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**THE POLITICAL ECONOMY OF FISCAL ADJUSTMENTS
IN THE EUROPEAN UNION**

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ABSTRACT

This paper explores via a panel of fifteen European Union (EU) Member States first what explains the composition of the budget and, secondly, why different countries chose different strategies of fiscal adjustment over the 1960-2000 period.

Results confirm the hypotheses that fragmentation of decision-making, ideology of the party in government, and closeness of elections affect fiscal policy regarding the composition of the public budget and the different types of adjustment strategies pursued to consolidate the budget.

Moreover, evidence from the nineties suggests that the European Monetary Union (EMU) has changed the relative importance of these variables as explanatory factors of fiscal outcomes. During this period, the ideology of the party in government has become the most powerful predictor of fiscal policies and strategies of adjustment. But EMU seems to have affected the preferences of socialist governments. In the new context, they prefer to use balanced budgets to finance supply-side policies of capital formation and to maintain public employment, and are reluctant to cut these expenditures even at the expense of public consumption and transfers.

1. Introduction*

It has become usual in the last decade to affirm that economics matter more than politics in Western capitalist democracies.

In a globalizing world, where capital flies freely in international markets looking for the best rate of return, and where trade liberalization is guaranteed by different regional and international agreements, sound monetary and fiscal policies to increase competitiveness and attract investors are a “must”, and this makes “go it alone” approaches to economic policy-making at least difficult¹.

Very recently, the Maastricht convergence criteria to qualify for the third stage of European Monetary Union (EMU), and the limits established by the Stability and Growth Pact, were assumed by many as the triumph of neoclassical understanding of economics, and was interpreted by most as the definitive end of partisan economic policies in Europe, which culminated in the victory of economics over politics.

Relevant scholars in the field of political economy have recently challenged some of these ideas and have demonstrated that in the global economy partisan politics still played an important role in developed countries, during the eighties and the beginning of the nineties (Boix, 1996; Garrett, 1998).

But the European case in the nineties seems more complicated to oppose. The recent process of monetary union in Europe, with the strict supranational monitoring of the

* Different versions of this paper have been presented in different seminars and workshops at Columbia University, New York University, the European Commission, the Juan March Institute, the Social Science Research Council and the Fundación de Estudios de Economía Aplicada (FEDEA). I wish to thank the European Commission, Cabinet Solbes, and the DG ECFIN for access to their economic databases, and Roberto Perotti for providing the data on “coalition size” and “cabinet size”. I also thank the Juan March Institute, La Caixa Foundation, and the Social Science Research Council for financial support. I acknowledge comments received by all participants in those seminars, and I am especially grateful for their important insights to Adam Przeworski, Carles Boix, Roberto Perotti, Alex Segura-Ubiergo, Michael Gilligan, Carlos Martínez-Mongay, Marco Buti, J.A. Herce, and Luis Planas. The usual disclaimer applies.

¹ “Provided that the Maastricht criteria are kept to, there remains very little leeway for single nations to “go it alone” in their fiscal policy.” (Rees, 2000: 167)

European Commission, has made differentiated economic policies even more difficult, and strongly suggests that one must accept economic policy convergence in the EU as a fact.

The truth is that in the European Union, monetary policy is in the hands of a supranational independent body (the European Central Bank) and national fiscal policies are constrained by the limit of 3% GDP deficit (with a tendency to converge towards balanced budgets so that deficits can be used to respond to asymmetric shocks).

Nevertheless, this study argues that even in this very restrictive context, national governments can still find ways to formulate differentiated fiscal policies. In this constrained but still free choice, politics matter at least as much as economics.

It is undeniable that the recent dramatic and fast reduction of budget deficits was embraced by all types of governments across Europe, and was publicly justified as the painful road leading to a better economic future. The consolidation effort to “pass the Maastricht exam” was such that the average budget deficit for the whole European Union was reduced five percentage points (from 6% to 1% of European GDP) between 1993 and 1999, while the debt to GDP ratio was reduced from a maximum level of 72% in 1996 to 64% in 2000. Some countries really made a tremendous improvement to qualify for the third phase of EMU. For example, in only four years between 1993 and 1997, Sweden reduced its public deficit by 11.4 percentage points of GDP, Finland by 7.1%, Italy by 6.8%, and United Kingdom by 6%. The Greek effort, with a reduction of 9.2 percentage points, was not enough to qualify with the rest of candidates². And the objective in all EU Member States is to achieve close to balanced budgets between 2001 and 2002.

But convergence in fiscal outcomes does not mean convergence in fiscal policies. Not every country chose the same means to achieve the common objective. In fact, this

² The public deficit reduction in the rest of the EU Member States was as follows: Belgium 5%, Spain 4.7%, Portugal 3.6%, France 2.8%, The Netherlands 2.6%, Austria 2.7%, and Germany 0.7%. Among the countries that already fulfilled the deficit criteria in 1993, because they consolidated their budgets in the eighties, Denmark improved its budget balance by 3.5%, and Ireland by 3.6%. Luxembourg maintained its superavit during the whole period. (EC, 1998: 93)

generalized trend towards balanced budgets suddenly turns into remarkable divergence if one looks at the ways in which every country decided to reach the 3% limit.

Meanwhile some countries like Spain, Austria and France waited until the last two years to reduce their deficit rapidly, others like Greece, Sweden and the Netherlands maintained their consolidations during the whole decade of the nineties. These different choices in the strength, the timing and the duration of fiscal adjustments, widened even more when one looks at the composition of these adjustments. Portugal increased its expenditures and, in order to consolidate its budget, it increased its revenues even more. Greece, Belgium, France and the United Kingdom also increased their revenues, but they reduced their primary expenditures by a relatively smaller amount. Italy, Finland, and Sweden followed a similar strategy, but gave more weight to cuts in primary expenditures. And finally, Denmark, Germany, Spain, Ireland, and the Netherlands decided to reduce both their public revenues and their public expenditures³.

Therefore, fiscal adjustments can vary in two dimensions: their (1) duration and their (2) composition. Consolidations can last longer or shorter, they can be revenue-based or expenditure-based. There can be switching and mixed strategies, where governments may decide to wait before cutting politically sensitive items such as transfers and subsidies. And the macroeconomic consequences of these different types of adjustment are not equivalent.

It is my purpose in this paper to investigate the second dimension⁴, and more concretely, to answer the two following questions:

-What affects the composition of the budget during both episodes of fiscal adjustment and fiscal expansion, taking into account every single item of the budget?

³ See EC (1998: 108).

⁴ The first dimension (duration of fiscal adjustments) has already been studied by Maroto and Mulas-Granados (2001). In that study they found that duration of fiscal consolidations in the EU during the last forty years have been very dependent on the accumulated level of debt, the quality of the adjustment (more expenditure-based adjustments tended to last longer), the fragmentation of the cabinet, and the electoral calendar (more fragmented governments and closeness to elections were associated with shorter durations).

-What explains that during episodes of fiscal adjustment, different countries follow different strategies of adjustment?

The literature on fiscal policy is abundant. From the works of the Italian School of Public Finance in the nineteenth century⁵ until the present a lot of work has been done. More recently, scholars have concentrated on a variety of issues related to fiscal policy such as the effects of electoral systems and fiscal institutions on fiscal policies⁶; the importance of ideology to influence some components of the budget⁷, and the level of debt⁸; the non-Keynesian effects of a certain type of fiscal consolidations⁹; and the importance of the composition of fiscal adjustments for the likelihood of their success¹⁰.

To date the only study that has partially addressed the first question is that of Perotti and Kontopoulos (1998). On a panel of OCDE countries from 1970-1995 they find that both cabinet ideology and fragmentation of decision-making affect the composition of the budget, mostly with respect to transfers. Nevertheless, their article bases its conclusions on data until 1995, leaving unexplored the period of strongest fiscal consolidations in the European Union that led to EMU in 1999. And most importantly, it does not address the second question of what determines the choice of a certain type of fiscal adjustment strategy, in countries attempting to balance their budgets.

Therefore this paper is conceived to fill this gap in the literature, by answering what explains the composition of the budget first, and secondly what explains the different strategies of adjustment and the composition of these adjustments adopted by EU Member

⁵ See Buchanan (1960).

⁶ See Grilli, Masciandaro and Tabellini (1991), Halleberg and Von Hagen (1997), and Milesi-Ferretti, Perotti and Rostagno (2001).

⁷ See Boix (1996, 1997), and Garrett (1998).

⁸ See the classical work by Roubini and Sachs (1989a, 1989b). For a literature review on the political economy of budget deficits, see Alesina and Perotti (1995a), and Persson and Tabellini (1999).

⁹ See McDermott and Wescott (1996).

¹⁰ See Alesina, Perotti and Tavares (1998).

States in periods of fiscal consolidation, with a special focus on fiscal adjustments in the nineties.

I do it from a political economy perspective, with reference to the institutional, ideological, and electoral approaches that have traditionally tackled this issue. In a positivist understanding of science it should be possible to decide in an empirical manner if these political factors did in fact have any effect on the choice of fiscal policies and adjustment strategies. Although theories cannot be refuted by means of empirical testing, the explanatory power of competing hypotheses can be discerned¹¹. Therefore, driven by empirical results, I pay special attention to the role that the government's ideology has on fiscal outcomes, because if politics was already defined in the thirties as the decision over "who gets what, when, and how" (Laswell, 1936: 19), it is clear that fiscal policy and the choice of consolidation strategies are nothing more than politics.

Results confirm the hypotheses that fragmentation of decision-making and ideology affect fiscal policy, while the closeness of elections has also a remarkable impact.

More fragmented governments tend to spend more, to increase transfers and if forced to consolidate the budget, they prefer to follow revenue-based adjustment strategies. For different reasons, socialist governments prefer bigger budgets, though not necessarily unbalanced budgets. They tend to increase transfers, the government wage bill and public investment. This is why in periods of fiscal adjustment, more leftist governments also prefer revenue-based strategies. Moreover, evidence from the nineties suggest that EMU has forced socialist governments to switch their preferences on the expenditures' side. In the new context, they prefer to use revenues from direct taxes to achieve balanced budgets that allow them to finance publicly supply-side policies of capital formation, and to maintain public employment. When forced to adjust they are reluctant to cut these expenditures even at the expense of public consumption and transfers.

¹¹ See Quine (1963) and Harding (1976).

The paper is structured as follows. Next section draws a general picture of fiscal outcomes in the EU during the last decades, and shows that a lot of variability in fiscal policies can be found despite of common trends. Section 3 explores the factors that explain the mentioned variation in fiscal policies, and that have affected the composition of public budgets across Europe between 1970-2000¹². Section 4 defines different strategies of fiscal adjustment and tests whether the same variables that explain the composition of the budget during adjustment and non-adjustment years, also determine the strategy of fiscal adjustment and its composition during episodes of fiscal consolidation. Finally, section 5 summarizes the main findings and presents some conclusions.

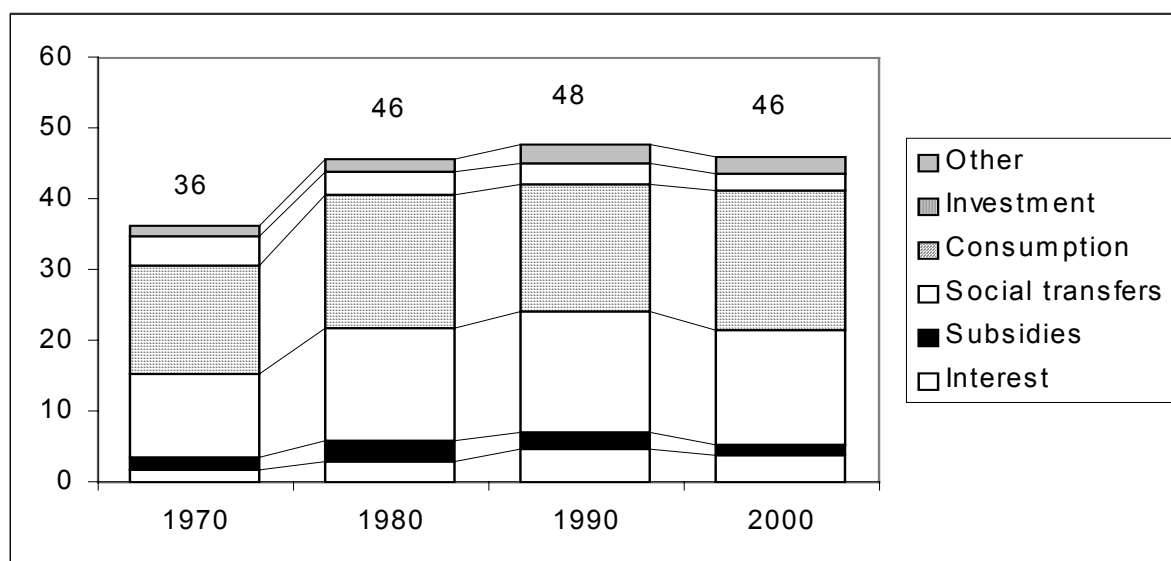
2. Fiscal Policies in the European Union, 1970-2000

When one looks at the overall record of fiscal outcomes in the last decades for the fifteen EU Member States, it is very easy to draw a general picture of common fiscal policy developments for the whole European Union.

As can be observed in the graph below, fiscal policy during the past thirty years has been characterized by a tremendous increase in public expenditures.

¹² To dedicate a section to this more general aspect has a dual objective: to avoid the selection bias that a single study of fiscal consolidation episodes would have caused; and to provide clues for possible determinants of the same budgets' composition during fiscal adjustment years.

Figure 1. *The Structure of Public Spending in the EU, 1970-2000 (%GDP)*

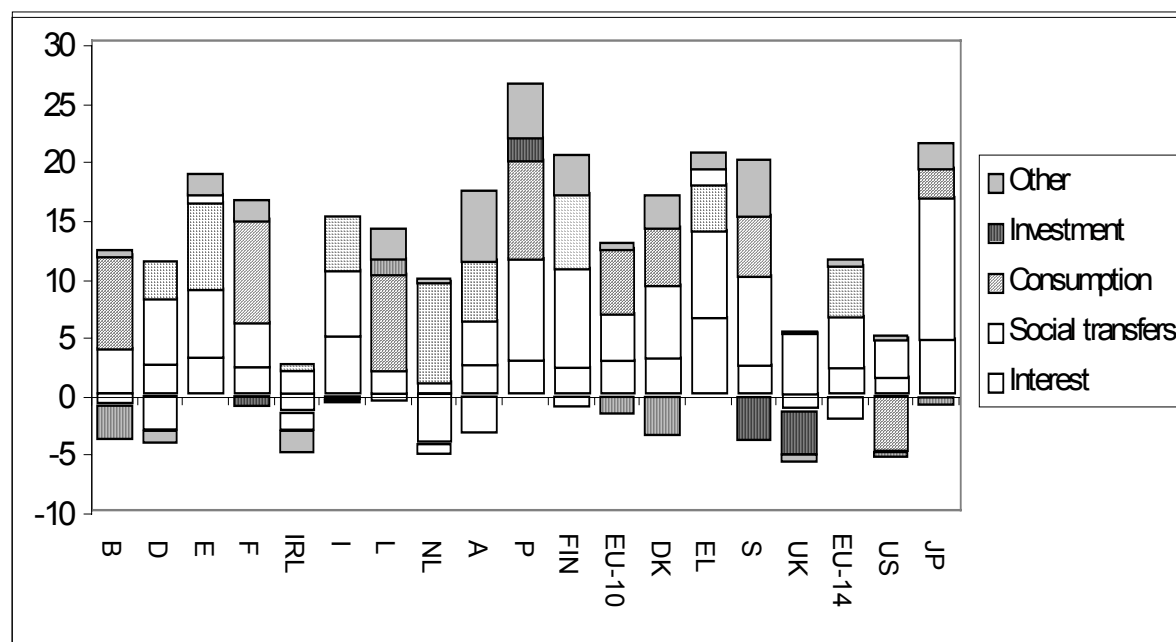


Source: Commission Services (EC, 2000b)

Public expenditures of general government in the European Union rose from 35% of European GDP in 1970 to a peak of 53% in 1993, basically due to expansion of public consumption and social transfers, associated with the Welfare State. In 2000 they have declined to about 46% of GDP. But this means that the size of the European public sector is still 13 percentage points of GDP higher than in the US and 20 percentage points of GDP higher than in Japan.

This general picture in the composition of public expenditures in the European Union, gets more complicated when variation in the composition of public expenditures is disaggregated by Member States.

Figure 2. *Changes in the Components of Government Spending, 1970-2000 (%GDP)*



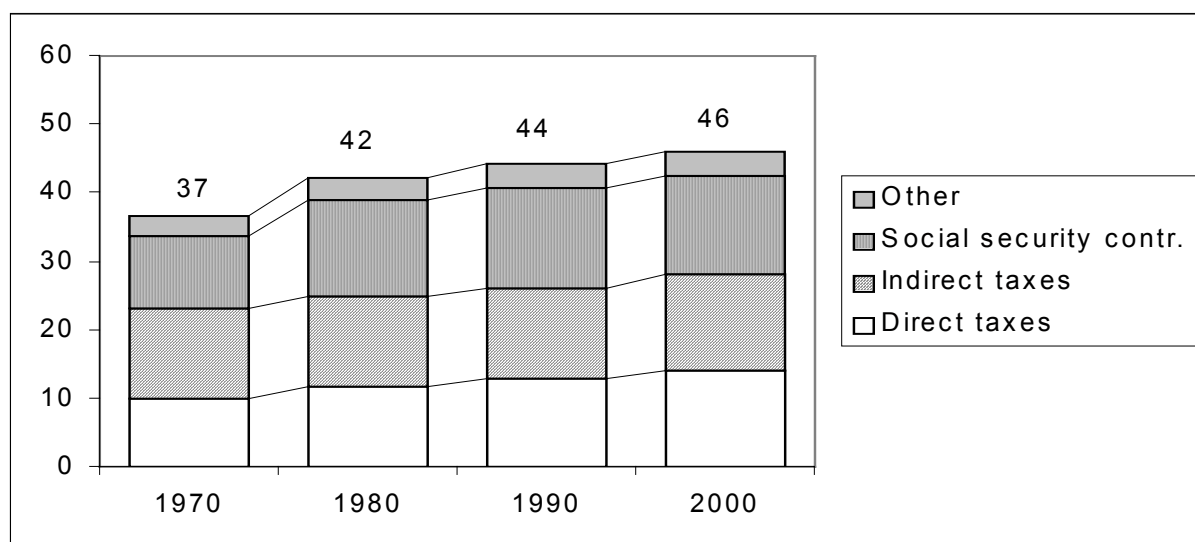
Source: Commission Services (EC, 2000b)

In the last thirty years, some countries like the Netherlands, Portugal, Belgium and France have increased their public consumption expenditures in around ten percentage points of GDP, while other countries like Germany, Ireland or the UK have increased them only between one and three percentage points. Variation in transfers expenditures is also very significant, with countries such as Greece, Portugal, Sweden and Finland that have increased their transfers around eight percentage points, while others like Luxembourg, Ireland or France have only increased these expenditures by three percentage points of GDP¹³. Finally, as most European economies have reached very high levels of development, the share of GDP dedicated to public investment has been generally reduced in the last three decades. Only, Spain, Greece, Portugal, UK and Luxembourg have increased their share of GDP dedicated to public investment between 1970 and 2000.

¹³ Belgium has even decreased the share of their transfers to GDP.

In order to finance the strong growth of public expenditures, public revenues in the EU grew from 35% in 1970 to a peak of 46% in 1999. They were expected to decrease only from 2000 on. The increase was based on higher taxes on labor. Both direct taxes and social contributions increased by 3% of GDP. On the contrary, indirect taxes fell by six percentage points during this period.

Figure 3. *The Structure of Government Resources in the EU, 1970-2000 (%GDP)*



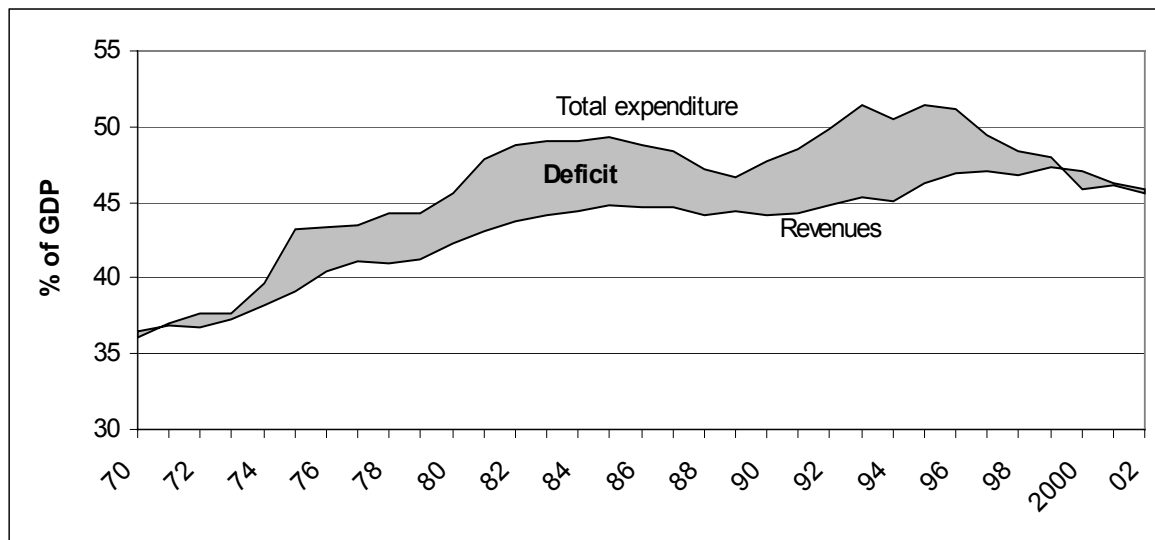
Source: Commission Services (EC, 2000 b)

Nevertheless, the increase in public revenues did not run parallel to the increase in public expenditures, and then it was not sufficient to balance the budget. As a consequence, large and persistent deficits arose, that had to be financed issuing debt.

This general behaviour of fiscal policies around Europe made public deficit in the EU remain above 3% from 1975 on. Public deficit reached its maximum in 1993 after the 1992-93 recession, recording 6% of GDP. These persistent deficits led to a rapidly increasing government debt, which jumped from 30% of GDP in the 1970s to a maximum of 72% in 1996. Public debt in the EU still remains at an average of 64% of GDP (with Belgium,

Greece and Italy over 100%). Under such an unsustainable path, the Maastricht convergence criteria forced a strong fiscal consolidation in the European Union, which achieved a deficit reduction of 5 percentage points between 1993 and 1999.

Figure 4. *General Government Expenditures, Revenues, and Borrowing in the EU, 1970-2002*



Source: Commission Services (EC, 2000b)

Finally, data show that during the last 30 years there was a persistent tendency to run pro-cyclical fiscal policies. Instead of reducing government deficits during periods of economic growth, governments undertook expansionary policies. This impeded counter-cyclical smoothing, because governments were forced to reduce deficits during recessions to prevent deficits and debt spiraling out of control. “Fiscal policies have thereby amplified the effects of cyclical swings in a pro-cyclical way rather than having the desired stabilizing effect” (EC, 2001: 7). This is especially illustrative of the rigidities of the budget, and most importantly, it is an example of how political leaders find it easier to justify a fiscal adjustment during bad times.

Despite the previous general picture of aggregate convergence, fiscal policies in the EU have significantly varied among different Member States. In the last decades, some countries decided to dedicate very large shares of their GDP to public provision of goods and services, and the Welfare State, while others preferred to limit the presence of the public sector in the economy. Table 1 below illustrates very clearly this variation.

Table 1. *Average Public Revenues, Expenditures, Deficit and Debt, 1970-2000 (%GDP)*

	Public Revenues	Public Expenditures	Public Deficit/Surplus	Public Debt
Austria	45.7	48.3	-2.17	45.24
Belgium	47.3	53.0	-2.55	100.14
Denmark	52.6	52.9	-0.50	46.85
Finland	46.1	44.7	1.90	23.84
France	45.8	48.0	-1.98	37.16
Germany	44.5	46.6	-2.05	39.37
Greece	30.3	37.3	-6.26	61.74
Ireland	35.7	44.4	-5.26	74.39
Italy	38.5	46.7	-8.10	82.40
Luxembourg	45.5	44.6	2.43	9.04
Netherlands	48.1	47.9	-2.76	62.50
Portugal	32.3	36.6	-4.33	50.83
Spain	32.7	35.4	-2.90	35.95
Sweden	56.5	58.0	-0.75	49.98
UK	39.0	41.6	-2.40	53.94
EU-15	42.7	45.7	-2.53	51.67

Source: Own elaboration

The previous variation in fiscal developments among different European countries has been also translated into remarkable variation in the timing, length and composition of fiscal adjustment episodes. At different moments in time, countries have found that their fiscal imbalances were unsustainable in the medium and long-run, and have decided to correct those imbalances and approximate public revenues and public expenditures. When they have done so, some have chosen to reduce their budget deficit gradually through successive short term fiscal consolidations (like Finland or the Netherlands), while others preferred to pursue fewer but longer adjustments (like Greece or Ireland).

Table 2. *Frequency and Duration of Fiscal Adjustments in the EU, 1970-2000*¹⁴

Episodes of Fiscal Adjustment in the EU, 1970-2000	
Austria	1992-93; 1995-98
Belgium	1977-78; 1982-85; 1987-88; 1993-98
Denmark	1983-87; 1992-93; 1996-97; 1999-00
Finland	1971-72; 1975-77; 1981-82; 1984-85; 1988-89; 1995-96; 1998-99
France	1976-77; 1980-81; 1996-98
Germany	1982-83; 1989-90
Greece	1974-75; 1982-83; 1986-88; 1991-92; 1994-00
Ireland	1976-77; 1983-85; 1991-95; 1996-99
Italy	1976-78; 1983-84; 1991-94; 1997-00
Luxembourg	1977-78; 1982-86; 1996-97
Netherlands	1972-73; 1977-78; 1985-86; 1988-89; 1991-94; 1996-97; 1999-00
Portugal	1969-70; 1982-84; 1986-87; 1992-93; 1995-98
Spain	1992-93; 1996-00
Sweden	1976-77; 1983-84; 1986-90; 1996-99
UK	1969-70; 1976-78; 1980-82; 1988-89; 1996-00

Source: Own elaboration

Those episodes of fiscal adjustment not only varied in the strength and duration of the consolidation strategy, but they also greatly varied in the composition of the adjustment. As can be seen in Table 3 below, just by looking at the composition of fiscal adjustments in the nineties substantial variation can be found. While some countries decided to follow revenue-based strategies, others decided to follow expenditure-based consolidation strategies, which also varied in the degree of current and capital expenditures that were diminished. Finally, a group of countries switched their strategies in the middle of the fiscal consolidation episode, apparently because the initial strategy was not sufficient to fulfil the Maastricht criteria on time.

¹⁴ For the purpose of this table, fiscal adjustment years are those in which the cyclically adjusted budget balance increased by more than 1% of adjusted GDP from the previous year. In Section 4.1 of this paper, a further discussion of the different definitions of fiscal adjustment episodes is presented.

Table 3. Composition of Fiscal Adjustments in the EU, 1990-2000¹⁵

Composition of budgetary consolidation in the 1990s (percentage points of GDP)								
Consolidation period			Change in structural balance	Change in structural revenue	Total	Change in structural primary expenditure		Change in interest payments
						Change in capital spending	Change in current primary expenditure	
Revenue-based retrenchment								
FR	1995 - 97	3.3	2.6	-0.9	-0.1	-0.8	0.2	
GR	1990 - 98	11.8	11.1	-1.0	0.8	-1.8	0.3	
IRL	1990 - 94	2.3	3.0	2.5	0.6	1.9	-1.8	
I	1991 - 97	9.4	6.4	-3.1	-1.0	-2.1	0.0	
P	1992 - 96	3.6	7.4	6.1	0.9	5.2	-2.3	
Expenditure-base retrenchment								
DK	1996 - 99	5.2	0.6	-2.9	-0.3	-2.6	-1.7	
FIN	1993 - 99	4.0	-4.6	-9.5	-0.7	-8.8	1.0	
SW	1994 - 98	10.9	3.0	-7.5	-0.1	-7.4	-0.4	
UK	1994 - 98	6.6	4.2	-2.8	-0.5	-2.3	0.5	
'Switching strategy'								
A	- 1st phase	1995 - 96	1.3	2.3	0.8	-0.4	1.2	0.2
	- 2nd phase	1997	2.2	-0.4	-2.3	-0.9	-1.4	-0.4
B	- 1st phase	1992 - 93	1.7	2.9	0.5	0.2	0.3	0.7
	- 2nd phase	1994 - 96	3.6	1.4	-0.2	0.1	-0.2	-1.9
DK	- 1st phase	1992 - 93	1.4	3.3	1.3	0.1	1.1	0.6
	- 2nd phase	1994 - 97	1.7	1.5	-0.7	-0.8	0.0	0.4
NL	- 1st phase	1991 - 93	4.3	4.2	-0.4	0.0	-0.4	0.2
	- 2nd phase	1994 - 97	1.7	-4.5	-5.4	0.9	-6.4	-0.8
SP	- 1st phase	1992 - 93	-0.3	3.9	2.8	-0.6	3.5	1.3
P	- 2nd phase	1994 - 97	3.5	-1.4	-4.6	-1.0	-3.6	-0.2
EU-11	- 1st phase	1992 - 93	0.7	3.1	1.8	-0.2	2.0	0.6
	- 2nd phase	1994 - 97	3.1	0.7	-2.0	-0.4	-1.6	-0.4

Source: Commission Services (EC, 2000b)

¹⁵ Some adjustment episodes may differ from those presented in Table 2. This is because Table 2 was constructed using data on primary budget balances cyclically adjusted (excluding interest payments), and Table 3 was constructed using data on budget balances cyclically adjusted (including interest payments).

The rest of this paper will explore what political and economic factors explain the mentioned variation in the size and the composition of the budget in general, and during fiscal adjustment episodes in particular.

3. The Composition of the Budget

The composition of the budget is important for two reasons: (1) it implies a political decision over who pays and who receives what in a country, and (2) according to economists, the composition of the budget has macroeconomic effects.

The first aspect is related to the distribution of income and reallocation of resources, while the second aspect is related to the generation of this income and those resources.

The decision over who gets what in a country and who pays to finance the public sector's activity, immediately implies a reallocation of resources. This reallocation effect can be the unintended outcome of public policies not directly conceived to affect the distribution of income, or in many occasions it is the direct result of a carefully designed policy aimed at increasing the degree of equality in the economy¹⁶. The ways in which a more equal distribution of income can be promoted through fiscal policy are almost uncountable. Some countries have, for example, promoted very actively direct transfers of income from public resources to improve the situation of the bottom tier of the income distribution. While others have focused on the top percentiles with highly progressive taxes.

These different approaches do not also reallocate resources, but can also have important growth effects. Based on the Keynesian framework, traditionally economists have expected fiscal adjustments to have a negative impact on aggregate demand, and thus to induce a contraction of the total level of output. Nevertheless, according to McDermott and Wescott (1996), Alesina and Perotti (1995a, 1995b, 1996, 1996b), Alesina, Perotti and

¹⁶ "Fiscal policy-taxation and spending is a government's most direct tool for redistributing income, both in the short and the long-run" (Tanzi, Chu, and Gupta, 1999: 23)

Tavares (1998), Buti and Sapir (1998), and Von Hagen, Hallett and Straucht (2001), fiscal adjustments that rely primarily on spending cuts in transfers and the government wage bill can be expansionary (anti-Keynesian effect) and have better chance of success than do fiscal adjustments that rely primarily on tax increases and cuts in public investment (which tend not to last and are contractionary).

One explanation for this evidence is a demand-side explanation: a serious fiscal tightening increases demand. When public deficits disappear, future tax burden decreases, disposable income rises, interest rates decline due to lower public debt, and altogether make both consumption and investment to rise.

An alternative supply-side explanation affirms that cuts in wage government consumption and in transfers can start a virtuous cycle that make the economy more competitive. Particularly in highly unionized and very open countries (most European countries), the combination of a reduction in public employment (which decreases the demand for labor), and a cut in transfers (which reduces the alternative income available to the unemployed), can reduce the bargaining power of unions. This is supposed to increase the competitiveness of the tradable sector, increasing exports and expanding growth.

Given such remarkable economic and political consequences, the decision on the budget's composition is probably the most important decision that any government takes every year. Thus it is my purpose in the rest of this section to investigate empirically what are the causes of that decision, or in other words, what are the economic and political factors that influence that transcendent choice.

In order to explain the observed variation in the composition of public budgets in the EU member countries, one can base hypotheses on the existing works on the subject. I have grouped this related literature into three groups: explanations that stress the importance of fragmentation of decision-making; explanations that stress the role of ideology in giving priority to some items of the budget over others; and explanations that stress the importance that elections have for every politician when confronted with fiscal policy decisions.

3.1. Fragmentation of Decision-Making

Traditionally, scholars working on the problem of public deficit reduction have focused on different barriers to successful consolidation. All these studies are related to the idea that fragmentation in decision-making is negative for expenditure control, because each group in a majority can push for an expenditure but it only internalizes a part of the costs and distortions of the associated increase in revenues needed to equilibrate the budget (Weingast, Shepsle and Johnson, 1981).

Therefore, the larger the number of actors with a voice in the fiscal decision-making process, the stronger the pressure for more expenditures, and thus the larger the deviation from the optimal fiscal policy. For example, coalition governments or big cabinets (with many spending ministries) would tend to have more problems to undertake a fiscal adjustment.

The relative power of the Finance Minister with respect to the rest of spending ministers is as important as the relative power of spending pressure groups with respect to the government. In both cases, the more power the Finance Minister has and the more centralized the decision-making process is, the better the chances for a successful fiscal adjustment (Perotti, 1998).

According to these theories, one can expect coalition size and cabinet size to be positively associated with higher expenditures and deficits.

3.2. Ideology of the Party in Government

Following the socialist preference for equality, redistribution, social benefits to the unemployed, and interventionist supply-side policies in the form of public provision of human and physical capital (Boix, 1996, 1997), one can expect left-wing governments to expand public expenditures on public consumption, social transfers, public investment and

the wage government bill to pay for an extensive public administration. To finance all these expenditures, one can also expect left-wing governments to tax more and more progressively. Higher public expenditures financed by higher public revenues do not mean that one should expect left-wing governments running deficits more often than right-wing governments. Stronger presence of the State in the economy does not initially have to be associated with unbalanced budgets. Moreover, according to Keynesianism, demand management of the economy requires that surpluses be built during periods of economic growth, to be used for consumption smoothing during periods of recession. Also, to intervene on the supply side of the economy through public investment socialist governments should prefer surplus or close to balanced budgets.

On the other hand, given the preferences of conservative governments for economic efficiency and minimum State intervention in the economy, one can expect their budgets to be balanced and smaller than those of socialist governments. Lower levels of expenditures to GDP will require lower levels of public revenues, and ideally less distortionary taxes of market mechanisms and private incentives.

3.3. Proximity of Elections

Under the assumption of fiscal illusion, voters are supposed to overestimate the benefits of current expenditures and underestimate the future tax burden that will be needed to finance current expenditure¹⁷. And under the assumption of misinformed voters, it will be difficult for voters to fully understand the details of the public budget's composition and its long-term impacts. Thus politicians that give validity to these previous assumptions will be willing to cut taxes and increase public consumption and transfers before elections. Apart from the immediate effects that these policies may have on voters, these policies will also

¹⁷ See Buchanan and Wagner (1977) on fiscal illusion.

launch a fiscal expansion that is likely to increase the rate of growth of GDP and the employment level¹⁸.

These electorally-driven policies are not supposed to affect only the government that takes these decisions, but also the newly elected government. Moreover, in democracies where alternation is common, fiscal policy can be strategically managed by an outgoing government to return to office in the next election, immediately after the electorate has punished the incoming government for medium-term undesirable fiscal outcomes that were really induced by the outgoing government and not by the incoming one.¹⁹

3.4. Empirical Evidence

To test the effect that the fragmentation of the cabinet, the ideology of the government and the proximity of elections have on the composition of the public budget, I run the following regression of time-series cross-national data for the period from 1970-2000, and for the fifteen European Union Member States.²⁰

$$\Delta Y_{i,t} = \alpha_0 + \alpha_1 BBAL_{i,t-1} + \delta_1 \Delta U_{i,t} + \delta_2 \Delta P_{i,t} + \beta_K X_{i,t} + T_t + C_i + \varepsilon_{i,t} \quad (1)$$

¹⁸ See Alesina, Cohen and Roubini (1992), and Alesina and Roubini (1993) on budget electoral cycles.

¹⁹ See Alesina and Perotti (1995a) for comments on distributional conflicts, war of attrition models and the strategic role of debt. An example may serve to illustrate this point more clearly. For example, a conservative government that dislikes the provision of public goods, if it is certain that it is going to be substituted by a leftist spending government willing to expand the provision of public services, may find it strategically optimal to leave less money to spend to the incoming new cabinet. By leaving an important amount of debt, the conservative government would have tied the hands of the leftist government, and would have obliged it to raise new taxes (which is unpopular) and/or not to comply with its electoral program of expansion of public services (which will cause strong disappointment in its electorate). With this strategic use of the debt, the incumbent conservative government would have dramatically increased its probabilities of defeating the new leftist government in the next round of elections, and coming back into government

²⁰ The period does not cover the sixties, as will do the analysis of adjustment strategies in Section 4, because lack of disaggregate data for many countries in the sixties did not allow me to extend also the more general composition analysis to that decade.

Where $\Delta Y_{i,t}$ is the annual change²¹ of any item of the budget cyclically adjusted (to partial out the evolution of the cycle and the interest payments which are out of the control of politicians) in country i during year t ; BBAL is the cyclically adjusted budget balance minus interests (a positive balance is a primary surplus and a negative balance is a primary deficit); ΔU is the change in the unemployment rate; ΔP is the rate of inflation of the consumer price index; X is a vector of four political independent variables (percentage of total cabinet posts held by social-democratic and other left parties; number of parties in government; number of spending ministers in the cabinet; and number of months before next election)²²; T is a vector of time effects; C is a vector of country dummy variables or fixed effects. The use of fixed effects is particularly important in this model since most variables vary more across units than over time.

The specification is identical to the one used by Perotti and Kontopoulos (1998) to explore the same question, though in a different sample. As they explain: “the use of variables representing the economic environment- ΔU and ΔP - has two basic justifications: first, to capture the effects of, say, unemployment on expenditure via unemployment-related subsidies and similar types of expenditures²³; second, to capture the reaction function of policymakers implementing countercyclical policies.” (pp. 15).

By introducing as independent variables coalition size and cabinet size, I also follow Perotti and Kontopoulos (1998) in abandoning the classical “Type of Government” variable²⁴. I have decided not to include as independent variable the electoral system (as

²¹ Annual changes means *first differences*. For example, the annual change of the budget balance in year t , equals the budget balance in year t minus the budget balance in year $t-1$.

²² See the Statistical Appendix for further specification of all variables used in this article.

²³ This type of control is especially important for some sub-items of the budget, where the EU Commission does not perform cyclical adjustments.

²⁴ That variable was first used in this context by Roubini and Sachs (1989a) to study the relationship between “type of governments” and deficit, which they found positively associated. This variable is a multinomial variable with six levels that decrease from single party government to caretaker government. Due to the arbitrariness involved in the construction of such variable, I prefer to use totally objective measures of fragmentation in decision-making, such as number of parties and number of ministers in the cabinet.

some others studies have done), because this is a variable that correlates strongly with coalition size, since more proportional systems tend to produce coalition governments²⁵.

In addition, I have decided to exclude any variable that accounts for procedural fragmentation (such as the existence of spending limits, the nature of the budget negotiations or the existence of strong finance ministers), because they are time invariant and cannot be distinguished from country dummies, and because Perotti and Kontopoulos (1998) have lastly demonstrated that contrary to previous findings, the impact of those variables on fiscal outcomes is rather insignificant.

To study the effect of the same independent variables in the composition of the budget, the same regression has been run several times with the following dependent variables: (1) the government's primary budget balanced cyclically adjusted; (2) revenues of general government cyclically adjusted; (3) expenditures of general government excluding interest payments cyclically adjusted; (4) taxes on income and wealth (direct taxes); (5) taxes on production and imports (indirect taxes); (6) social contributions; (7) final government consumption (public consumption); (8) collective consumption; (9) social benefits in kind; (10) social transfers other than in kind (social transfers); (11) compensation of employees (public wages); and (12) gross fixed capital formation (public investment).

I have done this for the whole 1970-2000 period, and two sub-periods, 1970-1994 and 1996-2000, to avoid the inconsistencies that the change from ESA-79 to ESA-95 generate in the AMECO Database of the European Commission²⁶.

I have followed for all these regressions the methodology suggested by Beck and Katz (1995, 1996) using Ordinary Least Squares with panel-corrected standard errors to deal with panel heteroskedasticity, spatial correlation and serial correlation²⁷.

²⁵ See Halleberg and Von Hagen (1997).

²⁶ To test the importance of the Maastricht Agreement, as a possible better criterium to split up periods, all regressions have been run also for periods 1970-1992 and 1993-2000 (excluding 1995), and results are basically the same than those for periods 1970-1994 and 1996-2000.

Table 5 below, presents the estimated coefficient for all regressions on main aggregates (that is Revenues, Expenditures and Budget Balance). Those results show that between 1970-2000 left-wing governments were not associated with budget deficits, and that they tended to be positively associated with higher revenues and expenditures. The positive impact in revenues was stronger in the nineties, while in that period the positive impact in expenditures became negative, associated with the process of fiscal adjustment in the run-up to EMU. Also, as expected, a growing number of parties in the coalition and a growing number of ministers in the cabinet were positively associated with higher expenditures, though these positive correlations were only statistically significant in the period 1970-94. In the second half of the nineties, as happened with ideology, they changed their signs. The impact of the number of months before next election is remarkable: the longer the time before the next election, the higher the adjusted deficits, and in the period from 1970 to 1994, the closer the election, the higher the adjusted expenditures, which confirms the electoral business cycle hypothesis.

Looking more in depth at the different components of public revenues and public expenditures between 1970-1994, just before the stronger fiscal efforts to qualify for EMU took place, gives a better perspective on the influence that each economic and political factor had on the budget's composition.

²⁷ According to Kaufman and Segura-Ubiergo (2001: 18), "the use of panel-corrected standard errors usually produces rather conservative results, since it tends to increase the standard errors of the estimates. Moreover, the inclusion of dummy variables tends to deflate the statistical significance of the other regressors (Sayrs 1989) (...) this carries some risk that causal hypotheses will be rejected prematurely. On the other hand, it also increases our confidence that results which do emerge as significant are not the consequence of unsound statistical assumptions or inappropriate econometric methods."

Table 5. Composition of the Budget. Main Aggregates, 1970-2000²⁸

	1970- 2000	1970- 2000	1970- 2000	1970- 1994	1970- 1994	1970- 1994	1996- 2000	1996- 2000	1996- 2000
	Var.Budg	Var. Rev	Var.Exp	Var.Budg	Var.Rev	Var.Exp	Var.Budg	Var. Rev	Var.Exp
Budget Balance (-)	-0.182*** (4.18)	-2.805 (1.52)	1.907 (0.96)	-0.177*** (3.21)	-3.917* (1.81)	1.125 (0.46)	-0.725*** (10.47)	-19.723** (2.60)	-1.798 (0.32)
Var.Unemploymt	-0.003 (0.03)	14.114*** (2.91)	10.751** (2.27)	-0.024 (0.23)	10.672* (1.87)	9.086 (1.64)	0.019 (0.11)	2.381 (0.14)	3.011 (0.27)
Var.Prices	0.080*** (3.02)	2.963*** (3.11)	0.207 (0.17)	0.083*** (2.61)	3.217*** (3.21)	0.240 (0.18)	-0.058 (1.60)	-7.913** (2.07)	-0.316 (0.13)
Government-Left	-0.002 (0.79)	0.197* (1.80)	0.114 (0.90)	-0.003 (1.06)	0.070 (0.57)	0.134 (0.86)	0.017*** (3.63)	1.305*** (2.97)	-0.460 (1.47)
Coalition Size	-0.107 (1.19)	1.515 (0.30)	2.166 (0.42)	-0.110 (1.01)	3.143 (0.53)	2.588 (0.45)	-0.354*** (2.83)	-48.64*** (3.72)	-10.147 (0.76)
Cabinet Size	-0.168** (2.41)	-6.568** (2.03)	5.712 (1.48)	-0.159* (1.79)	-4.705 (1.17)	11.433*** (2.80)	0.214 (1.32)	6.021 (0.38)	-26.626 (1.60)
Months – Election	0.014*** (2.91)	0.384 (1.37)	-0.433 (1.63)	0.017*** (2.93)	0.201 (0.60)	-0.700** (2.36)	0.008 (1.36)	0.947 (1.60)	0.228 (0.45)
Constant	1.773** (2.30)	84.758** (2.10)	12.491 (0.29)	1.387 (1.48)	92.954** (2.03)	-35.223 (0.78)	-0.216 (0.12)	13.766 (0.07)	373.59** (2.13)
Observations	412	413	413	339	340	340	73	73	73
Number of groups	15	15	15	15	15	15			
R-Squared	0.3050	0.3571	0.3759	0.29	0.3271	0.3639	0.7453	0.6269	0.5459
Wald-Chi2	2002.77	1892.16	4628.05	5952.09	5952.97	20423.28	11.16	7.40	7.76
Prob>Chi2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Panel-corrected z-statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Regressions for 1996-2000 were OLS with robust standard errors, because panel corrected standard errors cannot be used when the number of years is smaller than the number of countries in the panel .

²⁸ For presentation purposes, I have not included in this table the 14 Country and the 30 Time dummy variables. Complete regression results are available from the author upon request.

Table 6. *Composition of the Budget. Individual Items, 1970-1994*

	Vindtax	Vdirtax	Vpwages	Vfconsu	Vcolcons	Vsbenef	Vstransfer	Vpinvest
Budget Balance t-1	-4.115*** (2.70)	-2.835** (1.96)	0.807 (0.66)	1.061 (0.78)	0.531 (1.02)	0.543 (0.72)	0.541 (0.40)	-0.267 (0.26)
Var.Unemploymt	1.287 (0.30)	-6.647* (1.72)	5.292* (1.86)	3.400 (1.16)	3.510** (2.39)	2.975* (1.68)	12.379*** (3.28)	-1.524 (0.57)
Var.Prices	1.755* (1.93)	1.014 (1.41)	-0.080 (0.15)	0.529 (0.77)	0.004 (0.02)	-0.168 (0.70)	-1.052 (1.33)	-0.456 (0.83)
Government-Left	-0.003 (0.03)	-0.059 (0.61)	0.123 (1.61)	0.026 (0.30)	0.126*** (3.58)	0.161*** (3.32)	0.231** (2.11)	-0.042 (0.62)
Coalition Size	5.812 (1.63)	-2.278 (0.52)	-1.940 (0.65)	0.880 (0.28)	-2.748* (1.96)	-2.394 (1.34)	6.041* (1.81)	0.012 (0.00)
Cabinet Size	-4.882* (1.65)	4.823* (1.68)	3.000 (1.38)	1.225 (0.48)	2.644** (2.28)	4.787*** (3.09)	8.365*** (2.62)	1.540 (0.71)
Months - Election	0.473** (2.27)	0.577** (2.23)	0.198 (1.15)	-0.115 (0.54)	0.089 (1.16)	-0.076 (0.66)	-0.207 (0.93)	0.153 (1.05)
Constant	1105.47*** (3.10)	42.941 (1.33)	8.182 (0.34)	18.043 (0.63)	18.271 (1.34)	8.387 (0.43)	-43.905 (1.22)	24.392 (1.00)
Observations	340	340	340	340	322	322	340	340
Number of groups	15	15	15	15			15	15
R-Squared	0.2761	0.1429	0.3397	0.3790	0.6178	0.5713	0.3899	0.1972
Wald-Chi2	4723.64	4673.66	24960.10	20038.3	11.17	9.00	52799.74	814.73
Prob>Chi2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Panel-corrected z-statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Regressions for variation of collective consumption and variation of social benefits were OLS with robust standard errors, not panel corrected standard errors²⁹

Results in Table 6 above show that between 1970-94, leftist governments, coalition size, and number of spending ministers were positively and very significantly correlated with higher social transfers³⁰. In addition, leftist governments and big cabinets were associated with higher collective consumption, and higher social benefits.

Finally, by looking at the composition of public revenues, the effect that closeness of elections had on certain aspects of the budget is even clearer. The longer the period before elections, the higher the revenues from direct and indirect taxes, or in other words, the closer the elections, the lower the revenues from taxes. Also, although they are not statistically significant, the negative coefficient of Months to next Election in the social transfers

²⁹ Regressions for Collective Consumption and Social Benefits in Kind are OLS-robust, since due to the important number of missing cases, the number of observations per panel used to compute the disturbance covariance matrix in the panel corrected standard errors technique, is less than half of the average number of observations.

³⁰ These results are consistent with those obtained by Perotti and Kontopoulos (1998) for almost the same period (1965-1995) but with a larger sample of OECD countries.

regression, and the positive coefficient in the public investment one, are consistent with Rogoff's model predictions (Rogoff, 1990), where opportunistic policy-makers cut public investment before elections because they are less visible to voters than transfers.

Nevertheless, evidence from the second half of the nineties shows that the process of fiscal consolidation required to qualify for the third stage of EMU has reversed the effects that political variables had on fiscal outcomes.

As can be seen in the Table 7 below, the main finding for the second half of the nineties is that leftist governments, larger coalitions, larger cabinets and closeness of elections are not associated anymore with higher expenditures and higher transfers. The most important result is, however, the one related to ideology of the cabinet. These previous figures indicate that during the second half of the nineties leftist governments increased their revenues (mainly from direct taxes) to finance increases in the government wage bill and in public investment. These two items of the expenditures side of the budget were positively associated with left-wing governments before 1995, but they were not statistically significant and they were less important than social transfers.

It looks like, in the run-up to EMU, left-wing governments have readapted their preferences, and when forced to cut expenditures they preferred to maintain public wages and public investment, even at the expense of social transfers.

Table 7. Composition of the Budget. Individual Items, 1996-2000

	Vindtax	Vdirtax	Vpwages	Vfconsu	Vcolcon	Vsbenef	Vstransfe	Vpinvest
Budget Balance t-1	3.165	-11.443*	-6.208	1.765	3.112	11.538** *	-0.082	8.981**
	(0.56)	(1.82)	(1.15)	(0.26)	(1.38)	(4.58)	(0.02)	(2.34)
Var.Unemploymt	0.465	19.412	5.483	15.587*	1.767	5.057	3.970	-1.869
	(0.04)	(1.33)	(0.95)	(1.88)	(0.56)	(1.19)	(0.62)	(0.28)
Var.Prices	-2.520	-7.068**	0.383	2.316	1.070	4.656***	1.300	-2.770**
	(0.93)	(2.43)	(0.12)	(0.68)	(0.72)	(5.09)	(0.85)	(2.24)
Government-Left	0.202	1.045**	0.143	-0.213	-0.037	-0.307	-0.547*	0.523**
	(0.62)	(2.60)	(0.59)	(0.56)	(0.29)	(1.54)	(1.80)	(2.44)
Coalition Size	-16.761	-22.490*	-14.935*	-10.933	-3.102	-4.531	-8.179	-3.732
	(0.98)	(1.89)	(1.73)	(1.30)	(0.70)	(0.74)	(0.80)	(0.51)
Cabinet Size	-4.054	-10.751	-14.586	-	-5.281	-15.809**	-5.033	-10.653
	(0.23)	(0.66)	(1.64)	(2.13)	(1.10)	(2.66)	(0.56)	(1.24)
Months - Election	-0.104	0.756	-0.166	0.005	-0.050	-0.027	0.137	-0.449
	(0.20)	(1.54)	(0.55)	(0.01)	(0.28)	(0.14)	(0.52)	(1.40)
Constant	135.353	184.155	226.85**	285.80**	66.542	168.610* *	125.552	136.928
	(0.74)	(1.01)	(2.40)	(2.35)	(1.23)	(2.45)	(1.24)	(1.46)
Observations	73	73	73	73	73	73	73	73
R-squared	0.3822	0.4889	0.4106	0.4865	0.4821	0.5828	0.5036	0.4603
F (25, 47)	4.56	5.39	3.57	3.81	3.89	5.29	9.43	7.23
Prob>F	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000

Panel-corrected z-statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

All these regressions are OLS with robust standard errors, because panel corrected standard errors cannot be used when the number of years is smaller than the number of countries in the panel .

These results are very important because they support the argument that when demand policies have proved to have only temporary effects in the long-run and its short-term success depends on certain conditions of the labor market, the state and the international economy, leftist governments have been only left with the possibility to affect economic policies on the supply side. Boix (1996, 1997) has recently demonstrated that left-wing governments are likely to implement interventionist supply-side policies, through the public provision of human and physical capital, to increase growth and the competitiveness of the economy, and make better the worse-off. According to this new approach to economic policy management, capital will not fly out of the country to avoid higher taxation if public investment is expected to increase overall productivity in the economy (Boix, 1997: 818; Garrett, 1998). Results from this section confirm not only that these findings are still valid even after the Maastricht effort, but that EMU has forced leftist governments to definitively rank their expenditures' preferences.

4. Strategies of Fiscal Adjustment

Once the political determinants that affect the composition of the budget have been found, the paper turns now to answer the second question: i.e. What explains that different countries chose different strategies to consolidate their budgets during the last decades, and most importantly during the recent period of fiscal consolidation in the EU?

To start, I will define what is a fiscal adjustment, and I will define different possible strategies that governments can follow. In a very simple way, I will elaborate with more detail on the ideology hypothesis, given the preeminence that it has shown in determining the composition of the budget in the last thirty years, and most importantly in the last decade. Finally, I will use some graphs to illustrate the general characteristics of fiscal adjustment strategies by governments with different ideologies, and again regression analysis will be used to highlight the economic and political factors that explain the budget's composition, but now only during episodes of fiscal consolidation.

4.1. What is a Fiscal Adjustment?

A public deficit exists when total public revenues are insufficient to pay for total public expenditures. This difference is covered annually by borrowing money, and this constitutes the public debt. Therefore, public deficits can be increased or reduced every year. A fiscal adjustment takes place when in any given year the public deficit is reduced.

However, because I want to focus on politically driven fiscal adjustments, I consider that a fiscal adjustment takes place when the variation of cyclically adjusted primary deficit is positive from one year to the next one. As I have already explained, this allows me to focus on discretionary measures taken by politicians, once the economic cycle and debt interest payments have been discounted.

The existing literature on fiscal consolidations follows the trend started by Alesina and Perotti (1995b), and define episodes of fiscal consolidations as those in which the cyclically adjusted primary budget balance increased by at least 1.25% of GDP in two consecutive years, or if the change in the cyclically adjusted budget balance exceeded 1.5% of GDP in one year and was less than 1.25% of GDP in the following or the preceding year. To be consistent with this literature and to make my findings comparable, in the statistical analysis below, I have followed the same criteria to select the periods of fiscal adjustment from my sample. The only innovation that I have introduced is that if for example a period of fiscal adjustment lasts for 4 years and there is a change in the government's ideology in the middle, I split the case into two cases. This facilitates the comparison between leftist and rightist strategies of adjustment.

4.2. Strategies of Fiscal Adjustment and the Composition of the Budget

Thus, I define strategy of fiscal adjustment as the group of measures needed to balance the cyclically adjusted primary budget balance, and approximate cyclically adjusted primary expenditures and cyclically adjusted revenues in a given year. As I mentioned in the introduction, these strategies can vary in their duration and in their composition. This section deals with the “composition dimension”.³¹

In cases of unbalanced budgets, public deficit can be reduced by increasing revenues which allow the government to pay for the same level of public expenditures (revenue-based strategy), or by reducing public expenditures while public revenues are maintained or even reduced (expenditure-based strategy). More specifically, the range of possible strategies that are available to any government willing to start a fiscal consolidation are:

³¹ As also mentioned before, the “duration dimension” has been already studied by Maroto and Mulas-Granados (2001)

-Type 1 Strategy (S1): To increase revenues more than what it increases expenditures;
($\Delta\Delta R; \Delta E$)

-Type 2 Strategy (S2): To increase revenues and freeze expenditures; ($\Delta R; = E$)

-Type 3 Strategy (S3): To increase revenues and reduce expenditures; ($\Delta R; \nabla E$)

-Type 4 Strategy (S4): To freeze revenues and reduce expenditures; ($= R; \nabla E$)

-Type 5 Strategy (S5): To reduce revenues less than what it reduces expenditures.
($\nabla R; \nabla \nabla E$)

But inside these strategies more specificities arise. For example, variation in public revenues can be achieved through variation in direct taxes, indirect taxes, social contributions, other resources, etc. But also, direct taxes can be on labor or capital, and so on. The same happens with public expenditures. Variation in expenditures can be achieved through different combinations of changes in current or capital expenditures. Which in more detail depend on the amount of subsidies, social transfers, public consumption, public wages (function of the number of public employees), public investment, etc.

For example, strategies of adjustment in the seventies followed a general pattern of expansion of the public sector. An increase in public expenditures was financed and surpassed by an even bigger increase in revenues. In the eighties and the nineties the strategies of adjustment became increasingly different. For example, in the eighties, a majority of adjustments followed the previous pattern or the one characterized by revenues increases with freezing expenditures. During the nineties, finally, countries decided to reduce public expenditures, but the differences in the type of expenditures frozen or reduced increased.

In the process of deficit reduction to fulfill the Maastricht criteria, Austria, Denmark, Finland, Ireland, Spain and United Kingdom decided to cut transfers, while the rest preferred to freeze them. Public Consumption was reduced in France, Ireland, Spain and United Kingdom, increased in the Netherlands and Belgium and was maintained in the rest of the countries. Public wages were reduced in Belgium, Finland, Sweden and United Kingdom, while frozen in the rest of the EU. In general, France and Greece reduced their public deficits during the nineties by increasing their revenues and freezing their expenditures. Germany, Italy and Sweden and United Kingdom increased public revenues and reduced public

expenditures. Belgium, Denmark and Spain followed the strategy of maintaining revenues and reducing expenditures, while Austria, Finland, Ireland and the Netherlands reduced both revenues and expenditures.³²

3.3. Hypotheses

All the variability observed in the strategies of fiscal adjustment pursued by EU Member States in the last decades, and illustrated in the previous section, calls for an explanation. Hypotheses of the effects that political variables may have on fiscal adjustment strategies must be logically based on the effects that we have already seen these variables have on the composition of the budget during adjustment and non-adjustment years. Because more fragmented governments, more leftist governments and closeness of election tend to be associated with higher expenditures, I can expect these variables to be associated now with revenue-based strategies of fiscal adjustment, because the only way to reduce the deficit while expenditures are maintained or even increased, is to increase revenues even more.

Bigger coalitions and bigger cabinets are expected to maintain their preference for social transfers and expenditures, and in principle I do not expect them to cut these expenditures even in periods of fiscal adjustment.

On the contrary, the effect of elections on the strategies of fiscal adjustment cannot be expected to be the same than in the case of non-adjustment periods. Politicians may still want to manage the cycle electorally. The closer the elections, the lower the taxes (and thus the revenues) and the higher the expenditures. Nevertheless, this is a combination of policies that leads easily to run budget deficits. Thus, if the election is close, it is unlikely that the government starts a fiscal adjustment, and most likely it will end the consolidation³³.

³² See Table 3 by the European Commission on revenue-based, expenditure-based, and switching strategies of fiscal adjustment in section 2 of this article.

³³ See Maroto and Mulas-Granados (2001).

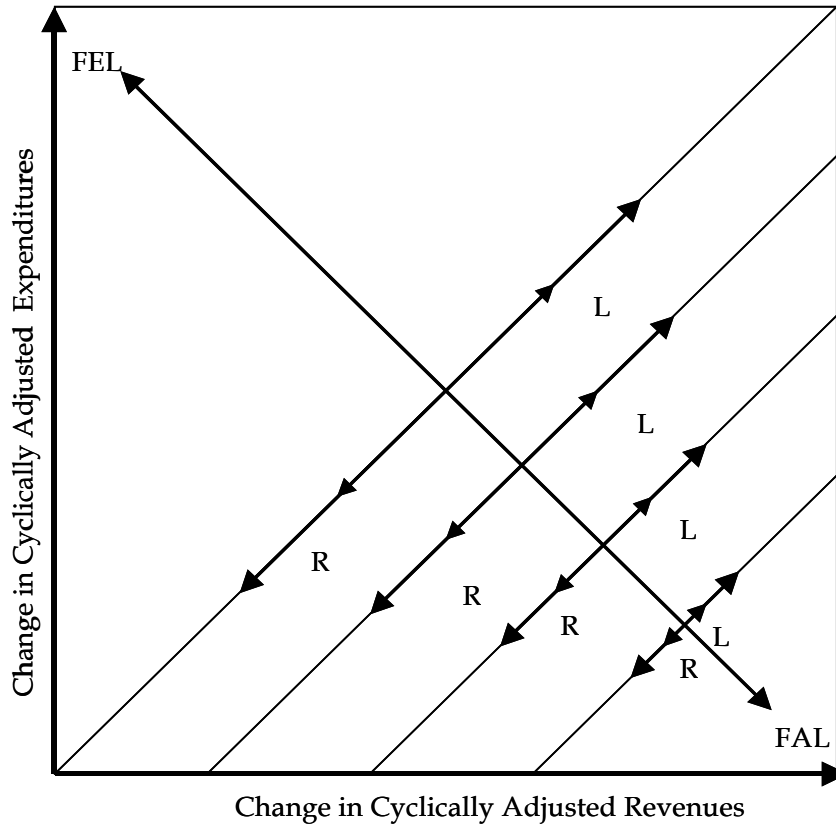
Consolidations only will take place when elections are imminent in cases where the fiscal adjustment is “unavoidable”, and has to comply with an inalterable calendar³⁴. This was the case in the run-up to EMU in the nineties, and the strong influence of this event in the whole sample of fiscal adjustments in Europe, makes me expect a different effect of elections on fiscal policies than what we saw in the previous section.

Finally, taking into consideration the effect that the ideology of the government demonstrated as a strong predictor of the composition of fiscal policy, left-wing governments can be now expected to be associated with revenue-based strategies of fiscal adjustment ($S1 > S2 > S3 > S4 > S5$), because their preference for equality and for a bigger presence of the public sector in the economy increases public expenditures, and this calls for higher revenues in order to keep the budget balanced. Deepening in leftist preferences with respect to the composition of the budget during fiscal adjustment periods, one can expect those preferences to be the same than their preferences during non-adjustment years: if forced to freeze or reduce expenditures leftist governments are expected to maintain the government wage bill, transfers payments and public investment.

Thus, I expect all left-wing governments undertaking a fiscal adjustment to place themselves to the right of the 45° line (see Figure 5 below), when the FEL (Fiscal Expansion Line) becomes the FAL (Fiscal Adjustment Line). And at each level (levels defined by the degree of the adjustment), I expect leftist governments to choose those strategies that imply both higher levels of public revenues and public expenditures (to the right of FAL). Similarly, preference for a weaker public sector should place right-wing governments making a fiscal adjustment below the Fiscal Adjustment Line (FAL).

³⁴ In fact, some politicians even ran their campaigns during the second half of the nineties on their capability to fulfill the Maastricht criteria better than the opponent.

Figure 5. *Strategies of Fiscal Adjustment. Ideal Types*

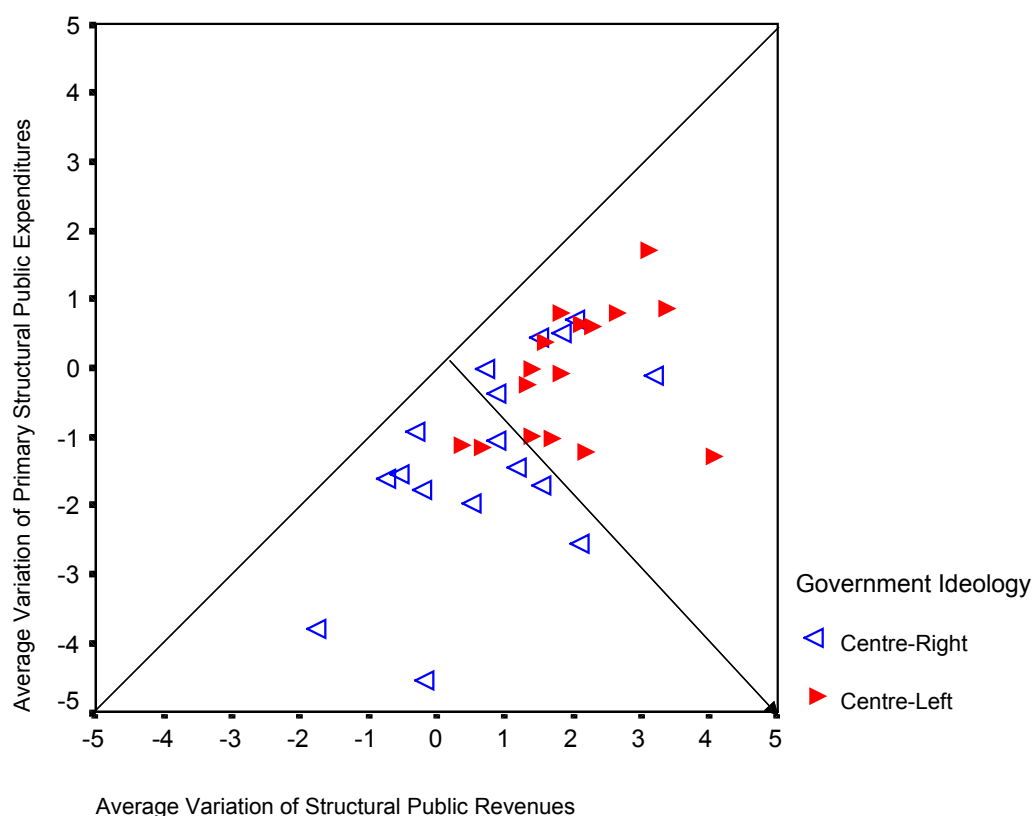


4.4. Empirical Evidence

In order to test the previous hypotheses, I have selected periods of fiscal adjustment in the European Union from 1960-2000, according to the definition provided in section 4.1.

The total number of cases of fiscal adjustment is 53 (35 in the period 1960-91, and 18 in the period 1992-00). Simple plotting of cases, labeled by the ideology of the party in government that undertook the adjustment, gives an idea of how well the data fit the ideology hypothesis.

Figure 6. *Strategies of Fiscal Adjustment, 1960-1991*³⁵

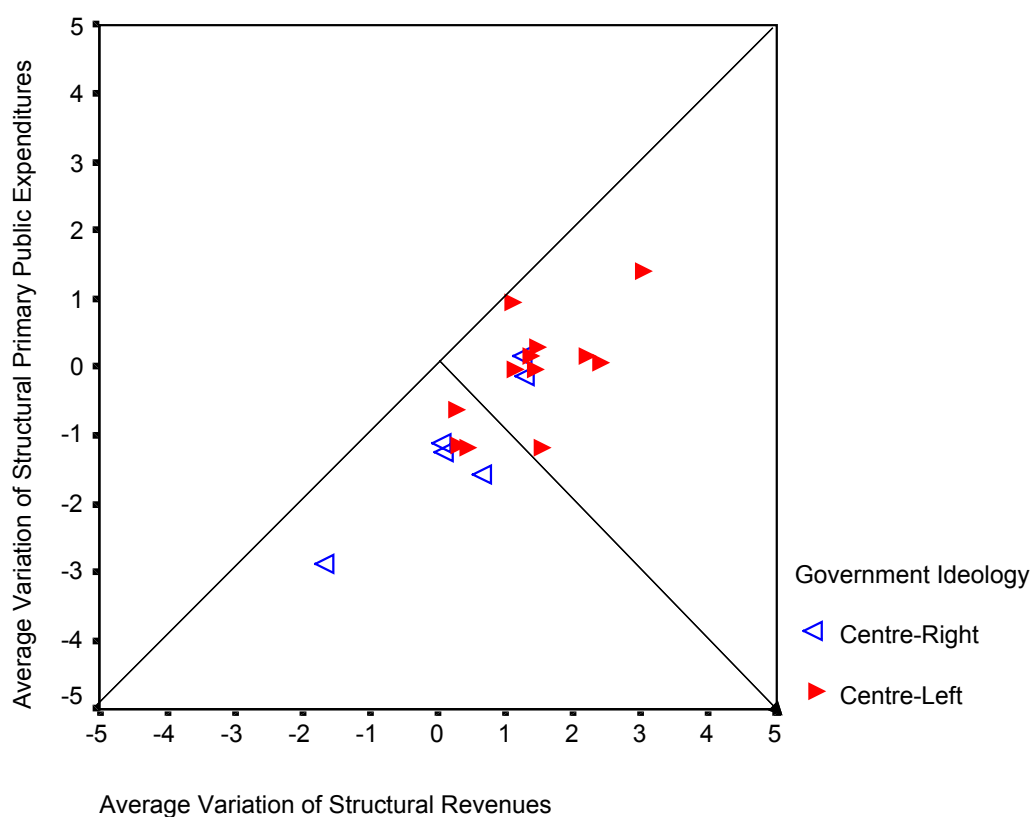


Basically, both left-wing and right-wing governments followed their expected behavior when confronted with a fiscal consolidation. Nevertheless, it looks like between 1960-91 some rightist governments followed leftist strategies of fiscal adjustment, increasing revenues substantially to finance increases in expenditures. This basically reflects the Welfare State consensus of the 60s and 70s in Europe, that developed the Welfare State in all European countries independently of the party in government.

The picture is less clear during the fiscal adjustment episodes that preceded EMU, even though the ideological hypotheses still fits very well.

³⁵ In this figure, *Structural* means *Cyclically Adjusted*.

Figure 7. *Strategies of Fiscal Adjustment, 1992-2000*



As can be seen in the figure above, in the nineties leftist governments took the strongest fiscal adjustments³⁶. This makes the comparison more difficult, since the number of adjustments held by leftist governments (12) doubles the number of adjustments held by rightist ones (6). More confusion of strategies appear in the nineties, with some rightist governments following revenue-based strategies of adjustment like France in 1995-96 or Portugal 1992-93, and some leftist governments following expenditure-based adjustment such as Denmark 1996-99 and Sweden 1995-98.

³⁶ If a different definition of fiscal adjustment was used, for example considering periods of fiscal adjustment as every case in which the variation of the cyclically adjusted primary budget balance was >0 , the total number of cases of adjustment in the period 1992-00 would increase from 18 to 34, out of which 17 were held under leftist governments and 17 under rightist governments.

These illustrative results stress the importance of looking at the composition of the strategies of adjustment. That is, when the effect of politics loses presence in aggregated magnitudes, it is necessary to look at minor components before arriving at definitive conclusions.

To study the effect that fragmentation of decision-making, ideology of the party in government and closeness of elections have had on strategies of fiscal adjustments and the composition of the budget during periods of fiscal consolidation, I run the same regressions than in section 3.4., but now only for the 53 episodes of consolidation.

$$\Delta Y_{i,t} = \alpha_0 + \alpha_1 BBAL_{i,t-1} + \delta_1 \Delta U_{i,t} + \delta_2 \Delta P_{i,t} + \beta_K X_{i,t} + C_i + \varepsilon_{i,t} \quad (2)$$

The technique now is OLS with robust standard errors, with country dummies and no year dummies, because the panel is markedly unbalanced, and the environment is assumed to be common for every EU country in the nineties³⁷.

Given the fact that now observations are episodes of fiscal adjustment that normally last longer than one year, the values in the levels and in the variations of the different dependent and independent variables are averages of the levels and variations of the whole period of adjustment. A new dependent variable was created, “Strategy Type”, which is the sum of the average variation of cyclically adjusted revenues and cyclically adjusted primary expenditures. The higher the value of “Strategy Type” in a fiscal adjustment episode, the more expansionary of the public sector was the strategy followed by the corresponding government.

Results for aggregate measures of the adjustment composition are presented in the table below.

³⁷ Also if I had introduced time dummies, I would have encountered a problem of insufficient degrees of freedom, since the sample is small. (N=53)

Table 8. *Strategies of Fiscal Adjustment. Main Aggregates, 1960-2000*

	Var. Reven	Var. Expend	Strategy Type
Budget Balance t-1	-0.092** (2.32)	0.023 (0.67)	-0.068 (1.13)
Var.Unemploymt	0.349** (2.42)	0.442*** (2.89)	0.791*** (2.89)
Var.Prices	-0.008 (0.61)	-0.016 (0.95)	-0.024 (0.91)
Government-Left	0.012*** (3.26)	0.015*** (3.05)	0.027*** (3.37)
Coalition Size	0.241** (2.46)	0.193 (1.59)	0.434** (2.13)
Cabinet Size	0.023 (0.40)	0.062 (1.06)	0.085 (0.84)
Months - Election	-0.441 (1.65)	0.215 (0.70)	-0.227 (0.45)
Constant	0.150 (0.26)	-2.363*** (3.36)	-2.217** (2.05)
Observations	53	53	53
R-squared	0.40	0.40	0.43
F(7,45)	4.09	3.56	4.14
Prob>F	0.0015	0.0040	0.0014

Robust t-statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

As can be seen in the previous table, results confirm the initial hypotheses. During episodes of fiscal adjustment between 1960-2000, bigger coalitions, bigger cabinets, and more leftist governments were associated with growing revenues and expenditures, and thus followed revenue-based strategies of adjustment. The effect of ideology was the only statistically significant. Though not statistically significant, the effect of closeness of elections was contrary to what could be expected (revenues increased and expenditures decreased as the election was closer). This is probably the result, as was previously hypothesized, of the overlapping of the “electoral calendar” in some of the countries that needed stronger adjustments between 1995-1998 and the “Maastricht calendar”³⁸.

³⁸ Echoing the wave of protests and strikes around Europe against the budget discipline imposed by the Maastricht Treaty, and the problem that politicians confronted to satisfy the people’s demands and those of the Maastricht criteria, *The New York Times* affirmed in March 1997: “Europe is really very unlucky. There is a collision of calendars, including the French and German election calendars and the Maastricht single-currency decision calendar in 1998”.

The analysis of the effect that the political variables had on the individual components of the budget during periods of fiscal adjustment (see Table 9 below), confirm again the mentioned hypotheses. Coalition size and cabinet size were positively associated with increases in transfers, though these effects were not statistically significant.

Most importantly, results show that ideology of the party in government is the most important political variable affecting the evolution of different items of the budget during periods of fiscal consolidation. Leftist governments followed strategies of adjustment that increased revenues (mostly from direct taxes) to finance the maintenance or even the increase of expenditures, especially public consumption, the government wage bill, and public investments. The rest of public expenditures were also positively affected by leftist governments, though they were not statistically significant.

Table 9. *Strategies of Fiscal Adjustment. Individual Items, 1960-2000*

	Vindtax	Vdirtax	Vfincon	Vpwages	Vstransf	Vpinvest
Budget Balance t-1	-0.032 (1.47)	-0.023 (1.20)	0.024 (1.22)	0.018 (1.43)	-0.010 (0.44)	0.025** (2.24)
Var.Unemploymt	0.005 (0.06)	-0.031 (0.32)	0.064 (0.60)	0.083 (1.43)	0.372*** (3.12)	0.007 (0.22)
Var.Prices	0.011 (1.40)	-0.007 (0.67)	-0.001 (0.20)	-0.003 (0.44)	0.004 (0.33)	0.010 (1.41)
Government-Left	0.003 (1.42)	0.006** (2.39)	0.007*** (2.99)	0.005*** (3.18)	0.001 (0.30)	0.002* (1.96)
Coalition Size	0.025 (0.49)	0.109 (1.48)	0.079 (0.86)	0.030 (0.66)	0.001 (0.30)	0.020 (0.86)
Cabinet Size	0.016 (0.60)	-0.010 (0.21)	-0.004 (0.10)	-0.010 (0.43)	0.035 (0.75)	0.027* (1.85)
Months - Election	-0.214 (1.61)	0.040 (0.22)	-0.082 (0.40)	0.011 (0.11)	-0.056 (0.23)	-0.023 (0.32)
Constant	0.050 (0.18)	0.024 (0.05)	-0.383 (1.09)	-0.237 (1.41)	-0.468 (0.98)	-0.659*** (4.31)
Observations	53	53	51	53	53	53
R-squared	0.18	0.12	0.12	0.32	0.19	0.28
F(7,45)	3.83	1.28	2.89	3.84	2.92	2.81
Prob>F	0.0024	0.2799	0.0145	0.0024	0.0132	0.0163

Robust t-statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Very relevant in this respect is the evidence that leftist governments still tried to affect the supply-side of the economy investing relatively more than rightist governments. This preference is so strong that it was maintained even in periods of fiscal adjustment, when typically public investment is either frozen or reduced. The fact is that under a general trend of decreasing public provision of physical capital since the 1970s, in the last decade socialist governments seem to have been successful in maintaining or even increasing the share of the GDP dedicated to public investment (See Table 10 below)

Table 10. *Average Public Investment by Cabinet's Ideology in the EU, 1970-2000*

Average public investment (%GDP) by government (EU-15):	1970-1989	1990-2000	1993-97
Right-wing governments	3.30 (n=145)	2.68 (n=59)	2.61 (n=28)
Center governments	3.75 (n=60)	2.75 (n=62)	2.73 (n=31)
Left-wing governments	3.78 (n=78)	2.88 (n=43)	3.06 (n=16)

Source: Own elaboration

These results are very important, since according to prominent studies mentioned in the previous section, consolidations that rely on increases in revenues and do not cut the government wage bill and public transfers are unlikely to be successful³⁹. Nevertheless, in relation with the EMU process, it should be recalled at this point that evidence from section 3.4 showed already that since 1995 all governments started to reduce slowly social transfers, to reform pension systems, and to control the most rigid expenditures

Nevertheless, results presented in this section provide very clear evidence that, even under the strongest pressures for further convergence of fiscal policies, there is still place to formulate differentiated approaches to fiscal policies at sub-aggregate levels.

³⁹ See for example Alesina, Perotti and Tavares (1998).

5. Conclusion

This article has answered the following two questions: what determines the composition of the budget, and what explains that different countries pursue different strategies of adjustment during episodes of fiscal consolidation. Results have confirmed that political variables affect both the composition of the budget and the strategies of fiscal adjustment. With respect to composition, bigger coalitions, bigger cabinets, more leftist governments and closeness of elections affect positively the increase in public expenditures, especially social transfers, between 1970-94.

Nevertheless, this influence was reversed during the second half of the nineties. Interestingly, evidence shows that between 1996-2000 ideology was the strongest determinant of the composition of the budget during this period, when leftist governments have reoriented their policies, and have used increasing revenues from direct taxes to balance the budget and to maintain or increase the government wage bill (public employment and wages), and public investment (to affect the economy in the supply side), even at the expense of reductions in public consumption and social transfers.

The importance of political variables is confirmed in the section dedicated to the study of fiscal adjustment strategies. Again, bigger coalitions, bigger cabinets and more leftist governments are associated with revenue-based adjustments, and the preference of leftist governments for certain items is corroborated.

Because the composition of the adjustment is related to its likelihood of success, apparently decisions such as those taken by some European countries in the nineties that followed a revenue-based adjustment to quickly qualify for EMU, should have never been adopted because they are not economically optimal in the medium-run. In fact, some of these countries will have difficulties to keep their budgets balanced during the next recession.

By pointing out the influence that political factors have on fiscal policy, this article is important to understand why those decisions were made and those strategies were chosen.

7. Statistical Appendix: Definition of Variables and Sources of Data

The set of variables used in all regressions of this article are:

7.1. Economic variables:

- Annual change (first differences) of cyclically adjusted primary budget balance; Lagged cyclically adjusted budget balance; and the rest of Budget components.

Data for primary budget balance, total revenues, and total primary expenditures, were cyclically adjusted according to the European Commission's method. The DG ECFIN method involves three main steps. In the first step, the output gap is computed as the difference between the actual output and an estimated output trend, applying the Hodrick-Prescott (HP) filter. In the second step, the budget sensitivity to the output gap is computed. This allows to compute the cyclical component of the budget. Finally, the cyclically adjusted budget balance is obtained by deducting the cyclical component from the actual government budget balance.

Budget components at more disaggregated levels were not cyclically adjusted.

- Annual change (first differences) of the Unemployment rate (Var. Unemployment).

- Annual change (first differences) of Consumer Price Index (Var. Prices)

SOURCE: AMECO-Macroeconomic database of the European Commission. DGEFIN. Brussels. Update January 2001.

7.2. Political Variables:

-Socialist Control of the Cabinet (Government-Left).

Social-democratic and other left parties in percentage of total cabinet posts, weighted by days. This variable runs continuously from 0 to 100.

SOURCE: Armingeon, Beyeler and Menegale (2000).

-Number of Parties in the Coalition (Coalition Size)

Borrowed from Prof. Roberto Perotti.

SOURCE: Woldendorp, Keman and Budge (1993) and *The Europa World Yearbook* for Greece, Portugal and Spain (the whole period), and all countries from 1995-2000.

-Number of Spending Ministers (Cabinet Size)

Borrowed from Prof. Roberto Perotti.

This variable is the sum of the following ministers: 1) Industry or Trade and/or ministers with related and/or subdivided competences like Foreign Trade, Commerce, and State Industries (if not attributed to Public Works-see next); 2) Public Works and/or Infrastructure and/or ministers with related and/or subdivided competences like (Public) Transportation, Energy, Post, Telecommunications, Merchant Marine, Civil Aviation, National Resources, Construction (if not specifically attributed to Housing-see below), Urban Development, etc; 3) Defense, 4) Justice; 5) Labour; 6) Education; 7) Health; 8) Housing; 9) Agriculture. Also all ministers with economic portfolio are added to this group: 10) Finance and/or ministers with related and/or subdivided competences like First Lord of the Treasury, Budget, Taxation, etc.; 11) Economic Affairs and/or ministers with related and/or subdivided competences like (Regional) Economic Planning or Development, Small Businesses.

SOURCE: Woldendorp, Keman and Budge (1993) and *The Europa World Yearbook* for Greece, Portugal and Spain (the whole period), and all countries from 1995-2000.

-Months to Next Election (Months-Election).

This variable takes values: 0, 12, 24, 36 and 48 depending on the distance between the current year, and the year in which the next general election will be celebrated.

SOURCE: Election dates are from Armingeon, Beyeler and Menegale (2000).

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