (i.e., the children of today) should honor public debt obligations rather than default? This point is particularly relevant for Cukierman and Meltzer (1989), since they assume that negative private bequests are not enforceable, while the public "negative bequest" (i.e., public debt) is enforceable, that is, the public debt cannot be defaulted.

Tabellini (1991) answers this last criticism by arguing that <u>inter</u>generational redistributions interplay with <u>intra</u>generational redistributions. A choice of default redistributes from debt holders to taxpayers, that is, from the "old" to the "young" and from the "rich" (who hold the debt) to the "poor" who do not. A "rich," young taxpayer may dislike default, although he does not hold any debt, because he cares about the welfare of his "old" and "rich" father. Thus, the "antidefault" coalition includes some of the young nondebt holders because of intergenerational altruism. Tabellini (1991) shows that, under certain conditions, the political equilibrium implies issuing debt, which is then honored.

The interesting contribution of this paper is its emphasis on intragenerational distribution. We shall argue below, particularly in Chapter VI, that the answers to our two questions have more to do with <u>intra</u>generational conflicts over distribution rather than with <u>inter</u>generational conflicts. However, even this paper cannot answer the two crucial questions: why now? and why in certain countries only?

1/ Note that if growth is increasing, then it might make sense for the current generation to shift the tax burden to the next one. However, growth has been, if anything, decreasing in OECD countries in the last 20 years relative to the previous two decades.

V. Debt as a Commitment: The Strategic Role of Debt

The stock of debt links past policies to future policies. The current policymaker can affect the "state of the word" inherited by his successors through his fiscal choices which determine the size of the debt.

Alesina and Tabellini (1990) argue that a government can take advantage of this strategic possibility and show that this political game between governments in office at different points in time can lead to an accumulation of government debt beyond what prescribed by the "tax smoothing" model. The simplest illustration of this idea is as follows: consider a two-party system where the two parties have different preferences over the composition of public spending. For concreteness, one party likes "defense" the other likes "social welfare." The two parties are ideological, that is, they represent the interests of different constituencies: the parties want to hold office in order to implement the desired policies. 1/ Suppose that the party that likes "defense" is in office today, and the result of the next election is uncertain, because of shocks to the electorate preferences: a fraction of the electorate oscillates between the party of "defense" and the party of "social welfare."

The "defense" party, in office today, spends on defense and issues debt so that if the "social welfare" party will be in office tomorrow, it will have to service the debt and won't be able to spend much on welfare. By committing future tax revenues to debt service, today's government can reduce spending of future governments. In other words, if the current government does not like the spending choices of its opponent, it can increase the utility of its constituency by issuing debt. This strategic interaction leads to deficits even though a social planner who maximizes the weighted average of utilities of the two groups would choose to balance the budget in every period.

The amount of borrowing of today's government is larger: (i) the larger is the disagreement between the two parties, that is, the more polarized are their preferences on the composition of government spending; and (ii) the more unlikely it is that today's government will be reappointed tomorrow. Therefore, polarization of party positions and government fragility explain debt accumulation.

Persson and Svensson (1989) provide a related model in which the two parties disagree not about the composition of government spending, but its level: they consider a "big spender" and a "low spender." An important difference between the two models is that while Alesina and Tabellini (1990) predict that every party would issue debt, Persson and Svensson (1989) do not: only the "low spender" does. The intuition is that by lowering taxes and issuing debt, the low spender constrains future spending. On the other

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1/ See Wittman (1983), Calvert (1985), Alesina (1988), and Alesina and Rosenthal (1994) for discussions of voting models with ideological parties.

hand, by creating surpluses the high spender encourages future spending. 1/ The model by Persson and Svensson (1989) is symmetric: one party creates deficits, the other one surpluses.

Tabellini and Alesina (1990) develop a more precise relationship between deficits and polarization of individual preferences, rather than party preferences. They consider a model where decisions are taken by majority rule, and any proposal can be made and voted upon in pairwise comparisons. Under these conditions, the "median voter theorem" implies that the policy adopted is the one most preferred by the median voter. 2/ With uncertainty about the preferences of future majorities over the composition of spending, the current median voter prefer to issue debt to tilt the future composition of spending in his favor. Tabellini and Alesina (1990) show that the amount of debt issued is increasing in the dispersion of voters' preferences: the more concentrated toward the extreme are the electorate's preferences, the larger is the debt.

This class of models suffers from the same problem we pointed out in models of intergenerational redistributions: public debt does not commit future governments if the latter can default. Alesina and Tabellini (1989) address this problem in a model of an open economy where the costs of default are modeled (quite roughly) as an output loss. The costs of default imply a constraint on the current government's ability to issue debt: at most, today's government can issue an amount of debt which makes the next government indifferent between defaulting and servicing the debt. This principle is quite general and should not depend on the specific assumptions concerning the costs of default.

In all the models reviewed thus far in this section, the strategic role of debts consist of creating "facts" for future governments, but the level of debt does not influence the electoral result. Aghion and Bolton (1990), Milesi-Ferretti (1993), and Milesi-Ferretti and Spolaore (1994) argue that incumbent governments can use strategically public debt to influence the election outcome, by influencing the preferences of the electorate. For example, suppose that the party of the left is expected to be more prone to default, since the upper class holds the largest fraction of the public debt. Aghion and Bolton (1990) show that right wing governments would choose to issue debt in order to make a larger fraction of the population a debt-holder. As a result, the left, that favors default, loses support. Milesi-Ferretti (1993) shows that the composition of debt between nominal debt and indexed debt can be used strategically along the same lines, if the left wing party is more inflationary than the right wing one.

1/ Persson and Svensson's results differ according to how "extreme" the two parties are in their preferences.

2/ This model is equivalent to one in which two parties compete for office and only care about winning. Both parties converge to the policy preferred by the "median voter;" this is the "median voter theorem" (Black (1958) and Downs (1957)).

Milesi-Ferretti and Spolaore (1993 and 1994) investigate in this context the general problem of "strategic inefficiencies," namely when it is in the interest of a rational incumbent to create inefficiencies on purpose and by doing so increase the probability of reelection.

How do these strategic models face the facts? Let us begin with the question "why now?" As we have seen, Alesina and Tabellini (1989 and 1990) and Tabellini and Alesina (1990) argue that political polarization and frequent government changes should be associated with larger debts. 1/ The 1970s and 1980s have witnessed much more frequent changes of governments from left to right and vice versa than the previous two decades. In the period 1960 to 1972 (up to the first oil shock), in the OECD economies one observes a "significant" government change on average about once every 10.5 years; from 1973 to 1987 about every 6.5 years. 2/ Thus, in the post 1972 period governments have been less certain of their reappointment than the previous decades.

The OECD economies have also become much less stable in the post 1973 period: political and economic instability are likely to be strictly interconnected and feed upon each other (Alesina, Ozler, Roubini, and Swagel (1992), and Alesina and Perotti (1993)).

Why public debts accumulate in certain countries and not in others? The theory implies that high debt countries should have more polarized political parties and a more polarized electorate with strong "extreme" groups. Alesina (1989) constructs a very rough index of political stability for OECD countries for the 1970s and 1980s based on several politico-institutional characteristics. 3/ The index is increasing in instability, and the average value for the countries in Figure 1 is 3.3; the average

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1/ The frequency of government changes can be taken as a very rough indicator of uncertainty. Countries and time periods in which the same government is repeatedly and routinely reappointed are probably cases of relative stable and certain preferences relative to cases of frequent changes.

2/ A government change is defined as "significant" when it involves a change in the party in office or a substantial change in the coalition (for instance the enlargement of a centrist coalition to a socialist party with nontrivial size). A minor coalition reshuffling, such as those often occurring in three-, four-, or five-party center left coalition in Italy is not considered significant. Data are from Alt (1985) and Alesina and Roubini (1992) who also provide more precise definitions, and the list of 18 OECD economies included in the sample used for these calculations.

3/ These are: whether or not the country has experienced one transition from dictatorship to democracy; whether in the country one finds significant extreme right wing parties and communist parties; a measure of frequency of government changes; whether or not the country has linguistic or regional conflicts; whether elections can be called by the executive, or their timing is fixed by the constitution; and the average size of coalitions.

value for countries in Figure 2 is -0.1. This difference is large since the highest value of the index for the countries included in the two figures is 6 and the lowest is -3. 1/

The models reviewed in this section have also been used to explain several specific episodes of debt accumulation. For instance, Alesina and Tabellini (1990) interpret Reagan's deficits as a manoeuvre to constrain future democratic administrations' spending on social welfare. 2/

It is quite certain that President Clinton's budget would have been more generous on domestic spending, if he had to face a lower interest bill. Persson and Svensson (1989) have argued that their model explain the Reagan's deficits and the Swedish experience of the conservative government of 1976-82. Aghion and Bolton's (1990) model can also explain episodes of deficits under conservative governments.

In summary, the class of models reviewed in this section suggests a relationship between the nature of party competition, polarization of preferences, and electoral uncertainty. These are variables which can be measured and do vary across countries and time periods. Therefore, these models are testable and, in principle, can provide answers to the question of "why now?" and "why in certain countries?" However, the empirical work based upon these models has, thus far, been sketchy, and at most, suggestive rather than conclusive. Nevertheless, these fragments of evidence suggest that these models may in fact go in the right direction.

1/ Ireland is not included in these calculations because the instability index is not available for this country.

2/ On January 25, 1987 in an op-ed article of the New York Times, one could read that "the deficit is not a despised orphan. It is President Reagan's child, and secretly he loves it, as David Stockman has explained: the deficit rigorously discourages any idea of spending another dime on social welfare."

VI. Distributional Conflicts and Wars of Attrition

The models discussed in the previous section emphasize a strategic interaction between political parties in office at different points in time. In this section, we review models in which deficits are the results of strategic conflicts between political parties or social groups that have an influence at the same time on policy decisions. For instance, while before we focused on the conflict and the ideological polarization between parties which alternate in single-party governments, here we are concerned with the polarization of parties' members of the same coalition government.

Alesina and Drazen (1991) propose a war of attrition model of delayed fiscal adjustments in which different socio-political groups fight about the distribution of the fiscal burden. The model assumes that a permanent shock perturbs the government budget, so that at the existing tax rates, a deficit appears and the debt begins to accumulate. A social planner would react immediately to this shock and raise tax revenues in order to keep a balanced budget. 1/ The point of the model is that the distributional struggle among social groups delays the adoption of the efficient policy of balancing the budget.

More specifically, when the deficit appears, it is financed partly by external debt accumulation 2/ and partly by some form of highly distortionary taxation, for instance seigniorage. A stabilization is defined as a change of policy which stabilizes the debt/GNP ratio and substitutes the pre-stabilization taxation with a less distortionary "regular" form of taxation.

Suppose that two groups have to decide on how to share the fiscal burden of the stabilization. 3/ The longer they wait the higher are the costs, for two reasons: the pre-stabilization fiscal distortions persist over time; the debt accumulates, so that higher taxes are needed to service it after the stabilization. An immediate agreement on how to share the fiscal burden of stabilization makes both groups better off relative to the same agreement reached with delay. However, rational delays occur under two conditions: (1) the proposed stabilization is "unequitable," namely one group has to bear a disproportionate share of the fiscal burden; and (2) the two groups are not informed about the other's "strength;" that is, each

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1/ For simplicity and clarity of exposition, this model implies that the optimal tax smoothing policy implies a permanently balanced budget.

2/ With some modification in the notation and in the model construction, the analysis can be applied to the case of domestic debt.

3/ With some complications, the model can be extended to more than two groups.

group does not know how costly it is for the other to postpone the stabilization. 1/

These costs can be interpreted in two nonmutually exclusive ways: one emphasizes the economic costs of the pre-stabilization distortions, the other emphasizes the political costs of preventing the other group from imposing an undesirable fiscal plan. Political costs include lobbying cost, or costs of direct political action.

The "loser" is the group which will have to pay the larger share of the fiscal stabilization; the "winner" is the other one. Generally, both groups will not accept to be the "loser" immediately: they hope that the other group will concede first. The optimal concession time is determined by equating the marginal cost of waiting with the marginal benefit of waiting. The marginal cost is the utility cost of living another instant in the unstable and distorted economy. The marginal benefit is given by the conditional probability that the other group will concede in the next instant multiplied by the difference in utility between being the "winner" and the "loser," that is, between paying the lower or the higher share of the fiscal burden.

The more unequal is the distribution of the stabilization costs, the latter is the expected time of stabilization. The intuition is clear: the more unequal is the burden of stabilization, ceteris paribus the higher are the benefits from "holding in." Furthermore, the lower are the costs of living in an unstable economy, ceteris paribus, the latter is the stabilization. This result has two interpretations: first, it suggests that economic mechanisms, such as indexation clauses, which reduce the cost of macroeconomic instability tend to postpone adjustments; second, political mechanisms, which make it easier and less costly to exercise a veto power and "block" proposed stabilization plans, delay stabilization.

Drazen and Grilli (1993) extend this model by showing that an economic crisis may anticipate the stabilization by forcing a "solution" to the war of attrition. The idea is that an increase in the pre-stabilization costs due to a crisis makes it so costly to continue the war of attrition that one group concedes. Thus, an economic emergency can, in the end, be socially beneficial: on the one hand, it causes an economic crisis with its costs; on the other hand, it shortens the delay in the adoption of the necessary stabilization. 2/

1/ The original model of war of attrition in a biological context was formalized by Riley (1980). Bliss and Nalebuff (1984) further developed it. For applications of this model to labor strike, see Kennan and Wilson (1988).

2/ Drazen and Grilli (1993) note that Hirschman (1985) made a similar argument informally, but their paper is the first rigorous formalization of these ideas.

Spolaore (1993) applies war of attrition models to coalition governments. He considers fiscal shocks which create budget deficits. Given these shocks, a social planner would follow the optimal policy which is modeled as a function of the costs of adjustment and the persistence of the shock. Spolaore (1993) takes this optimal policy as a benchmark and shows that a coalition government delays adjustment, while a single party government reacts "too much," relative to what a social planner would do. This result arises because different parties represent the interest of different constituencies and each of them would like to be spared from taxes. A coalition government delays the fiscal adjustment until the "veto power" game among coalition members is resolved; 1/ as a result, a coalition government does not adjust as often and as much as a social planner would do. On the contrary, a single party government "overreact" to the fiscal shock, since it underestimates the social costs of adjustment. In fact, its constituency can be "protected" so that it does not bear any cost. Spolaore (1993) also shows that the inefficiencies in policy reactions in a coalition government is increasing in the number of coalition members.

In summary, this line of research relates the accumulation of public debt to the fragmentation of governments and to the degree of political cohesion. Less cohesion implies more difficulties in achieving an agreement on an equitable distribution of the costs of fiscal adjustments and, therefore, to longer delays in stopping the growth of debt. Furthermore, political institutions and electoral laws leading to the formation of coalition governments should be associated with higher deficits than single party governments.

How do these models answer our two questions? First, the question of why now? War of attrition models explain why countries delay adjustments to shock, and, therefore, can explain the procrastination of fiscal adjustments. However, these models do not explain the cause of the original shock which perturbated the fiscal balance. Roubini and Sachs (1989a and 1989b) show that until the first oil shock, by and large the OECD economies had followed fiscal policies empirically undistinguishable from the "tax smoothing" model. After the oil shock, certain countries let their government debt explode by delaying the adjustment. Von Hagen (1992) also notes that the cross-country variability of fiscal performance greatly increased after the first oil shock, relative to the previous decade. Thus, these results suggest that different institutions have to explain different responses to a common shock, rather than the shock itself.

Why certain countries and not others? Weak coalition governments have typically postponed fiscal adjustments and have accumulated debt. Roubini and Sachs (1989a and 1989b) construct a political indicator which assumes increasing values as government fragmentation increases. They show that,

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1/ Unlike Alesina and Drazen (1991), Spolaore (1993) does not rely on asymmetric information but on randomization to obtain delays.

after controlling for several economic determinants of budget deficits (suggested by the "tax smoothing" model), their political variable is highly significant: the higher the number of parties in a coalition government, the higher is public debt.

Grilli, Masciandaro, and Tabellini (1991) also show that budget deficits are correlated with government durability: longer lived governments have smaller deficits. This finding is consistent with the previous one, since coalition governments typically have shorter lives than single party governments.

The nature of party systems and of government structure depends on the electoral system. For instance, proportional, representational electoral systems typically create multiparty systems and coalition governments; on the contrary, majoritarian systems lead to single party governments, as shown in Figure 6. Furthermore, government durability is lower in representational systems characterized by coalition governments (Figure 7). Therefore, one can suggest a relationship between the type of electoral system and the level of debt. This observation certainly fits the cases of Belgium, Ireland, and Italy, the three countries with the largest debt/GNP ratios in the OECD (Figure 8).

The American version of coalition government is the relatively common situation of divided government, that is, the case in which the same party does not hold the Presidency and a majority in the House and in the Senate. 1/

A widely held view, both in the popular press and in academia is that divided government in the 1980s was responsible for the buildup of American deficits. 2/ The problem with this argument is that divided government is not a novelty of the 1980s: it occurred often in the past. On the other hand, the 1980s are a rather unique example of peacetime, nonrecessionary buildup of debt. In other words, why divided government in previous decades did not create the same deficits as in the 1980s? 3/ Furthermore, the root of the American deficits are in the 1981/82 fiscal policies: these were the two years with the most unified Republican control of the decade.

1/ For a more extended discussion of similarities and differences between divided government in the United States and coalition governments in Europe see Alesina and Rosenthal (1994), Chapter 10, Fiorina (1991), and Laver and Shepsle (1991).

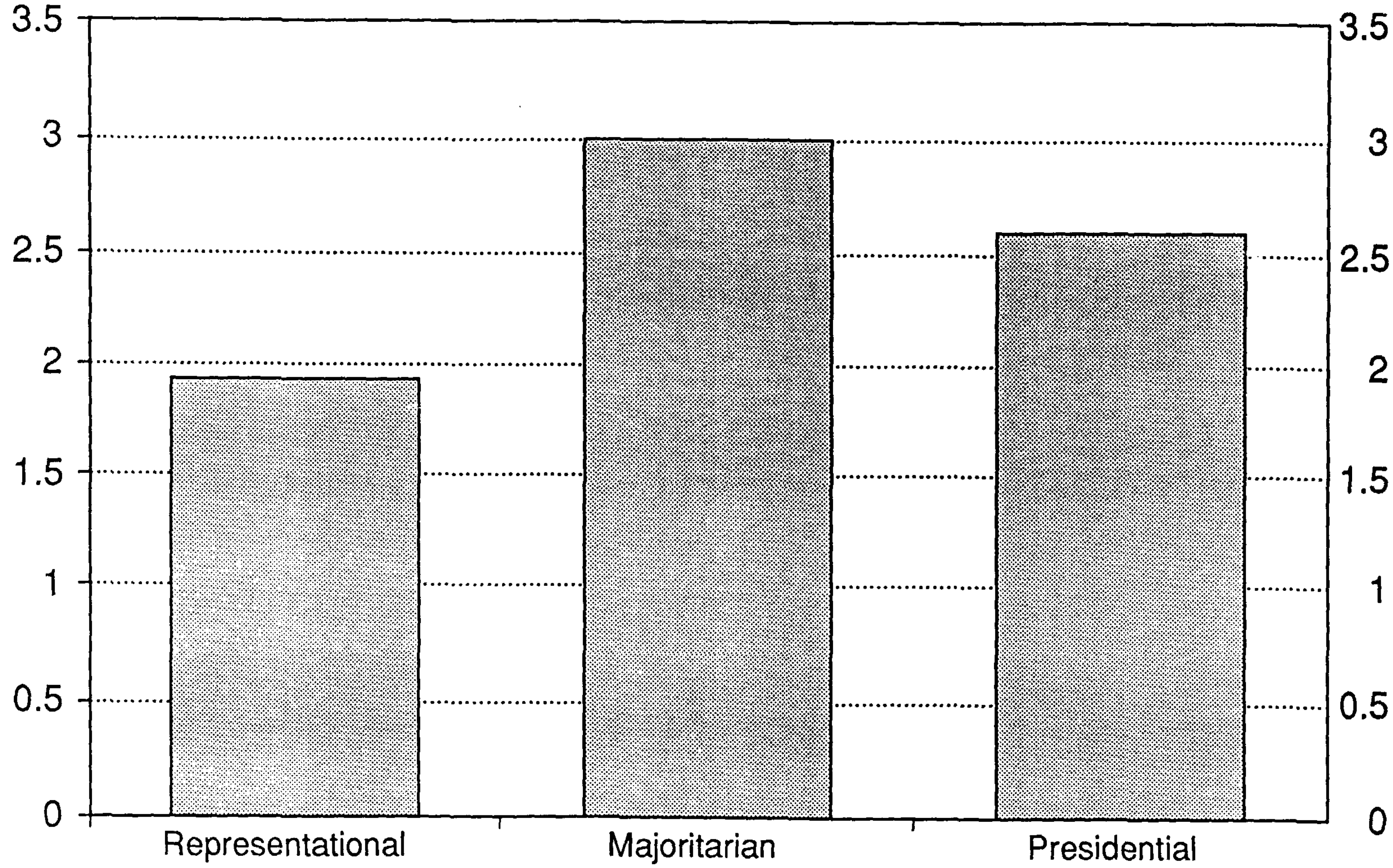
2/ See, for instance, McCubbins (1991) and the criticism by Barro (1991).

3/ McCubbins (1991) argues that what matters is not the division between the President of one party and a Congress with a majority of the other party, but division between Senate and House. The latter case, which occurred from 1981 to 1986 is much less common. However, McCubbins' argument still relies essentially on one observation.

Figure 6

DURABILITY OF THE EXECUTIVE

AVERAGE NUMBER OF YEARS 1950-90

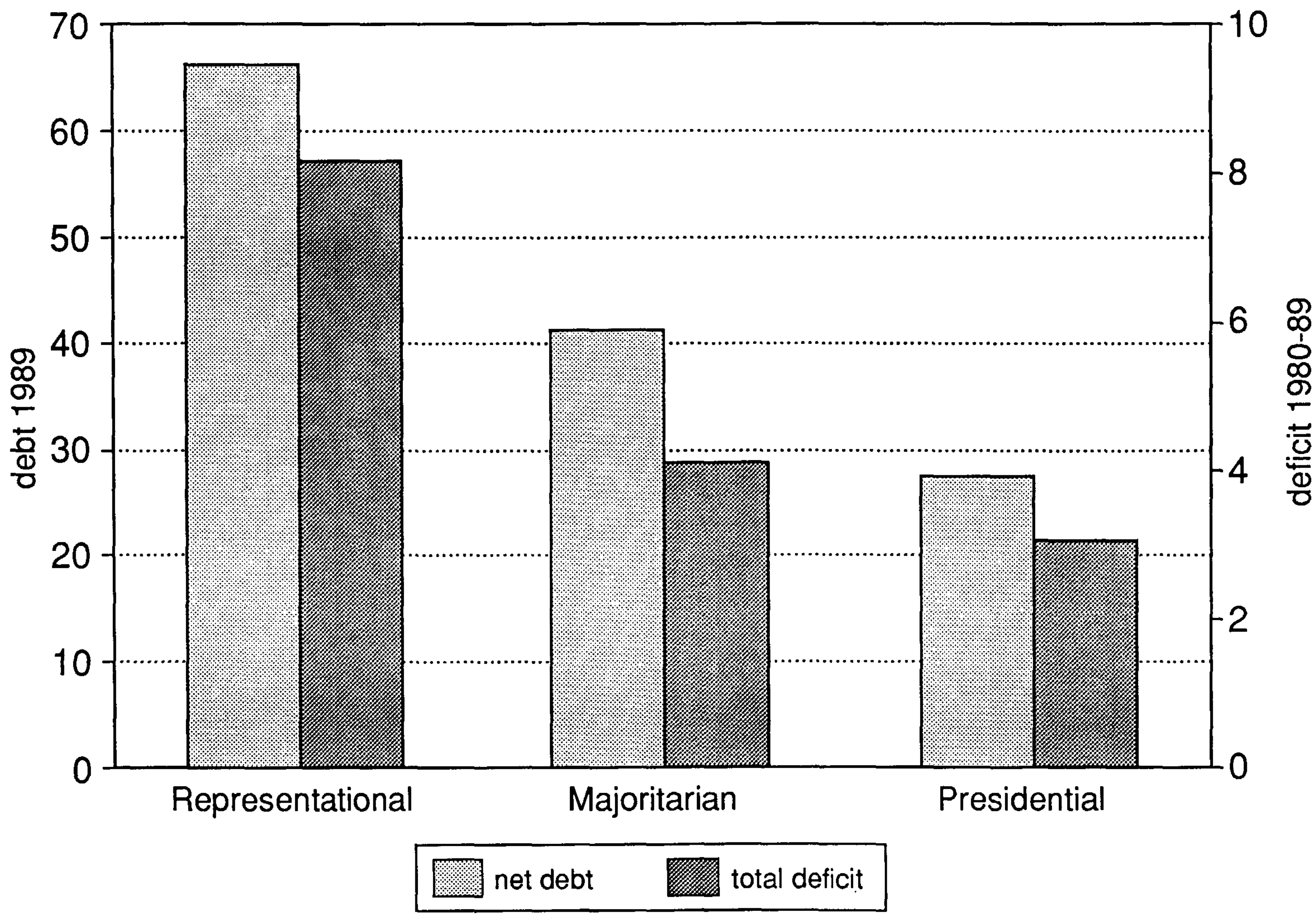


Source: R. Barro and V. Grilli (1994).

Figure 8

DEBT AND DEFICIT AS PERCENT OF GNP

Group Average



Source: R. Barro and V. Grilli (1994).

Poterba (1992) and Alt and Lowry (1992) present evidence on the effect of divided government by looking at American states. They consider the policy response to fiscal shocks and find that the adjustment is slower in states with divided control than in states with unified control. Their results are remarkably similar to those by Roubini and Sachs (1989a and 1989b) on OECD economies: in both cases coalition or divided government do not create budget deficits, but procrastinate the adjustment to shocks.

In summary, the models surveyed in the section are quite successful at establishing links between institutional features and party structure and budget deficits. The empirical evidence is quite encouraging for these models, perhaps more than for the somewhat related approach of the previous section. Finally, note that institutions such as electoral systems are themselves endogenous. They do change overtime, although infrequently, 1/ and are chosen as a result of socio-political conflicts of interests. Thus, the researcher faces a challenging question: to what extent can we take institutions as exogenous in explaining deficit biases?

1/ New Zealand and Italy are, for instance, in the midst of sweeping electoral reforms.

VII. Geographically Dispersed Interests

A large literature in political science has studied how the organization of legislatures lead to inefficient fiscal decisions. 1/ Although this research focuses on the United States Congress, its implications are broader: for the purpose of our paper, we focus on models where the geographic base of members of congress leads to "excessive" spending.

Weingast, Shepsle, and Johnsen (1981) argue that representatives with a geographically based constituency overestimate the benefits of public projects in their districts, relative to the costs of financing it, which are distributed nationwide. The aggregate effect of rational representatives facing these incentives is an oversupply of geographically based public projects. Specifically, the size of the budget is larger with N legislators elected in N districts than with a single legislator elected nationwide and the budget size is increasing in N, the number of districts. The key intuition is that the voters of district i receive benefits equal to B_i for a project but have to pay 1/N of the total costs, if taxes are equally distributed among districts. A geographically based representative does not internalize the effect of its proposals on the tax burden of the nation.

These models typically explain the size of budget, in particular of expenditures on "pork barrel" projects; therefore they do not directly address the problem of budget deficits. However, these models can potentially be very useful for our questions as well, if they are extended in two important directions.

First, they should become dynamic, in order to be capable of addressing not only the issue of the <u>size</u> of the budget, but also its <u>balance</u>. Is it the case that geographically elected representatives have an incentive to run deficits relative to representatives elected nationwide? The second issue to be reconsidered is that the share of OECD country budgets devoted to pork barrel projects is shrinking, relative to the share of transfer programs and entitlements. To be sure, some of the transfer programs have geographically based constituencies. For example, Florida has a high concentration of old-age pensions; invalidity pensions have been used as a transfer system from Northern to Southern Italy. 2/ These are cases in which income redistribution and geographical redistribution become highly interconnected. However, strictly defined pork barrel projects are only a relatively small part of current budget problems in OECD economies. It is

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1/ See for instance Ferejohn (1974), Fiorina and Noll (1978), Shepsle and Weingast (1981), Weingast, Shepsle, and Johnsen (1981), and Baron and Ferejohn (1989).

2/ Emerson (1988) reports that in 1984 the ratio of invalidity pensions over old-age pensions in Italy was about 40 percent and it was 250 percent in Southern Italy and 669 percent in the Sicilian province of Enna.

A recent paper by Von Hagen (1992) uses this approach to answer our two questions concerning budget deficits, by focusing on the budgetary institutions of the 12 members of the EEC. He tests an interesting "structural hypothesis," namely that: "Budget procedures lead to greater fiscal discipline if they give strong prerogative to the prime minister or the finance minister, if they limit universalism, reciprocity, and parliamentary amendments and facilitate strict execution of the budget law."

Von Hagen constructs indices which summarize several budgetary institutions. The most comprehensive index used in this study includes classifications of countries as a function of: (i) the strength of the position of the prime minister (or finance minister) in intra-government negotiations; (ii) the limits (or lack thereof) to parliamentary amendments; (iii) the type of parliamentary votes (item by item, global, etc.); (iv) the timing of parliamentary votes; (v) the degree of transparency of the budget; and (vi) the amount of flexibility in the implementation process.

The classification of countries according to these criteria inevitably requires some judgment calls, particularly since the author attempts to capture "de facto" procedures, beyond the letter of the law. Nevertheless, the strong support which he finds for the "structural hypothesis" is convincing. In particular, he finds that several related indices of budgetary institution are significant explanatory variable for cross-country differences in the debt/GNP ratios and budget deficits in the 1980s in the EEC; the "structural hypothesis" receives rather strong support.

Von Hagen's institutional data are quite rich and worth further exploration. For instance, these aggregate indices, "squeeze in" many institutional differences. A comparison between two "fiscally responsible" countries, France and Germany, illustrates the point. France has a very high index 1/ due to its voting rules and the role of the Prime Minister. Germany's voting rules are actually among the least compatible (at least on paper) with fiscal responsibility, however, Germany also has a high index because of budget transparency and inflexibility in the implementation. 2/ That is, one find much variability of institutional arrangements, even within countries with the same aggregate index. 3/

American states are a second example on which one can test the idea that "budgetary institutions matter." American states have a variety of

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1/ The indices are defined as increasing with the structural hypothesis.

2/ In fact, in variations of the basic index in which these two characteristics are not considered, Germany's rank drops a few position.

3/ Von Hagen (1992) also tests less successfully another hypothesis, focusing on the existence of long term (i.e., multi year) budget plans. This hypothesis is harder to test and the proposed indices probably relies too heavily on the existence of long-term budget proposals which are not truly binding. See Tanzi (1992) for a discussion of the perverse effect of noncredible long-term budget plans.

different arrangements concerning their budget; in addition to different procedures for budget formation, some states have "hard" budget balance rules, other have "soft" budget balance rules, and a few have no such rules. It is commonly argued that state legislatures find more or less "creative" ways to circumvent these rules; 1/ however, three recent quantitative empirical papers make the point that budget rules do make some difference, even though, probably not as much as the letter of the law would imply. Von Hagen (1991) concludes that budget rules have some effect on the level and composition of state debts. Alt and Lowry (1992) and Poterba (1992) argue that American states with "harder" balance budget rules react more promptly and more energetically to negative revenue shocks or positive spending shocks.

In summary, the crucial message of this research is that budgetary institutions influence fiscal policies. Does this insight contribute to answer our two questions? Institutional differences can certainly contribute to answer our second question: why in certain countries and not in others?

As for the first question (why now?), there might be more of a problem. As Von Hagen (1992) notes, budgetary institutions are relatively stable over time. Thus, how can we explain the sharp increase in the cross-country variance of fiscal performances in the 1970s and 1980s, relative to the two previous decades?

One possible answer is to consider the effect of economic shocks in different budgetary institutions, along the same line of "war of attrition" models. Perhaps the consequences of budgetary institutions not adequate to enforce fiscal responsibility have a particularly negative impact in periods in which fiscal adjustments are needed. In our view, this is a very promising avenue to explore further with careful comparative empirical work.

1/ For a recent discussion of this point, see Alt and Lowry (1992) and Poterba (1992).

IX. Policy Implications

The policy implications of the political economy literature are particularly relevant for institutional reforms. If policy outcomes are influenced by politico-institutional variables, then in order to improve policy making one has to intervene at the institutional level. Several OECD economies are struggling with fiscal adjustment programs and fiscal reforms. Former planned economies are in the process of building new fiscal institutions, and the policy advisor has to deal with institutional questions. 1/

One can think of two types of institutional reforms: (1) changes in the legislation directly regulating the budget formation; and (2) more general institutional reforms, such as changes in electoral laws.

1. The budget formation

a. Balanced budget

One of the most commonly advocated reforms of the budget process is the introduction of a balanced budget law, or more generally, of regulations which limit the discretionality of each government in running deficits. 2/ The "tax smoothing" theory implies that, in general, a balanced budget policy is sub-optimal. However, we have also argued that this theory is not a completely accurate description of actual fiscal policies. Thus, two questions arise:

- Is a sub-optimal budget balanced policy superior or inferior to the sub-optimal policy obtained without the balanced budget law?

- How can one make a balanced budget law enforceable?

The first question is difficult, since it involves comparisons of "second best" outcomes. Generally, the larger are the "politically induced" inefficiencies, the more attractive is the option of a balanced budget law. For instance, if it is true that proportional electoral systems with coalition governments are more likely to procrastinate budget adjustments, then a balanced budget law is particularly appropriate in these systems.

The costs of a balanced budget law are the loss of fiscal stabilizations over the cycle, and the loss of flexibility in reacting to shocks on expenditure or revenues. In theory, these problems could be overcome by a "contingent" rule; for instance a "cyclically adjusted" balance budget rule. However, the more complicated is the rule, the harder it is to enforce it. 3/

1/ On this point, see Tanzi (1992 and 1993b).
2/ For instance, Buchanan and Wagner (1977).
3/ For a discussion of this point see Tanzi (1993a).

Balanced budget laws may also be more or less desirable at different "levels" of the public administrations. For instance, most American states have some form of a balanced budget rule, and as argued above these rules are somewhat effective in enforcing fiscal adjustments (Poterba (1992)). On the contrary, no such rules exist at the federal level. Restrictions on public borrowing probably came about as a response to the 19th century defaults (Ratchford (1941)); however, this asymmetry between the state level and the federal level can be rationalized by a higher value of discretion at the federal level: expenditures and revenue at the state level may be easier to predict than those of the federal level. On the other hand, it is an open question at what level one should conduct stabilization policies. 1/

The question of enforceability of a balanced budget law is also quite complex. Any law can be changed by a sovereign, even though certain laws are more difficult to change than others. For instance, a constitutional amendment is typically the most difficult law to change, since it requires the most complex procedures and the highest qualified majorities in the legislature. This is why the most enthusiastic supporters of balanced budget rules favor this institutional solution.

The procedural choice runs into the usual trade-off between commitments and flexibility: by making it very difficult to change the law, one makes commitments more credible, but reduces the possibility of reacting to unforeseen shocks. Tabellini and Alesina (1990) show that in their model even though "behind a veil of ignorance" everybody would favor a balanced budget rule, the same rule is not enforceable if it can be changed by simple majority rule, after the "veil of ignorance" is removed. The idea is that when a certain government, expression of a certain majority, is in office, it has an incentive to break the balanced budget rule and impose it on future governments. By doing so, the current government achieves the flexibility needed to favor its constituency and leaves the costs of debt <u>and</u> the constraint of the balance budget law on its successor. Thus, if the balance budget rule can be broken by simple majority and the government commands this majority, then the rule is not credible.

By increasing the size of the majority needed to break the rule, one gains credibility but loses flexibility. A challenging normative problem is to decide what is the optimal qualified majority that has to be required to abandon the balanced budget. This majority requirement should be increasing with the politico-economic forces which increase the incentive to run deficits, (as discussed in the previous sections), increasing in the predictability of expenditures and revenues, and decreasing in the benefits of fiscal stabilizations.

1/ On this point, see Persson and Tabellini (1992).

b. Procedures for budget approval

War of attrition models suggest that by limiting the "veto power" of players involved in the budget formation, one reduces delays in fiscal adjustments and enforces fiscal responsibility.

A first "war of attrition" may be played within the government among spending ministers at the stage of budget formulation; this is most likely to happen in coalition governments where different ministers belong to different parties, but it may also happen otherwise. Spending ministers are more likely to be sensitive to special interest pressures than the Prime Minister or the Finance Minister: the latter is (or should be) more sensitive to the overall size and financing of the budget. The effect of intergovernmental wars of attrition are reduced if either the Prime Minister, (or the Finance Minister has a "strong" role in the budget formation process. Procedures which make a Prime Minister "strong" are those that limit the "veto power" of spending ministers.

A second stage where "wars of attrition" may take place and special interests can endanger fiscal responsibility is in the process of legislative approval of the budget. Procedures that: (i) limit the type of admissible amendments; and (ii) impose first a vote on the size of total spending and then a discussion of specific items, are more likely to limit deficits. 1/ By voting first on the overall size of the budget and the balance, one avoids the likely outcome of a reconciliation of conflicting spending needs with an increase in the deficits.

c. Central Bank independence

Several authors have highlighted the superior achievements of independent Central Banks on the inflation front. 2/ Independent Central Banks may also enforce fiscal responsibility by limiting the governments' access to seignorage as a more or less "hidden" tax. 3/

With an independent Central Bank, deficits have to be bond financed; this leads to an increase in the debt/GNP ratio and, possibly, higher interest rates. In other words, the government faces a "harder" budget constrain.

1/ The empirical results of Von Hagen (1992) bring support to these views. For more theoretical discussion see, however, Ferejohn and Krehbiel (1987).

2/ For instance, Alesina and Summers (1993), Cukierman, Webb, and Neyapti (1992), and Grilli, Masciandaro, and Tabellini (1991).

3/ For a formalization of this argument, see Tabellini (1986).

2. Electoral reforms

New Zealand is moving toward a more proportional electoral system, while Italy is moving in the opposite direction. Eastern European countries and former soviet republics had to choose (or are in the process of choosing) electoral laws. These decisions may have important fiscal consequences, and in some cases (e.g., Italy) fiscal imbalances are one of the motivations that lead to widespread dissatisfaction with the existing law.

As almost always in economics one faces a trade-off. Proportional electoral systems lead to coalitions and fiscal deadlocks which delays stabilizations. Majoritarian systems, by concentrating power in a single party, avoid deadlocks but may create excessive variability of policies, since the party in office is not "moderated" by coalition partners. 1/

How should one choose on this trade-off? The literature reviewed here provides some partial answers to this question. For instance, countries with a very polarized distribution of preferences (perhaps related to income distribution) may need more proportional electoral systems to avoid extreme policy variability, due to changes in governments with "extreme" positions. On the other hand, in periods of economic crisis or transition coalition governments may be an obstacle to the much needed swift policy action.

Clearly, electoral laws cannot be changed very frequently, thus countries have to make a relatively "permanent" choice over this trade-off. Generally speaking, choices toward the "extremes" of this trade-off are unlikely to be optimal. As for the budget deficits, a mistake toward excessive proportional representation is likely to have more negative consequences that the opposite mistake. This is particularly true if proportional electoral systems are accompanied by budgetary institutions which are not likely to enforce discipline; for instance, a "weak" Prime Minister in the cabinet, or unlimited amendments in the legislature.

1/ For an interesting formalization of these ideas, see Spolaore (1993). For a discussion of policy moderation in coalition government, see Alesina and Rosenthal (1994). See Tabellini and Alesina (1990) for some results on the relationship between the distribution of voter preferences and policy variability.

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