



Budget Deficits and Fiscal Adjustments under Fragmented Decision Making: New Evidence on an Old Discussion

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ABSTRACT

The purpose of this paper is to present the existing literature of political explanations for budget deficits and fiscal adjustments. The literature is distinguished initially in two broad categories, namely the effects of conflicts among agents with heterogeneous preferences and institutional effects. At the next stage the category of conflicts among agents is further distinguished in two approaches, namely political stability approach and weak government approach. The existing literature confirms that political instability leads to the strategic use of debt and therefore to higher fiscal deficits. Institutions are proved to contribute positively to the success of fiscal adjustments. However, interest groups with political power and the risk aversion character of politicians imply that fiscal adjustment is usually delayed and more costly.

Keywords: Budget institutions; fiscal deficit; fiscal policy; political economy; fiscal adjustment.

JEL Classification: E62, H61, H62

1. INTRODUCTION

Budget deficits and fiscal reforms cannot be fully explained by focusing only on their economic determinants and consequences. Decisions for

the fiscal policy of a country are taken mainly by the policy makers, which implies that political costs of fiscal decisions are considered. It is rational to assume that the latter do not always implement the optimal economic policies.

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Instead, the conventional wisdom would agree that a policymaker takes into account political considerations, like the forthcoming elections, the possibility to manipulate the debt in order to get re-elected or if not possible, to use it strategically in such a way that will tie the hands of his successor. Ideology is also an important determinant of policymaker's decisions. Left wing policymakers tend to favor different fiscal policies than right wing policymakers. This may occur not only because the policymaker acts according to his ideology but simply because he represents the interests of certain voters. Interest groups also play a major role. Some of these interest groups may have a bargaining power which is higher than the share of their vote and thus they may be in the position to postpone important decisions when they realize that they will carry a cost of said decisions. Polarization is another crucial political factor that affects fiscal decisions. In such an environment the policymaker cannot be considered to maximize the objective function of a representative voter, but it is logical to assume that he tries to satisfy his voters thus ensuring his reelection, by maximizing the objective function of his supporters. Therefore, we accept a decision-making environment where there is fragmentation, namely there are interest groups with heterogeneous preferences. These groups can be political parties, local authorities, lobbies or even unions. When the decision-making process is fragmented, then the corresponding fiscal policies are the result of the interaction of agents with conflictual interests. Thus, despite the predictions of the seminal models of Barro [1] and Lucas-Stokey [2], that debts are a tool to smooth consumption, namely to have a stable path of consumption, empirical evidence does not confirm it, or in the best cases confirm only partially, the hypothesis of consumption smoothing.

The main factor that makes essential the introduction of political determinants in debt analysis is the notion of fragmentation. Perotti and Kontopoulos [3], define fragmentation as the degree to which individual fiscal policymakers internalize the cost of one dollar of aggregate expenditure. In other words, fragmentation implies that fiscal decisions have a cost, which is mainly political. They also distinguish fragmentation between size and procedure. The former is measured by the size of coalition and the size of cabinet. The number of spending ministers is another potential measurement of size fragmentation. The latter concerns the way that political actors interact with each other and it

is measured as the nature of budget negotiation and the expenditure limits. Political fragmentation, namely the degree of polarization among political interest groups, is also a dimension of fragmentation with critical importance.

Various studies have presented reviews of the literature relevant to the political economy of budget deficits. However, a concrete discussion on the literature classified according to effects of conflicts among agents with heterogeneous preferences considering the budget institutions under which they interact, is missing from the analysis. The purpose of the essay is to account for that shortcoming aiming to present and organize the existing literature of political explanations on budget deficits and fiscal adjustments interpreting the political incentives of fiscal decisions and considering the institutional framework under which fiscal policy is applied. This is crucial as the policymakers also consider the political costs of their decisions.

Does the government use debt strategically to get reelected or even to tie the hands of its successor? What are the effects of the conflicts among interest groups, in the timing of fiscal adjustment (late fiscal adjustment issue); What are the effects of institutional framework on budgetary issues; What are the electoral impacts of fiscal reforms? These are questions of vital importance which need a political and institutional approach if they are to be answered. Thus, political models of debt use political tools in order to explain issues that, under a non-conflictual decision-making process, would be determined only by economic factors. However, the equilibrium model is still useful. It can be used as a benchmark because it refers to the optimal results, namely "how things should be". Thus, we can measure deviations of current policy results from optimal equilibrium policies results, to examine the potential welfare losses.

The paper proceeds as follows: Section 2 presents the main classification methods of political explanations on budget deficits and fiscal adjustments. Section 3 reviews the contributions related to the conflicts of agents with heterogeneous preferences (political stability approach and weak government approach), while Section 4 discusses the institutional effects. Section 5 presents the electoral effects of fiscal reforms. Finally, section 6 concludes, laying out an overview and issues for future research.

2. LITERATURE CLASSIFICATION OF POLITICAL EXPLANATIONS ON BUDGET DEFICITS

The literature of political models of budget deficits and fiscal adjustments provides a satisfying number of surveys and reviews, offering concentrated the evolution of the relevant theories and empirical evidences. Researchers use a variety of classification methods in their surveys. A seminal survey contribution is that of Alesina and Perotti [4]. They classify the political models in six categories: (a) Models based upon opportunistic policymakers and naïve voters with fiscal illusion. These models represent the political business cycles school or public choice school introduced by Nordhaus [5] and Buchanan and Wagner [6]. The main assumptions here are that politicians are opportunistic in the sense that they manipulate debt to get reelected and voters are assumed to make continuous mistakes due to lack of information. Thus, they are consistently deceived by politicians (fiscal illusion hypothesis); (b) Models of intergenerational redistributions where the current generations have incentives to avoid the cost of a fiscal adjustment or of a loss in the benefits of fiscal expansion. Consequently, they have a strong incentive to transfer the burden of debt to future generations; (c) Models of debt as a strategic variable. In these models debt is used as tool in order to tie the hands of the successor, especially when the probability of reelection for the current government is very low and polarization is high. Seminal contributions in this category are Persson and Svensson [7]; Alesina and Tabellini [8]; Tabellini and Alesina [9]; (d) Models of coalition government where the hypothesis of the inability of a weak government to apply unpopular fiscal adjustments is tested. Seminal contributions here are the war of attrition model of Alesina and Drazen [10] and the common pool problem of Velasco [11,12] (e) Models of geographically dispersed interests and (f) Models emphasizing the effects of budgetary institutions. In this category we could distinguish between rules and procedures [13].

Another important literature review contribution is that of Persson and Tabellini [14], in which they distinguish the relevant literature in three categories, namely: (a) General redistributive politics, which focuses on models of redistribution, pensions, insurance and labor market regulations; (b) Special interest politics, which focuses on models of bargaining, lobbying

and electoral competition and (c) Comparative politics which focuses on the issues of electoral rules and checks and balances. The survey part in Kraemer's [15], research is also worth mentioning. Kraemer organizes the literature as follows: (a) Non rational voters and opportunistic governments; (b) Non rational voters and ideological governments; (c) Rational voters and ideological governments; (d) Rational voters and opportunistic governments. Eslava [16,13], also provides useful reviews, organizing the literature in four groups: (a) Opportunistic politicians; (b) Conflicts of interests between politicians (partisan effects-strategic use of deficit); (c) Conflicts between social groups; (d) Budget institutions. Finally, we should not neglect to mention the contribution of Tommasi and Velasco [17], that provides a detailed survey of the political economy of reforms in general and that of Drazen [18], that focuses on literature relevant to delayed reforms.

In our paper, we distinguish initially, the effects of the political models of government debt in two main categories: (a) Effects of conflicts among agents with heterogeneous preferences, namely political parties or voters; (b) Institutional effects. Just as Eslava [16] notes for her classification of the literature, it is important to stress here that our categories are also not mutually exclusive, but they can possibly reinforce each other.

3. CONFLICTS OF AGENTS WITH HETEROGENEOUS PREFERENCES

The first category of literature, in which we focus, will be further distinguished, according to Grilli, Masciandaro and Tabellini [19], in two approaches, namely political stability approach and weak government approach. The first approach concerns how the ideological differences of political parties that alternate in office affect debt accumulation. The central question is how the policymakers, representing the interests of groups with heterogeneous preferences, weigh the future. Instability and polarization are the main political determinants of debt. Future costs of debt accumulation are not always known to the voters ex-ante. Thus, governments have incentives to manipulate debt for electoral purposes or even use it strategically to tie the hand of their successors. We refer to this approach as political stability approach. The second approach concerns how the different ideological base of each political party, affects the implementation of policies that usually imply political losses, like stabilization programs. The central

variable here is the support the party in office enjoys, namely how weak or strong is the government. We will refer to this approach as government weakness approach.

3.1 Political Stability Approach

In the first theoretical approach three seminal contributions are of vital importance [7,8,9]. All of them follow a positive approach to explain the incentives of the government to manipulate the debt for electoral purposes or to use it strategically in order to tie the hands of its successor.

Persson and Svensson [7], present a political model of budget deficit based on the idea that a government in office would choose to affect the choices of the next government. In particular Persson and Svensson focus on the incentives of the current political party in office to manipulate the debt. They consider two policymakers that represent interest groups in conflicts due to different preferences for the level of the government expenditure. In this model the fiscal strategic interaction between the two parties is generated because of disagreement of the interest groups for the level of debt, rather than for its composition. The result is that the public expenditure will differ from the expenditure that would exist in case of non elections. A conservative government has an incentive to create deficits, although its ideology is against large deficits, in order to tie the hands of the left-wing successor. The latter, contrary to its ideology, will be obliged to adopt a fiscal adjustment program to reduce the large deficit of the right-wing government.

Alesina and Tabellini [8] present a political model of debt in which the policymaker that wins the elections satisfies the interest group that supports him, by choosing the composition rather than the level of public good provided, as in Persson and Svensson [7]. Thus, the issue of the level of debt is actually an issue of the intensity of political disagreement, or polarization, between competing parties. The higher the political disagreement, namely the higher the polarization, the higher the incentive of the party in office to issue new debt. The same occurs with the probability of reelection, which interacts with the level of debt. The latter increases as the former decreases. This interaction does not exist in the case of a benevolent social planner where political polarization is zero and elections do not take place. Tabellini and Alesina [9], also state

the issue of time allocation of burden between voters of current and future periods. As in the previous model, a balanced budget is an optimal and efficient choice. However, lack of information and political disagreement change this condition of efficiency. In the current period the majority party does not know the future composition and the allocation of the repayment of burden. However, it can have full knowledge of the current allocation of debt. The asymmetry of knowledge for choices of current and future majority implies that current majority does not fully internalize the cost of budget deficit burden. Thus, a deficit bias is generated.

Crain and Tollison [20], examine empirically the hypothesis of the strategic use of debt introduced above. They find no strong evidence to confirm the predictions of the model for strategic deficits. However, they find evidence that political competition will generally lead to higher variability in fiscal policy. As a result, the debate of which type of political system minimizes the economic losses from political competition, would be of vital importance. Peterson-Lidbom [21], focuses on the same issue using data from local governments in Sweden. His empirical results indicate that right wing governments tend to increase the level of debt when the probability of losing elections is high. The result is symmetric when it comes to left wing governments. The latter decrease public spending when reelection probabilities are low. Peterson-Lidbom's findings are supportive to the view of strategic use of deficit and especially for Persson and Svensson model [7]. Lambertini [22], also examines empirically the models of Alesina and Tabellini [8], and Persson and Svensson [7]. Three main issues are tested. First, whether the composition of the provided public good is related to the political ideology of the party in office. Second, whether the anticipation, on behalf of the current government, that a replacement in office will occur in the forthcoming elections leads to budget deficits in conservatives and budget surpluses in liberals, as Persson and Svensson predict. Third, whether the anticipation that a replacement in office will take place, leads to budget deficits no matter what the ideology of the current government is. The empirical results of his work show that none of the above theoretical predictions are confirmed. Sutter [23], uses data from OECD countries for the period after the 1970s. The effects of two main political variables, namely polarization and probability of reelection on debt are tested. Sutter used two different

methods for the statistical research. In the first method he applied across subject design, which is the analogue of multi-country data. This method has also been used from Lambertini [22] and Franzese [24] and the results did not confirm that polarization and probability of reelection play a major role in debt accumulation. Sutter's study confirms these findings. In the second method Sutter applied within-subject design which is an analogue to single-country data. This method has also been used by Peterson-Lidbom [21], to show that polarization and probability of reelection do play a major role in debt accumulation. Sutter, concludes that the within-subject design method is more reliable because it allows for polarization to be kept fixed, as we refer to one country data. In addition, it excludes the probability of institutional effects because in the context of one country institutional effects are given.

Empirical research examines whether governments apply pre-electoral debt manipulation policies and whether the voters reward governments that implement such policies. Despite the conventional wisdom that voters reward fiscal expansions because of the economic benefits they imply in present, Peltzman [25], finds empirical evidence that exactly the opposite holds. His sample contains data from the US during the period 1950-1988. Voters are proved to be fiscal conservatives and the political cost of a large fiscal deficit is important. The evidence of Peltzman implies that a fiscal adjustment program does not lead to a loss of political support for the government. Another important aspect of his research is that voters are better at collecting information relative to the budgetary issues. Thus, the impact of fiscal illusion decreases. Electoral cycles and the probability of getting reelected is also another explanation for high deficits. Franzese [24], examines empirically, among others, the effects of pre electoral fiscal policies in the accumulation of public debt using a sample of postwar OECD countries. He argues that pre electoral policies have statistically significant effects on public deficits. Specifically, he observes a two-year pre-electoral cycle and a corresponding long run impact on debt. Kraemer [15], examines the political consequences of the manipulation of fiscal deficit for reelection purposes. Particularly, he examines whether the democratization process in Latin America and the Caribbean, leads to electoral cycles relative to fiscal policy. He concludes that electoral cycle policy is very widespread but at the same time it is politically

costly, not to mention the economic inefficiency it implies.

3.2 Government Weakness Approach

The theoretical approach of government weakness treats the postponement of essential fiscal reforms as a result of the inability, or weakness, of the party in office to implement them. Two seminal contributions are important in this approach. Alesina and Drazen [10], present a war of attrition model where different groups disagree on the share of the fiscal adjustment cost. Each of them waits until another group with higher cost of waiting concedes. The latter group will carry a disproportionately high weight of the stabilization cost. The second seminal model is that of Velasco [11], which is a common pool model. In these models actors compete over a limited resource that is made available to all for consumption. These models focus on the issue of the role of different decision makers in changing the status quo [19]. Both models imply a late fiscal adjustment.

Before presenting the fiscal version of the war of attrition model, it is important to note the way in which the provision of public goods creates incentives for a war of attrition behavior. In this context, Bliss and Nalebuff [26], provide an explanation for the provision of public goods from private agents. The provision of public goods would be optimized if the private agent with the lower cost of providing it was known and was also forced to provide it. However, every agent has an incentive not to reveal its cost of providing the public good and just waits for someone else to do so. In this case which is called "war of attrition", as agents wait until someone else provides the public good, the agent that has the lower cost of providing the good will also be the most impatient agent and will finally provide the public good. Bliss and Nalebuff [26], proved that as the population size approaches to infinity, the free riding problem gradually disappears and the expected waiting time for each agent is zero. Thus, the corresponding public good is provided immediately. Alesina and Drazen [10], present a fiscal version of the war of attrition model in order to explain the delays in fiscal adjustment. According to their model agents are rational but their preferences are heterogeneous, which implies distributional conflicts among interest groups and delays in needed reforms. Each group has an incentive to disagree on the reform until another group with higher cost of waiting

(thus lower cost to adjust), concedes and adjustment starts. The group which concedes bears a higher cost of stabilization.

An important policy implication of the war of attrition model is that the necessary fiscal reforms may gain public support simply by the passage of time. This is because the passage of time increases the cost of waiting and thus increases the probability for a group to accept a reform program that was previously rejected. Drazen and Grilli [27], extend the war of attrition model in order to argue that a crisis may be beneficial for a society. They state that when a crisis occurs, the cost of non adoption of the essential fiscal adjustment is higher. Thus, the distributional conflict among heterogeneous groups is reduced and the government has the incentive to apply fiscal reforms. A basic drawback of this model is the assumption that the government weighs equally the welfare of the competing interest groups. The hypothesis of the welfare improving character of a crisis is also confirmed by Veiga [28] and Hsieh [29].

Laban and Sturzenegger [30], discuss the issue of payoff uncertainty after the stabilization. High income citizens have easier access to financial resources and thus they have a lower cost of waiting. In other words, they are willing to delay the adjustment for a longer period. However, the delay of fiscal stabilization increases the cost of non-adjustment for the relatively poorer citizens. Therefore, the war of attrition model in Laban and Sturzenegger [30], implies that the relatively poorer citizen will concede first due to the increasing cost of waiting.

On the other hand, Martinelli and Escorza [31], examine the effects of asymmetries in the cost of pre stabilization period, to the timing of adjustment. Political parties that are supported by relatively lower income voters may have a stronger incentive to accept adjustment, because the cost of delay is higher for their voter and thus for the political party. The ex-ante asymmetry may imply a shorter delay in adjustment or even an immediate one, in case of full information about the cost of non-adjustment. This model explains the implementation, on behalf of the left-wing governments, of market-oriented reforms during the 1980s and 1990s in Latin America.

Likewise, Casella and Eichengreen [32], base their analysis on the war of attrition model, aiming at examining the effects of foreign aid in the fiscal adjustment process. Their model

predicts that if economic aid is provided early, then it can enforce the fiscal adjustment process. Hsieh [29], also studies the effects of foreign aid on the timing of adjustment. The main difference between the two war of attrition models is that the model of Hsieh [29], endogenizes the distribution of the stabilization cost, by assuming two political parties representing different interest groups that are involved in a bargaining game. Mascagni and Timmis [33], show that aid in Ethiopia during the period 1961-2010 had beneficial fiscal effects, while Bwire et al. [34], also find that aid contributed to improved fiscal performance in Rwanda, during the period 1990-2015. On the other hand, Alesina, Ardagna and Trebbi [35], using a data of developing and developed countries from period 1960- 2003, find empirical evidence that foreign aid, in the sense of IMF assisted programs, have a limited effect or no effect at all on the probability of a fiscal adjustment.

In common pool models the budget of the government is treated as a property with common access for the interest groups. Velasco [12], studies the political aspects of fiscal policy using a common pool model. Agents are assumed to be rational but with heterogeneous preferences, due to political fragmentation, and compete with each other for common resources. Each group of agents influences the government to spend the common resources in a composition that the particular group prefers. Velasco accepts the assumption that the government is weak, in the sense that the interest groups are indeed in the position to influence the composition of public spending. In another seminal contribution of Velasco [11], the common pool model is used for the study of delays in fiscal adjustment. In this model the decision making process is also fragmented and the political party in office is assumed to be weak. According to the common pool model two main policy implications are extracted. The first is that the theory of intertemporal consumption smoothing cannot explain the emergence of fiscal deficits, as the latter occur even in periods where there are no reasons for smoothing. The second is that despite the delays in the implementation of fiscal adjustment, deficits will be reduced or even eliminated, but only after they have reached a certain level. The framework of common pool adjustment issues is also applied in the field of the local interest groups. Doi and Iori [36], examine the role of regional or local interest groups. In their model the government is assumed to be weak in imposing spending cuts

but not in affecting the composition of public spending as in the models of Velasco [11,12]. As a result any cut must come from an agreement between the government and the local authorities. The empirical investigation in Japan during the 90s confirms the predictions of this model relative to the weakness of the government.

Usually the literature of political economy of fiscal reforms focuses on whether a reform is successful or not. Lavigne [37], introduces the concept of need for the fiscal adjustment. Lavigne argues that especially in developing countries flexible institutions strongly enforce the fiscal reforms, without undermining the democratic tradition. Mierau and Jong-A-Pin [38], empirically examine a relevant issue, namely the political factors that affect the probability a decision for a fiscal adjustment will be taken. They examine a sample of 20 OECD countries covering the period 1970-2003 and distinguish between rapid and gradual adjustments. Their results indicate that the decision for a rapid adjustment is less likely when elections are close while the decision for a gradual adjustment is more likely when broader policy reforms are applied at the same time.

Veiga [28], empirically studies the effects of political fragmentation and political instability on the timing of adjustment. His sample contains ten countries, most of them from South America and 27 stabilization programs, covering the period from 1959 to 1991. The statistical results indicate that higher fragmentation leads to a larger delay in the adoption of an adjustment program. Consequently, countries with proportional electoral systems tend to have higher political fragmentation and thus larger delays to implement adjustments. Mulas-Granados [39], focuses on the political factors that influence the decisions for the composition of the adjustment strategies in European countries. Ideology is the most critical one and able to explain why European countries followed non-optimal fiscal adjustment policies, namely adjustments based on revenue increases. Tavares [40], relates ideology with the persistence of fiscal adjustment. He examines a sample of OECD countries and confirms the partisan hypothesis. Left wing governments raise taxes to reduce deficits while right wing governments cut spending. There are also cases in which left wing governments cut spending while right wing governments increase taxes. When this occurs, governments signal commitment to the

adjustment program and as a result they gain credibility. A policy that directly hurts the voters of a government is a clear message of determination in the adjustment program. As Gupta, Clements, Baldacci and Mulas-Granado [41], stress, there are six determinants of persistence to reforms. First, the size of the needed adjustment does not have a negative impact. Second, the higher the budget deficit at the beginning the less likely is for the adjustment to be successful. Third the negative past experience has negative current and future effects. Fourth, the systematic effort for collecting revenues has a positive impact. Fifth, the access in external resources of finance has a negative effect and sixth, there is a negative effect of economic growth on the persistence.

3.2.1 The impact of government system

According to the weak government approach, political parties representing voters with heterogeneous preferences have strong incentives to avoid the cost of fiscal adjustment policies. Thus, there must be some political factors that increase or decrease the ability of the government to implement unpopular fiscal policies. Grilli, Masciandaro and Tabellini [19], consider government support in the legislature and its durability as measurements of the weakness of the government. A crucial determinant of the weakness of a government is also the number of decision makers that participate in it.

The conventional wisdom takes for granted that the larger the number of the decision makers the less they will internalize the cost of their decisions and thus the more difficult it will be to implement a fiscal adjustment. Veto power in the members of coalition governments is an additional reason to believe that coalition governments may experience a lot of difficulties in applying tight fiscal policies. Roubini and Sachs [42] find evidence that that coalition governments with many parties involved, tend to create larger fiscal deficits or are inefficient in adopting the proper adjustments in order to reduce an already large fiscal deficit, due to the veto power of the partners in coalition. Edin and Ohlsson [43], reexamine the data of Roubini and Sachs [42], by dividing the governments in two types, namely majority governments and minority governments. They argue that the negative effects of a coalition government on the budget deficit are due to the fact that some coalition governments that, despite they are coalition

governments, at the same time they are also minority governments. The latter are indeed weak to reduce the deficits. De Haan and Sturm [44], use a sample of countries of the European Union during the decade of 1980 in order to test the weak government for coalitions but they do not find empirical support for the models of Edin and Ohlsson [43], and Roubini and Sachs [42]. A similar conclusion holds for De Haan and Sturm [45]. On the other hand, Artés and Jurado [46], showed that lower deficits are driven mainly by single-party majority governments' capacity to raise more revenues, a finding which is in line with that of Roubini and Sachs.

Kontopoulos and Perotti [47], make a useful distinction relative to size fragmentation. They distinguish two dimensions of it, namely the number of parties in the government and the number of spending ministers, which was a new dimension. They find strong empirical support that the number of spending ministers is a determinant of government expenditure, as the more the spending ministers the higher the expenditures of the government. This evidence confirms the negative impact of high number of decision makers in the ability of a government to keep deficits low, thus confirming weak government hypothesis. Despite the significance of spending ministers in the determination of public deficit, they find no empirical support for the other dimension of size fragmentation, namely the number of parties in the government coalition. De Haan, Sturm and Beekhuis [48], confirm neither the empirical evidence of Roubini and Sachs [43], nor the evidence of Kontopoulos and Perotti [47]. Volkering and de Haan [49], made a similar distinction with Kontopoulos and Perotti [47], when it comes to size fragmentation. The number of spending ministers is proved to be significant as a determinant of budget deficit while the number of parties in office has a less significant effect. Elgie and McMenamin [50], extend the research of Volkering and de Haan [49], by adding in the sample ten non-OECD countries. They confirm the empirical evidence of the latter without the extra ten non-OECD countries. However, when these countries are added in the sample a major difference is raised, as size fragmentation did not play a significant role anymore. This result is interpreted by them as indication that the effects of fragmentation are very sensitive to the composition of the sample. A very interesting aspect of weak government hypothesis is presented by De Haan, Pin and Mierau [51], Using a sample of EU countries for the 1984-2003 period, they find indications that

budget institutions can contribute in the reduction of deficits in countries where in office are government coalitions with large ideological differences. Specifically, they find that budgetary institutions become statistically significant in case of coalition governments with strong ideological differences, thereby mitigating the impact of political fragmentation.

Spolaore [52], considers three alternative government systems, namely the cabinet (one decision maker with full control), the checks and balances system (one decision maker but the rest have veto power) and the consensus system (full agreement by all agents is required) and studies their effects on the adjustment process. He finds that systems of government that are based on consensus lead to inefficient adjustment policies, as they fail to adjust when the option of adjustment is the efficient option. Close to the issue of the government system is the issue of the voting system. Julio [53], notes the impact of voting type as a determinant of adjustment timing, by examining the median voter, the relative richer voter and a policy maker representing the median voter but at the same time the government implements a social transfer program to support the relative poorer. He concludes that fiscal adjustments are not always late of optimal, but they may occur sooner depending on the preferences of the policymaker.

4. INSTITUTIONAL EFFECTS

The political effects on government debt that arise from conflicts among agents with heterogeneous preferences, discussed above, take place under a specific institutional framework. This framework implies certain restrictions to agents as they are obliged to follow them. Perotti and Kontopoulos [3], refer to procedural fragmentation in order to express the way that political decision makers interact with each other. It is measured as the nature of budget negotiations and the expenditure limits. Eslava [13], considers two types of budgetary institutions, namely numerical targets and procedural rules. Thus, budget negotiations could be classified as a procedural rule and expenditure limits as numerical targets. Kontopoulos and Perotti find evidence which imply that neither budget negotiations nor expenditure limits are significant determinants of deficits. De Haan and Sturm [44] develop the exact opposite argument. Using a sample of EU countries they find empirical evidence that institutional framework affects the level of debt.

Maltritz and Wüste [54], examined a group of 27 European Union countries and showed that the existence of fiscal rules reduces deficits significantly, a result which is supportive of institutional effects. Similarly, Mawejje and Odhiambo [55], support the view that political elites affect the level of budget deficits when budget institutions are not well developed to restrict their influence, a finding which is in line with Eslava [13].

Alesina, Ardagna and Trebbi [35], empirically confirm the conventional wisdom that institutional constraints, like veto power, have a negative impact on the probability of fiscal adjustment. Lavigne [37], finds evidence consistent with the arguments of Alesina, Ardagna and Trebbi. He concludes that budgetary institutions and institutional framework in general must be flexible, especially in cases of reforms. When it comes to developing countries, he supports that institutional flexibility is of vital importance as it enforces fiscal reforms and protects democracy. Elgie, McMenamin [50], consider the older democracies as more institutionalized and argues that the older a democracy is the higher the possibility that legislative fractionalization will negatively affect the budget surplus.

The participation in a supranational economic union, like the European Union, may demand the adoption of certain fiscal institutions that imply specific procedures and restrictions. The latter impose upper limits for budget deficits, in other words deficit ceilings, thus imposing restrictions on the ability of the current government to use the budget deficits strategically. Krogstrup and Wyplosz [56], extend the model of Velasco [12], in order to examine the effects of deficit ceilings coming from supranational arrangements. First, they adopt the probability of productive public spending and second, they consider two countries. Thus, the common pool problem is extended towards an international economy environment. The model predicts that despite the fact that international ceiling implies less deficit bias, they cannot eliminate it. The main reason is that by setting a deficit ceiling, we do not distinguish between productive and unproductive public spending. Consequently, the ceiling may be an obstacle for productive public spending. To overcome this issue, a national institutional framework is needed, complementary to the supranational one. Eichengreen and Wyplosz [57], focus on an important European fiscal institution, namely on the Stability Pact. They examine the political costs to implement the rules

and restrictions it implies. Politicians that will implement Stability Pact have to choose how to spend their political capital. The first choice is to proceed to fiscal adjustments, if needed, so that they avoid the embarrassment of a fine. The other choice is to implement reforms in labor markets. In that sense implementation of fiscal discipline is costly because politicians will not have enough political capital left for non fiscal issues.

Electoral institutions play a major role, among others, in the composition of public spending. Milesi-Ferretti, Perotti and Rostagno [58], distinguish between proportional electoral systems and majoritarian systems. The former allow the representation in the legislative of more interests, while the latter allow the representation of limited local interests. They also distinguish between two types of public expenditures, namely transfers and public good spending. The researchers argue that transfers are the social analogue of spending while public good spending is a geographical analogue of spending. Their model predicts that the institution of the proportional electoral system tends to spend more on social transfers, while majoritarian electoral institutions tend to spend more on public goods. Jurado and León [59], show that the geographic distribution of social recipients moderates the impact of electoral institutions on social provision. Specifically, they find evidence that majoritarian systems increase the provision of social spending when recipients are concentrated in certain regions. Further, De Haan, Pin and Mierau [51], examine the role of budgetary institutions in a political environment which is characterized by ideological differences (political fragmentation). They use a sample from EU countries, during the 1984-2003 period. Their empirical findings suggest that budgetary institutions can contribute largely to reduce deficits, under the condition of a high political fragmentation in the coalition in office. On the contrary, the impact of budget institutions on deficits is not affected by size fragmentation.

5. ELECTORAL EFFECTS OF FISCAL REFORMS

Having examined the literature relevant to the conflicts of agents with heterogeneous preferences and the institutional framework under which the conflicts take place, a main question arises. Are fiscal adjustments always politically costly? Obviously the expansionary (or not expansionary) character of the reforms plays

a major role in its electoral consequences. Ardagna [60], studies the factors that determine the success and expansionary character of fiscal stabilizations. He finds that the success of a fiscal adjustment depends mainly on the size of the cuts. On the other hand, there is no evidence that loose monetary policy or currency devaluations are important elements of the success and expansionary nature of the fiscal reform. Alesina, Perotti and Tavares [61], find empirical evidences that fiscal adjustments are not always associated with recessions. They argue that in successful reforms two thirds of the reduction of the deficit comes from reduction in spending and only one third comes from increases in revenues. European experience reveals that this is not always the case as Gros and Alcidi [62], stress. They note that past experience in the continent shows that a large fiscal adjustment takes at least five years to be concluded and during this period the debt to GDP ratio increases. Thus, the success or failure is revealed after a long time, which obviously implies political costs. Data also reveals that Mediterranean countries tend to adjust their fiscal deficits by increasing the revenues, while countries of the north adjust through expenditure cuts, which implies a higher probability for a non-expansionary adjustment, thus economic and politically costly. Gros and Alcidi [62], also find evidence that governments that apply fiscal reforms have a high possibility to be rewarded by the voters. Alesina, Carloni and Lecce [63], confirm the hypothesis of the electoral reward. They find evidence that governments which apply fiscal adjustments do not face a high electoral cost. Their interpretation in this result is that it is a possible indication of reverse causality. The reverse causality argument states that fiscal adjustments can be implemented only by strong and solid governments thus these governments will also be reelected with high probability anyway.

If there are strong indications that fiscal adjustments can be persistent and successful and that their electoral cost is not as high as conventional wisdom would suggest, then why are politicians unwilling to implement fiscal adjustments? Alesina, Perotti and Tavares [61], stress the issue that reforms negatively affect interest groups whose political power is higher than their voting share. Alesina and Ardagna [64], reject the explanation that political cost is the reason for the unwillingness of politicians to implement fiscal adjustments and provide three alternative arguments, namely the risk aversion

character of politicians, the increase in income inequality and the role of lobbies, especially of labor unions and unions of retirees.

6. CONCLUSIONS

This paper has reviewed the literature of political explanations on budget deficits and fiscal adjustments interpreting the political incentives of fiscal decisions and considering the institutional environment under which fiscal policy is applied. Political models of budget deficits imply that the decision-making process is under fragmentation. Consequently, the literature is distinguished initially in two broad categories, namely effects of conflicts among agents with heterogeneous preferences and institutional effects. At the next stage the category of conflicts among agents is further distinguished in two approaches. The first approach (political stability approach) is concerned with issues of strategic use of debt while the second (weak government approach) is concerned with issues of fiscal adjustments.

The existing literature confirms that political instability leads to the strategic use of debt on behalf of the party in office and consequently leads to higher deficits. Higher conflicts among interest groups with heterogeneous preferences can lead to the postponement of the essential fiscal adjustments and thus deficits are higher. The literature relative to the weak government hypothesis confirms that the higher the fragmentation, namely the more the parties in the coalition government or the more the spending ministers, the higher the conflicts among agents and thus the more possible it becomes for high deficits to appear.

Institutional framework also plays a major role in the fiscal outcomes. Institutional flexibility is proved to contribute positively to the success of fiscal adjustments. In cases of high political fragmentation in the coalition in office the empirical findings suggest that budgetary institutions can contribute largely to reduce deficits. When it comes to the issue of electoral consequences of fiscal adjustments, there are strong indications that voters are fiscally conservative and that stabilization policies are not always politically costly. However, interest groups with political power stronger than their voting share and the risk aversion character of politicians imply that adjustment is usually delayed.

Although the present analysis has shed light on crucial political determinants of fiscal policy, several issues remain open for future research. First, additional research could be useful relative to the impact of the government system on the financial decisions and the institutional framework that minimizes the delays in the implementation of the fiscal adjustments. Second, since the empirical results of specific political effects on debt are contradictory, reverse causality effects and sensitivity effects should be also tested extensively in the future.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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