THE COMPOSITION OF PUBLIC SPENDING AND THE NATIONALIZATION OF PARTY SYSTEMS IN WESTERN EUROPE

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ABSTRACT

Do political institutions shape the structure of public spending? Based on a sample of 141 elections in eighteen Western European countries over the period 1970-1998, this paper shows that governments' margin of maneuverability to design and implement fiscal policies depends on the level of party linkage or the nationalization of party systems, defined as the extent to which parties are uniformly successful in winning votes across districts. The mechanism behind this argument is that in weakly nationalized countries there are additional transaction costs to change the budget as a consequence of the survival of local parties and interests. Therefore, the composition of public spending is more rigid here than in highly nationalized countries.

Key words: Electoral system, fiscal policy, linkage, nationalization, party system, public good, transaction costs, transfers.

1. INTRODUCTION[1]

Although undervalued for decades as a consequence of the hegemony of Keynesian short-run policies based on demand impulses, the composition of public spending plays a crucial role nowadays. Several strands of economic literature reflects this change. Since the early nineties the theoretical and empirical literature on long-run economic growth has paid an increasing attention to the effects of the composition of government expenditures in both neoclassical models and endogenous models of economic growth (Barro, 1990; Easterly and Rebelo, 1993; Devarajan, Swaroop, and Zou, 1996; Tanzi and Zee, 1997). Moreover, since the seminal work by Aschauer (1989), the relationship between public investment and productivity and growth has been exhaustively analyzed using different methodologies[2].

Given the aforementioned empirical and theoretical relevance of the composition of public expenditure, two questions are key. First, does it differ across countries? Sanz and Velázquez (2001) answer this question in the case of the OECD countries over the period 1970-1998. According to their analysis on the convergence in government expenditure, there is a different steady-state for each country, involving permanent differences in the long term. Second, which are the determinants of the composition of public spending? Standard economic approaches are usually based on the median voter's model and on variables like per capita income, public/private sector price ratio, the unemployment rate, total population, population density, population structure by age, or social inequality (Tridimas, 2001; Sanz and Velazquez, 2002). However, although insightful, economic variables are not enough to fully statistically account for this dependent variable (Sanz and Velázquez, 2002).

Research on political economy has recently begun to examine how political institutions explain national differences in fiscal policy choices. For instance, Arze *et al (*2005) show that fiscal decentralization increases the share of education and health expenditures in total government expenditures. Fiscal decentralization induces agents to demand increased production of publicly provided private good as opposed to pure public goods because of a better match between public choices and individual preferences[3].

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[1] The Instituto de Estudios Fiscales (www.ief.es) provided financial support for the project from which this article is drawn.

[2] Among others, the use of VAR models (Otto and Voss, 1996), the estimation of parameters of aggregate production functions (García-Milá et al, 1996), or the estimation of aggregate cost and benefit functions (Morrison and Schwartz, 1996).

[3] Arze e*t al* (2005) examine the relationship between fiscal decentralization and the functional composition of public expenditures. Using an unbalanced panel data set spanning 45 developed and developing countries over a period of 28 years, they show that decentralization increases the share of education and health expenditures in total government expenditures, especially

But the lion's share of this research has been focused on the impact of electoral systems. Electoral rules are crucial in modern democracies. They shape party systems, in particular, district-level or local party systems (Cox, 1997; Duverger, 1954). Moreover, they also matter in issues such as corruption and effectiveness in government service provision (Persson and Tabellini, 2003; 2004; Persson, Tabellini and Trebi, 2003) and the nature of political cycles and macroeconomic policy (Alesina *et al* 1999; Persson, *et al*, 2004). And recent literature on fiscal policy has attributed a decisive impact to electoral systems on the size and composition of public spending[4].

There are, at least, two different theoretical approaches in the literature. On the one hand, Persson and Tabellini (1999, 2000, 2002) and Lizzeri and Persico (2001) defend that majoritarian systems are associated with higher targeatable spending and lower "universal" expenditure. Majoritarian —as opposed to proportional— elections increase competition between parties by focusing it into some key marginal districts. Typically, these districts consists of more mobile voters, who can be more easily swayed by electoral promises. Hence, electoral competition is stiffer under majoritarian elections, as politicians try to please "swing voters" in the marginal districts, rather than swing voters in the population as a whole. This leads to more targeted redistribution, at the expense of public good provision.

On the other hand, Milesi-Ferreti *et al* (2000, 2002) and Scartascini and Crain (2001) defend that proportional systems are more geared to spending on transfers, with a limited scope for targeting them geographically, while majoritarian systems are more prone to purchases of goods and services, typically targeted along geographical lines. The underlying causal mechanism rests on the notion that proportional systems allow representation of a greater variety on interests. In a majoritarian system, where each district elects one representative, all representatives belong to the same social group. Hence, all elected representatives derive utility from the same type of transfers, but each derives utility from a different direct expenditure program. It follows that electors will have an incentive to vote for individuals with stronger preferences for direct expenditure relative to transfers, in order to bias government expenditure on public goods towards their district. In a proportional system, where each district elects more than one representative, more than one social group is represented in Parliament, and now each representative derives utility from a different type of transfer. Individuals have an incentive to vote for representatives with stronger preference for transfers, in order to bias the spending decisions of the government towards their own type of transfers.

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in developing countries. Previous papers by Gerdtham *et al* (1994) and Falch and Rattso (1997) also analyzed this relationship.

[4] A comprehensive survey of the literature can be found in Persson and Tabellini (2000, 2002).

In this paper we show that the focus should be on the degree of nationalization of party systems rather than on electoral systems when analyzing the governments' margin of maneuverability to design and implement fiscal policies. The nationalization of party systems depends on the processes through the highly localized and territorialized politics is replaced by national electoral alignments and oppositions: programs and policies become national in scope and cancel out or at least reduce the scope of local problems, with the most relevant issues being transferred from the local to the national level (Caramani, 2004: 1). Cox (1999) calls this process *linkage,* and Chhibber and Kollman (1998, 2004) *party aggregation*: it can be defined as the extent to which parties are uniformly successful in winning votes across districts (Moenius and Kasuya, 2004: 543).

And there are no clear theoretical reasons to expect that electoral systems features such as district magnitude affect the size of national party systems. It depends on the incentives for candidates and politicians to coalesce around the same labels as politicians from different regions who have different ideologies and have different loyalties to previous and current government policies and leaders (Chhibber and Kollman, 2004: 20).

The second aim of this paper is to reveal the mechanism relating linkage and the composition of public expenditure. Two possibilities are explored: the relationship between the degree of linkage and the share of transfers to families on total budget; and the effect of linkage on the rigidity of the composition of public expenditure. In highly nationalized party systems, local or regional parties (and interests) virtually disappear from national politics. However, when there is a poor linkage, local or regional parties are independent and relevant actors in national politics. Since budgets are multilateral bargaining, the survival of subnational parties introduces additional transaction costs of change. While it is well known that choices on public budgets are subject to a strong inertia[5], we analyze whether weakly nationalized party systems tend to produce higher levels of rigidity.

To test these all those arguments we use a new political and economic data set on 141 elections in eighteen Western European countries over the period 1970-1998. The countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom.

The plan of the paper is as follows. The next section presents our argument about the influence of the formation of national party systems on public spending and discusses the shortcomings of the literature we have sketched. Section 3 explains the incentives for the nationalization of party systems and

[5] See the seminal contribution by Davis *et al* (1966).

tests the specific hypotheses generated by our model with cross-country data. Section 4 examines the impact of the nationalization of party systems on the composition of public spending. Section 5 concludes.

2. THEORETICAL ARGUMENTS

Budget process may be seen as a set of both formal and informal rules aiming at solving conflicts involving citizens, interest groups, politicians, bureaucrats, and ministers (Von Hagen and Harden, 1994; Gonzalez-Paramo, 2001). This view of budgets as the result of bargaining has two implications. First, budgets and, in particular, the composition of public expenditure are subject to transaction costs or, more specifically, bargaining costs. Bargaining costs are interpreted expansively to include all the costs associated with multilateral bargaining, competitive bidding, and other voluntary mechanisms for determining a mutually acceptable agreement (Milgrom and Roberts, 1990). This sort of transactions is incurred within budgets (or institutions, in general) whenever some individuals bargain with or act to influence the holder of a jurisdiction or whenever any group of actors attempts to purchase some property right valuable to them (Alt and Alesina, 1996: 649). Second, once a budget has been implemented, it generates constituencies of support in government, business and even the public and becomes difficult to dislodge or improve. Therefore, in terms of institutional robustness, the transaction costs of change provide a budget with something of a cushion, giving it a stability it might not otherwise enjoy in a transactions-cost-free world. In sum, understanding incrementalism in budgeting should pay attention not only to conventional wisdom on the extreme complexity of calculations required to revise every spending programs, confronting to all potential alternatives (Davis *et al*, 1964), but also to the literature on transaction costs.

Consequently, given this strong *inertia* in the composition of public expenditure, our argument is that political institutions matter when they modify transaction costs. As we demonstrate in the following pages, there are no reasons to expect that electoral systems significantly affect transaction costs. The institutional arrangement than alters the incidence of transactions costs is the degree of nationalization of party systems. When local interests survive in a party system as a consequence of a poor linkage, local or regional parties are relevant actors in national politics. Hence, in weakly nationalized party systems, transaction costs of change are potentially higher than in highly nationalized party systems. In other words, politicians should enjoy a higher rigidity or a lower margin of maneuverability to change the composition of public spending in the former case.

In this sense, the impact of the degree of nationalization of party systems on the composition of public expenditure has to be distinguished from the impact of the fragmentation of party systems or legislatures. In highly nationalized party systems, where only national parties exist, and independently of their number, the bargaining of budgets takes place in a unidimensional space, specifically the left-right schema. More parties means an increase in the bargaining costs, but all of them are located in the same space. According to the Black's median voters theorem (Black, 1958), if legislators of a group who must solve a problem of budgeting have single-peaked preferences, then the ideal point of the median voter has an empty winset: there is no other alternative that any of the majority coalitions prefers to this point.

On the contrary, in weakly nationalized party systems, where subnational parties do not disappear from national politics, a second dimension comes into play: local and regional interests. The set of outcomes, or simply the "policy space" is two-dimensional, and this is the domain over which preferences are expressed. According to the McKelvey's chaos theorem (McKelvey, 1976), in multidimensional spatial settings, except in the case of a rare distribution of ideal points that hardly ever occurs naturally, there will be no majority rule empty-winset point. Instead there will be chaos —no Condorcet winner, anything can happen, and whoever controls the order of voting can determine the final outcome[6].

Since multidimensional bargaining or models are inherently more complex than unidimensional ones, budgets are subject to higher transaction costs in countries with a poor party linkage: the composition of public expenditure tends to be more difficult to change there. And highly fragmented legislatures are not necessarily weakly nationalized party systems. The effective number of electoral parties in Denmark, for instance, is above the mean in our sample of countries, but its degree of party linkage is clearly below the mean sample. But, obviously, although they are conceptually different, the correlation between these two variables is high.

The formation of a national party system in a country takes place in two consecutive and independent moments. The first one concerns how many parties there are at the local or district level. Voters cast their votes and the local or district-level party system is formed in each district of a country. The prequel to our story is the received wisdom within electoral studies that district magnitude is a major variable, if not the primary one, that determines how an electoral system affects party competition.

Electoral systems affect the coordination of political forces within districts when candidates or parties enter the race and voters distribute their votes among them. If the prospective competitors in a district are all primarily

[6] See Shepsle and Bonchek (1991: chapter 5) for a formal exposition of this result. Their analysis is focused precisely on a problem of budgeting.

interested in winning a seat in the election at hand, and they will not enter if their chances are not good enough, then electoral coordination may end at the elite level. However, when some minor-party or independent candidates enter regardless of their chances at winning, then voters may be faced with the incentives to vote strategically. The general finding is embodied in the *M+1* rule —*M* is the number of seats allocated in an electoral district—, which says that, under some conditions, strategic voting will reduce contests with more than M+1 candidates or parties to contests in which at most M+1 competitors are seriously in the running for seats (Cox, 1997, 1999). Accordingly, the number of parties or candidates entering the race is a positive function of district magnitude: all else equal, the number of parties running in a district will tend to decrease (increase) as *M* decreases (increases). Social cleavages are free to determine the number of competitors below this upper bound. Thus, systems may have few parties because there are few cleavages or because the upper bound is low; but systems should have many parties only when there are many cleavages combined with a permissive electoral system (e.g., Amorim Neto and Cox, 1997; Chhibber and Kollman, 2004: chapter 2; Cox, 1997; Jones, 1993; Lijphart, 1994; Ordeshook and Shvetsova, 1994; Rae, 1971; Riker, 1982; Taagepera and Shugart, 1989).

The second moment in the process of creating a national party system is linking the members of the various local party systems into national parties: votes received in various districts are aggregated nationwide. This process, that Cox (1997) has called linkage and Chhibber and Kollman (1998, 2004) party aggregation, can be defined according to Moenius and Kasuya (2004: 543) as the extent to which parties are uniformly successful in wining votes across districts. Although electoral rules directly affect district-level party systems, as we have seen, there is no clear theoretical reason to expect them to affect linkage or party aggregation, hence less reason to expect them to affect the size of the national party system (Cox, 1999: 156). Except in those few cases in which the country makes up a single electoral district, whether national party systems mirror local party systems is entirely another matter. Regardless of electoral rules, it depends on the degree to which candidates and parties make linkages across districts to establish larger political groupings or organizations based on common party labels (Chhibber and Kollman, 2004: 19).

The local argument or electoral coordination at the district-level does only provide a very vague upper bound on the number of parties nationally. According to Cox (1997: 186), a system with nothing but single-member plurality elections should have no more than 2D parties, where D is the number of districts. United Kingdom, for example, has 646 single-member, simple-plurality districts. The number of parties should be no more than 2*646 = 1292. Similarly, a system with nothing but M-seat PR elections should have no more than (M+1)D parties, where *M* is the number of seats allocated in an electoral district. The Netherlands, for instance, uses 1 one hundred fifty-member district and awards seats to lists by the d´Hondt method of proportional representation. The number of parties should be no more than (150+1)*1=151.

This upper bound on the number of parties nationally sets linkage at its lowest extreme. Each party in a country fields candidates in just one district, so that every local party system is sui generis. In other words, each district has an entirely different set of parties and there is no overlap of parties' district-level vote shares when votes are aggregated at the national level. In this case, the national party system is considerably larger than the average of the local party systems. At the opposite extreme, when there is the highest linkage, every party runs candidates in every district, so that every local party system is a microcosm of the national party system. Therefore, the set of parties running in each districts is identical, and each party receives the same proportion of votes across districts. In this case, the number of parties in the national party system nearly equals the average number in the local systems (Cox, 1999: 155; Moenius and Kasuya, 2004: 545).

In accounting for the number of parties nationally or for changes over time within countries, that is, the degree of party linkage or nationalization, explanations based solely on the electoral systems are strained. For example, the United States, Canada, India and Great Britain have single-member and simple-plurality electoral rules to award seats to lower houses of parliament, However, there are significant differences across the countries in the number of parties nationally and over time. In the United States, the number of national parties stabilized around two only after the New Deal. In Canada the effective number of parties getting votes in national elections was 3.5 in the first national elections held in 1867. In 1917 only 2 parties competed in elections for the lower house, whereas in 1995 the effective number of parties getting votes was approximately 4. In India the number of parties competing in national elections also has fluctuated, although there has been a steady increase since the 1970s with the effective number of parties rising for 3 in 1977 to almost 7 for the 1996 and 1999 elections. Finally, in Britain the effective number of parties receiving votes in 1885 was 2.17, increasing to 4.43 in 1918, and then settling to about 2.5 for much of postwar period before rising above 3 in the 1990s (Chhibber and Kollman, 2004: chapter 1). Obviously, the same electoral system cannot generate by itself different party systems or the same population diversity cannot be translated into a so divergent number of parties over time within each country.

Similarly, a lot of PR systems with multimember districts (Colombia, Costa Rica, El Salvador, Greece, Malta, Mauritius or even Austria, where the mean district magnitude is 13) have a lower effective number of parties getting votes in national elections than Canada, Great Britain and India (Cox, 1997: Appendix C). Again, one can only conclude that electoral systems are not the key variable to explain the number of parties nationally.

Given the two moments in the process of creating a national party system, we hypothesize that which type of fiscal policy prevails in each country and, more specifically, the rigidity in the composition of public spending does not depend on the electoral system, but on the persistence (and strength) of local parties (and subnational interests) in the process of national-level party system formation. That is, on the degree of linkage or nationalization of national party systems.

As Milesi-Ferreti *et al* (2002: 609) emphasize, decisions on fiscal policy entails a trade-off between allegiance to a social constituency and allegiance to a geographic constituency. Each one crystallizes in a different type of government spending: transfers and purchases of goods and services. The former are mostly targeted to groups of individuals with certain characteristics, such as the unemployed or the elderly, while the latter instead are typically targeted along geographical lines. On the one hand, in those countries in which there is a high linkage, and thus the national-level party system perfectly mirrors the party system of each district (or region), local or regional parties (and interests) virtually disappear from national politics. Politicians feel it necessary to join parties that link districts across the entire country or across a very wide range of the ideological space, while voters have incentives to abandon local parties to support nationally competitive parties. Hence, elected representatives derive utility from the same public goods, but they derive utility from a different type of transfer. This implies that national viewpoints prevail over local ones. And we cannot forget that transfers and purchases of goods are services are independent of the region of residence of those citizens who meet the criteria for that transfer (Milesi-Ferreti *et al*, 2002: 612). Therefore, highly nationalized party systems should be more geared to spending on transfers.

On the other hand, in those countries in which there is a poor linkage, and thus the national-level party system does not mirror the party system of each district (or region), local or regional parties are independent and relevant actors in national politics. Politicians feel it necessary to join parties that represent only their particular district or region or particular narrow slice of the ideological space, while voters have incentives to support local parties. Hence, elected politicians representing subnational parties derive now utility from a different public good than elected politicians representing national parties. This implies that, at least for local or regional parties, local viewpoints prevail over national ones. As Milesi-Ferreti *et al* (2002: 612) point out, spending on goods and services is local in interest. And obviously, the higher the fragmentation of the national party system, the higher the relevance of subnational parties in national politics and then the higher the impact of local interests. Therefore, poor nationalized party systems should be more prone to direct public expenditure.

The empirical predictions derived from our theoretical argument are different to those advocated by the literature, in particular by Persson and Tabellini (1999, 2000, 2002), on the one hand, and Milesi-Ferreti *et al* (2002), on the other. Two countries with the same electoral system, majoritarian or proportional, might have a different composition and/or rigidity of public expenditure. Similarly, two countries with a different electoral system might have the same or almost the same composition and/or rigidity of public expenditure. These notable differences between the empirical predictions of our argument and the literature are explained by the absence of a robust causal mechanism linking electoral systems and public expenditure. The process of linking the members of the various local party systems into national parties is analysed in the formal models of Milesi-Ferreti *et al* (2002) or Persson and Tabellini (1999, 2000, 2002). They explain the size and composition of government expenditure as the result of a two-stage game. First, how many parties are at the district level as a consequence of the permissiveness of electoral systems and, second, how the governments are formed and their decisions taken. But, (a) they assume that in majoritarian electoral systems the geographic distribution of different social groups is similar across districts (Milesi-Ferreti el at 2002: 610 or Persson and Tabellini, 1999: 711, 2000: 210; 2002: 638) and then that the winners of the seats are the same everywhere. And (b) they assume that on proportional electoral systems the whole country makes up a single electoral district (Milesi-Ferreti el at, 2002: 613 or Persson and Tabellini, 1999: 708). Both assumptions are empirically flawed. In majoritarian electoral systems, the uniform distribution of social groups is more an exception than a regularity. The case of Canada is enlightening. In proportional electoral systems, Israel, Namibia and The Netherlands are the only three cases in the world in which the country makes up a single electoral district (Cox, 1997: chapter 3).

Therefore, electoral coordination at the district-level in these models provides a very precise upper bound on the number of parties nationally. A system with nothing but single-member plurality elections should have no more than 2D parties, where D is the number of districts. But since local party systems are identical, the upper bound is $2*1= 2$. Similarly, a system with nothing but M-seat PR elections should have no more than (M+1)D parties, where *M* is the number of seats allocated in an electoral district. But given that D is 1, this upper bound is $(M+1)*1 = M+1$. In sum, every local party is a microcosm of the national party system and then party systems have a perfect linkage as the results of nationalization of party organizations. The formation of the national party system in a country takes place in only one moment and, as a consequence, electoral rules directly affect not only district-level party systems, but also the size of the national party system.

3. INCENTIVES FOR THE NATIONALIZATION OF PARTY SYSTEMS

Despite the importance of the coordination of potentially separate local parties and party systems to form a national party system, only recently have scholars begun to pay attention to this issue (Caramani, 2004; Cox, 1997, 1999; Chhibber and Kollman, 1998; 2004; Jones and Mainwaring, 2003; Moenius and Kasuya, 2004).

The incentives for the nationalization of party systems or, in other words, for linking or aggregating the members of the various local party systems into national parties are institutional and sociological. According to Cox (1997, 1999), institutional incentives pertain to economies of scale and have the following abstract form: some group seeks to accomplish a task that requires the help of a large number of legislative candidates; this group therefore seeks to induce would-be legislators from many different districts to participate in a larger organization.

Different versions of linkage or party aggregation emerge as the task is changed. Here we consider two (Cox, 1999: 156-159):

a) *Securing more legislative seats or a better chance at winning the presidency*

On the one hand, electoral laws implementing an upper tier to pool votes that are wasted or excess in a given district typically require an explicit legal coordination. In the German electoral system, for example, compensatory seats are distributed at the national level among those parties that secure at least 5% of the national vote (or win at least three district seats). Thus, upper tiers provide a strong incentive to politicians to ally across district boundaries and to voters to abandon locally competitive but nationally noncompetitive parties or to abandon nationally competitive parties in order to prevent a prospective coalition partner form failing below the critical threshold of votes.

On the other hand, similar incentives for cross-district coordination exist in those countries in which the winning candidate in presidential elections must get specified support levels in the various regions. For example, in Algeria.

b) *Securing the control of the central government*

The efforts for cross-district coordination one is willing to exert in order to control the central government depend on how centralized the power is in a country and to what extent the power is stake all at once electorally. In particular, as national governments exert more political and economic control over local areas candidates have greater incentives to associate themselves with national organizations, and voters have greater incentives to abandon locally competitive but nationally noncompetitive parties (Chhibber and Kollman, 1998: 329). Thus, party systems become more national as governments centralize authority. Three institutional mechanisms encourage the nationalization of party systems in these terms:

- *The degree of political and economic centralization*. According to the empirical evidence provided by Chhibber and Kollman (1998, 2004) for Canada, Great Britain, India and the United States, the relative authority of national and subnational governments in a country helps to determine the success or failure of regional and minor parties and, therefore, the formation of a national party system. The basic argument is straightforward. Voters are more likely to support national political parties as the national government becomes more important for their lives. As this happens, candidates also are more likely to forsake local parties and assume the labels of national parties. These two effects are specially true in federal states where there can be a real back-and-forth between the authority of states and provinces and the national government. Thus, one expects a better linkage in states that are more unitary and worse linkage in states that are more federal.
- *Bicameralism*. Similarly, the presence of an upper house and the manner is which is elected affect linkage in the same terms, in particular when membership is geographically determined, bicameral system is strong and the upper and lower houses are elected using significantly different rules (Martínez and Lago, 2005). Thus, one expects better linkage in states that are unicameral and worse linkage in states that are bicameral (Cox, 1999: 150; Chhibber and Kollman, 2004: 30-32).
- *The nature of the executive (presidential versus parliamentary)*. Presidential elections are usually considered as a key variable driving the linkage of legislative candidates across districts. The mechanism underlying this effect is that, when there are presidential elections, candidates for the lower house often want to link with national-party candidates. Thus, minor parties have more opportunities to gain representation to the lower house when there are no presidential elections (Jones, 1994; Mainwaring and Sugart, 1997; Shugart and Carey, 1992; Taagepera and Sugart, 1989). However, and according to the empirical evidence provided by Cox (1997: chapter 10), this argument is no so simple. Presidential elections will drive the system toward national bipartism (or encourage the nationalization of party systems) to the extent that the presidency is a nondivisible prize elected by rules that approximate a straight fight. That is, if all four conditions are met: a powerful presidency, a strong presidential election procedure, strongly linked presidential and legislative elections, and a strong legislative election procedure.

Finally, sociological incentives for the nationalization of party systems depends on the existence and distribution of social cleavages. Cleavages at the local level increase the chances of malcoordination (hence of an increase in the number of entrants) (Cox, 1997). At the national level, the story depends on the geographic distribution of voters (Kin and Ohn, 1992). If a third party's supporters are concentrated in a particular region or district/s, then they may be able to compete successfully as one of the viable parties locally, even while remaining a third party nationally. Thus, one expect a worse linkage in countries where social diversity is concentrated and a better linkage in countries where social diversity is not concentrated or does not exit.

In considering the determinants of the degree of party linkage, we have taken as a case every legislative election in our sample of eighteen Western European countries between 1970 and 1998. Netherlands has been excluded. Since the whole country makes up a single electoral district there, party linkage is always perfect and therefore the national and the local party systems are the same independently of the institutional design and the social diversity discussed above. The total number of observations is 132. To our knowledge, this is the first time the determinants of the degree of party linkage are tested.

Our measure of the nationalization of party systems or party linkage, the dependent variable, is based on the inflation rate (I) introduced by Moenius and Kasuya (2004):

$$I=\left(\frac{ENP_{nat}-ENP_{avg}}{ENP_{avg}}\right)*100$$

where:

ENP_{nat} = the effective number of parties at the national level, and

ENP_{avg} = the average effective number of parties at the district level.

ENP measures how many "serious" parties are in the race. It is calculated as follows. For n parties receiving votes, $ENP=\frac{1}{\sum_{i=1}^{n} p_i^2}$. The element p is the proportion of votes obtained by party *i* in the election (Laakso and Taagepera, 1979). Our data on district-level electoral results come from Caramani (2000).

I relates the size of the national-level party system to the average size of the district-level party systems. If the size of the national-level party system is larger than the average size of party systems across districts, the measure indicates that there is inflation of the party system from the district level to the national level. If the average size of the party system across districts is larger than the size of the party system on the national level, we observe party system deflation. In short, the higher the inflation or the lower the deflation rate, the poorer the linkage across district-level party systems.

The independent variables are six. First, *Federalism* has been coded as a dummy variable (1 for federal countries, 0 for unitary). The source is Lijphart (1999). Second, *Bicameralism* has been coded as a dummy variable (1 for bicameral countries, 0 for unicameral). Our source is again Lijphart (1999). Third, the *Upper Tier* variable equals the percentage of all assembly seats allocated in the upper tier(s) of the polity. It ranges for zero for democracies without upper tiers to a maximum of 50% for Germany. The source is Golder (2005). Fourth, similar to Amorim Neto and Cox (1997), our approach to code *Presidentialism* takes the influence a presidential election exerts on a legislative elections as depending on the proximity of the two elections. If we denote the date of the legislative election by L_t, the date of the preceding presidential election by P_{t-1}, and the date of the succeeding presidential election by P_{t+1}, then the proximity value is:

$$PROXIMITY = 2 * \left| \frac{L_t - P_{t-1}}{P_{t+1} - P_{t-1}} - \frac{1}{2} \right|$$

This formula expresses the time elapsed between the preceding presidential election and the legislative election $L_t - P_{t-1}$ as a fraction of the presidential term $P_{t+1} - P_{t-1}$. Subtracting ½ from this elapsed time fraction, and then taking the absolute vale, shows how far away from the midterm the legislative election was held. The logic of the formula is as follows: The least proximal legislative elections are those held at midterm. The formula gives a proximity value of zero to these elections, which equates with the totally isolated elections of non-presidential elections. The most proximal nonconcurrent elections are those held just before or just after a presidential election. The formula gives them a proximity value that approaches one, the same value given to concurrent elections. Our data come from Golder (2005). Fifth, social heterogeneity is measured according to the most commonly employed measure of aggregate diversity: *Ethnic Fractionalization*. Fractionalization is defined as the probability that two individuals selected at random from a country will be from different ethnic groups:

$$FRACT_j = 1 - \sum_{i=1}^{N} s^2_{ij}$$

where s_{ij} is the share of group i (i = 1 … N) in country j.[7] The source is Alesina *et al* (2003). Finally, *District Magnitude,* operationalized as the average district magnitude in an electoral system, has been included. Caramani (2000) and Golder (2005) are our sources. Although there is no clear theoretical reason in

[7] We have also investigated the impact of the linguistic fractionalization and various combinations of ethnic and linguistic heterogeneity, without finding significantly stronger results than those reported.

our model to expect an effect of electoral systems features on party linkage, the connection between district magnitude and the degree of nationalizaton of party systems is key in the argument of Persson and Tabellini (1999, 2000, 2002) or Milesi-Ferreti *et al* (2000, 2002), Mujherjee (2003) or Scartascini and Crain (2001), at least implicitly. Given their assumptions of a similar distribution of social groups across districts in majoritarian systems and the existence of a single district in proportional systems, the consequence is that countries have just as large a national party system as one would expect were each local party system a microcosm of the whole (0% inflation).

Summary statistics for the variables in our model are provided in table 1[8]. Not surprisingly, there is considerable variation in the inflation scores or the degree of nationalization of party systems: the standard deviation of linkage is higher than the mean. This implies that countries have substantially larger national party systems than one would expect where their local party systems largely the same throughout the nation (16.93% inflation).

Table 1

DESCRIPTIVE STATISTICS

Variable	Observations	Mean	Std. Dev. (All)	Std. Dev. (Within)	Std. Dev. (Between)	Min.	Max.
Linkage	141	16.93	25.11	6.85	23.84	0	115.23
Federalism	141	0.32	0.47	0.00	0.48	0	1
Bicameralism	141	0.65	0.48	0.00	0.48	0	1
Upper Tier	141	0.11	0.15	0.04	0.15	0	0.50
Presidentialism	141	0.19	0.32	0.17	0.27	0	1
Ethnic Frac.	141	0.18	0.17	0.00	0.18	0.05	0.56
District Magnitude	141	17.47	35.13	1.50	33.78	1	150

Correlations among the variables are provided in table 2. The correlation between *Linkage* and *District Magnitude* is only -0.05 and is not statistically discernible from zero at about the 0.05 level or better. In other words, *District Magnitude* does not affect *Linkage*. Correlations among the other five independent variables and *Linkage* are of the expected sign and significant at the 0.05 level or better. The only exception is the *Upper Tier* variable. We hypothesized a negative sign, but the correlation is positive owing to Belgium. When Belgium is excluded, the correlation is –0.33.

[8] Netherlands is included here.

Table 2

CORRELATION AMONG THE VARIABLES

	Linkage	Federalism	Bicameralism	Upper Tier	Presidentialism	Ethnic Frac.	District Magnitude
Linkage	1.00						
Federalism	0.51*	1.00					
Bicameralism	0.25*	0.47*	1.00				
Upper Tier	0.27*	0.39*	-0.07	1.00			
Presidentialism	-0.19*	-0.17*	-0.12	-0.30*	1.00		
Ethnic Frac.	0.72*	0.66*	0.21*	0.17	-0.34*	1.00	
District Magnitude	-0.05	0.01	-0.14	0.20*	0.07	-0.01	1.00

* Correlation coefficients significant at the 5% level or better.

Having discussed the data and operationalization of our variables and their correlations, we can turn to the issue of how we specify the relations of interest. In the analysis of party linkage or the degree of nationalization of party systems we run two different econometric specifications. Equation one includes one variable pertaining to the legislative electoral systems, *District Magnitude*; a sociological variable tapping into social heterogeneity (specifically, *Ethnic Fractionalization*); and the translation of this social diversity into institutional terms (specifically, *Federalism*). Equation 2 is a pure institutionalist specification in which *Upper Tier*, *Presidentialism*, *Bicameralism,* and *District Magnitude* are combined:

$$\mathrm{Linkage}_{it} = \beta_0 + \beta_1 \mathrm{Magnitude}_{it} + \beta_2 \mathrm{Ethnic}_{it} + \beta_3 \mathrm{Federalism}_{it} + \delta x_{it} + \mu_{it} \quad [1]$$

$$\begin{aligned}\mathrm{Linkage}_{it} &= \beta_0 + \beta_1 \mathrm{Magnitude}_{it} + \beta_4 \mathrm{UpperTier}_{it} + \\ &+ \beta_5 \mathrm{Presidentialism}_{it} + \beta_6 \mathrm{Bicameralism}_{it} + \varepsilon_{it}\end{aligned} \quad [2]$$

The main results are displayed in table 3. Estimates of equation [1] are summarized in columns 1, 2, 3, 5, and 6. Those corresponding to equation [2] are shown in columns 4 and 7. In columns 1 to 4, Panel Corrected Standard Errors (Beck and Katz, 1995) are used instead of OLS Standard errors in order to deal with panel heteroskedasticity and serial autocorrelation. However, testing and controlling for potential cross-section correlation is discarded due to non-contemporaneous electoral cycles across countries. Estimating individual variances in order to estimate by FGLS is also ruled out due to the short number of individual observations.

Because between-variation of variables *District Magnitude, Federalism* and *Ethnic Fractionalization* is much wider than within-variation, we also calculated the between-group estimator corresponding to columns 2 and 3[9]. Results are summarized in columns 5 and 6, respectively.

Finally, in column 7 individual fixed-effects are included into estimates to test potential omitted variable bias. However, independent variables are time invariant (bicameralism) or quasi-time invariant: between-variation is much wider than within- variation, as in the case of *District Magnitude*. Then, including both fixed-effects and time-invariant variables is not possible using standard procedures. And replacing fixed-effects with random-effects would be a bad option because those are assumed orthogonal to regressors (Beck and Katz, 2004). As an alternative to standard LSDV, the three-stage estimator (called *xtfevd*) proposed by Plümper and Troeger (2004a and 2004b) was used[10]. Variables *Bicameralism* and *District Magnitude* are treated as time invariant[11].

The first econometric model explains about 7 percent of the variance in *Linkage* values. Not surprisingly, *District Magnitude* is not statistically significant: the number of seats to be filled in a district do not affect the nationalization of party systems. The second model, in which the variable *Ethnic Fractionalization* is added, produces a much better fit (an R^2 of 0.37). *Ethnic Fractionalization* has the expected sign and is statistically significant at the 0.01 level: the higher the ethnic diversity, the worse the linkage. The third econometric model, in which *Ethnic Fractionalization* is replaced with *Federalism* in order to avoid problems of multicollinearity, produces a worse fit (an R^2 of 0.18). *Federalism* has the expected positive sign and is statistically significant at the 0.01 level: *Linkage* is worse in federal states than in unitary states, In the fourth model only *Bicameralism* is statistically significant (at the 0.01 level): in bicameral countries linkage is worse than in unicameral countries. *Upper tier* and *Presidentialism* are not statistically significant, and only the latter has the expected (negative) sign. Finally, between-estimates in columns 5 to 7 confirm the previous findings.

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[9] As it is easy to demonstrate, the OLS estimator is a matrix weighted average of the within- and between-groups estimator. See, for instance, Greene (2003, 289-290).

[10] While the effect of time-invariant variables cannot be estimated when individual fixed effects are also included, Monte Carlo simulations show that *xtfevd* performs better than the fixed-effect model when the between variation clearly exceeds the within variation (by at least factor 2.5). This is the case of variables *Presidentialism* and *District magnitude*. We thank Vera Troeger and Thomas Plümper for access to their STATA© program.

[11] The number of observation drops from 132 to 115 because *xtfevd* discard initial observations when the Prais-Winsten AR(1) option is cosen, as we do.

Table 3

THE DETERMINANTS OF THE NATIONALIZATION OF PARTY SYSTEMS

Independent variables	Models (1)	(2)	(3)	(4)	(5)	(6)	(7)
District Magnitude	-0.21 (0.21)	-0.27 (0.22)	-0.26 (0.24)	-0.10 (0.21)	-0.38 (0.87)	-0.29 (1.05)	-0.13 (0.16)
Ethnic Fractionalization		93.73*** (20.31)			93.49*** (26.91)		
Federalism			24.54*** (8.68)			25.42* (12.54)	
Upper Tier				22.19 (15.85)			1.74 (6.02)
Presidentialism				-0.81 (1.86)			-0.75 (2.17)
Bicameralism				7.86** (3.64)			13.74*** (1.84)
R^2	0.071	0.371	0.176	0.103	0.465	0.230	0.880
N	132	132	132	132	17	17	115
Estimation Method	OLS with PCSE	OLS with PCSE	OLS with PCSE	OLS with PCSE	Between-groups	Between-groups	xtfevd

*** p<0.01, **p<0.05, *p<0.10

Notes: Standard Errors are given in parentheses.

4. THE COMPOSITION OF PUBLIC SPENDING AND THE NATIONALIZATION OF PARTY SYSTEMS

In this section, we examine whether political institutions shape fiscal policy choices. First, we test if government spending on transfers is a function of the permissiveness of electoral systems or district magnitude. Second, we test our main hypothesis, which predicts that in weakly nationalized party systems, and given the additional transaction costs introduced by subnational parties, politicians enjoy a higher rigidity or a lower margin of maneuverability to change the composition of public spending than in highly nationalized party systems.

We have taken as a case every legislative election in our sample of eighteen Western European countries between 1970 and 1998. The data source for the fiscal and economic variables is the *OECD Statistical Compendium edition 02#2003*. This database has two advantages in comparison with other potential sources: the homogeneity of fiscal data and the precision in the definition of fiscal variables.

The procedure to test the effects of our key independent variables, alone and in combination with different control variables, is as follows:

$$\text{Transfers}_{it} = \alpha + \beta_1\text{Transfers}_{it-1} + \beta_2\text{Linkage} + \beta_3\text{Age} + \beta_4\text{Unemployment} + \\ + \beta_5\text{EOGDP} + \beta_6\text{Federalism} + \beta_7\text{Magnitude} + \varepsilon_{it}$$

where:

- *$Transfers_{it}$* and *$Transfers_{it-1}$* are government transfers to families as a share of public expenditure in country i at times t and t-1 respectively (in percentage). Source: OECD. Using the acronyms from the OCDE:

  Tranfers= (SSPG+TRPG)/(IGAA+TKPG+CGAA+ SSPG+TRPG).

  SSPG= Social benefits paid by government.

  TRPG= Other current transfers paid by government.

  IGAA= Fixed investment, government.

  TKPG= Capital transfers and transactions paid.

  CGAA= Government consumption.

- *Linkage* is the degree of party linkage or nationalization of party systems based on the inflation rate introduced by Moenius and Kasuya (2004).
- *Age* is the share of population over 65 years (in percentage). Source: OECD.
- *Unemployment* is the unemployment rate (in percentage). Source: OECD.
- *EOGDP* is Total Expenditure over GDP (in percentage). Source: OECD. OECD acronyms: *YPGTC*.
- *Federalism* is a dummy variable equal to one for federal countries and 0 for unitary countries.
- *District Magnitude* is the average district magnitude in each electoral system.

Because of strong sluggishness in changes on the budget structure, the lagged endogenous is included as regressor. Variables *Age* and *Unemployment* have been also added to control for both within and between variation in the number of beneficiaries from the main transfer programs (pensions and unemployment compensation). Both variables are determinants of transfers and Social Security payments (Sanz and Velázquez, 2002). According to the aforementioned results by Arze *et al* (2005), we introduce a dummy variable, *Federalism,* for federal countries. Finally, variable *EOGDP* is included to control for a potential relationship between the level of public expenditure and its composition.

Spending categories included into the denominator in the variable *Transfers* accounts for more than 90% of average total public spending for all countries and years in the period 1970-98. Variable *EOGDP* also includes into the numerator items as interest payments and subsidies to firms. This definition of the dependent variable as a share of public expenditure instead of in terms of the GDP is explained by two reasons. Firstly, we are not interested in the level of expenditure, but in its composition. Moreover, an increase in transfers over the GDP is compatible with a reduction of their share on budget if the growth in direct expenditure is higher. Secondly, since the seminal contributions by Adolph Wagner in the 19th century, a huge number of both theoretical and empirical papers on the determinants of the level of public expenditure on GDP have been published[12]. Hence, institutional variables like the electoral system should be integrated into those theoretical and econometric available models in order to control for all potential factors explaining the level of expenditure in each country. And this is not an easy task (Jackson, 1993).

Two other variables were included in previous estimates to control for both differences in standards of living and economies of scale: per capita GDP expressed in Purchasing Power Parities and total population. Both were not significant once the lagged endogenous were included as a regressor. Summary statistics for the variables are provided in table 4.

For the statistical sets, we use a panel data composed of 91 observations. Several reasons explain why the number of observations drops from initial 141 to 91. The inclusion of lagged endogenous as regressor drops 17 observations. The lack of fiscal data for Switzerland and for some countries in the 70s is a second reason. Finally, extremely short electoral cycles are excluded. In all cases data for election years is discarded due to potential lags between changes on political variables and changes on budget structure and to avoid biases due to the manipulation of the budget composition around election moments (Barreira and Baleiras, 2004). Let be two consecutive elections in years t and t+s, average values from years t+1 to t+s-1 are then used. As a result observations for one-year ($s=0$) or two-years ($s=1$) electoral cycles are dropped.

Serial autocorrelation dissapears once Transfers_{-1} is included. Moreover, the Breusch and Pagan Lagrangian multiplier test shows that individual random effects are not necessary (p-value=0.246). The Cook-Weisberg test for heteroskedasticity was carried on. According to the results, the null hypothesis of constant variance should be rejected (p-value 0.012). On the contrary, multicollinearity is not a serious concern according to estimates of multiple correlation among regressors. Hence, Panel Corrected Standard Errors (Beck and Katz, 1995) are used instead of OLS Standard errors in order to deal with panel heteroscedasticity. However, testing and controlling for potential cross-section correlation is discarded again.

[12] See, among others, Tarchys (1975), Lybeck (1988), Henrekson and Lybeck (1988), and Hackl *et al* (1993).

Table 4

DESCRIPTIVE STATISTICS

Variable	Observations	Mean	Std. Dev. (All)	Std. Dev. (Within)	Std. Dev. (Between)	Min.	Max.
Transfers	91	0.42	0.06	0.03	0.05	0.21	0.52
Linkage	91	15.16	15.16	5.52	23.77	0	115.23
Age	91	14.03	1.93	1.20	1.58	8.45	17.81
Unemployment	91	6.91	3.85	2.31	3.20	1.15	18.25
EOGDP	91	49.74	7.49	4.29	6.05	33.78	70.22
Federalism	91	0.30	0.46	0.00	0.46	0	1
District Magnitude	91	14.96	29.66	1.83	34.74	1	150

The main results are displayed in table 5. In the first model, *Linkage* has the expected sign —the weaker the nationalization of party systems, the lower the spending on transfers—, but it is not statistically significant. *Federalism* and total expenditure over the GDP (*EOGDP*) are not statistically significant either. On the contrary, the share of population over 65 years and the unemployment rate are statistically significant at the 5% level: a one percent increase in the unemployment rate and in the share of population over 65 years raises the weight of transfers on total expenditure by about 0.14 and 0.28 points, respectively. Finally, the composition of public spending is subject to a strong rigidity: the lagged spending in transfers has a coefficient of 0.87. The second model, in which the variables *Federalism* and *EOGDP* are omitted, produces little change in the coefficients of the variables. *Linkage* is again not statistically significant.

Although an unitary coefficient for $Transfers_{t-1}$ may be clearly discarded according to the Wald test (p-value=0.011), in estimation 3 the hypothesis $\beta=1$ is imposed (i.e. we suppose an unit root process on the variable transfers). The model shows little change in the coefficients of *Linkage* and *Unemployment*, but produces an insignificant coefficient of *AGE*.

The fourth model, in which *Linkage* is replaced with *District Magnitude*, produces a coefficient on *District Magnitude* that is not statistically significant: electoral systems do not affect the composition of public expenditure. And the lagged share of transfers shows the same coefficient than in the previous models[13].

[13] Because between-variation of variables *Linkage* and *District Magnitude* is much wider than within-variation, we also calculated the between-group estimator corresponding to columns 2 and 4 (dropping the lagged endogenous). While the statistical significance of the latter increased, the corresponding p-value was over 0.20.

In the fifth column, the hypothesis predicting a higher rigidity of the budget structure in weakly nationalized party systems is tested. A new dummy variable (*spline*) is defined in order to split the sample into two according to the degree of party linkage: *spline* is equal to one when party linkage in above the median, (i.e., the lowest nationalized party systems) and 0 when it is below the median (i.e., the highest nationalized party systems). Then, the following econometric specification is estimated:

$$\text{Transfers}_{it} = \alpha + \beta_3 \text{Age} + \beta_4 \text{Unemployment} + \beta_9 \text{spline}_{it} + \beta_{10} \text{spline} \bullet \text{Transfers}_{it-1} + \\ + \beta_{11}(1\text{–spline}) \bullet \text{Transfers}_{it-1} + \mu_{it}$$

The coefficient on this spline is negative, suggesting that spending on transfers is lower in weakly nationalized party systems than in highly nationalized party systems. But it is not statistically significant. The introduction of an interaction between the spline and the government transfers in t-1 explores to what extent rigidity of the budget composition depends on the degree of party linkage. The answer is affirmative: the lagged spending on transfers has a coefficient of 0.93 for weakly nationalized party systems, but only of 0.82 for highly nationalized party systems. In other words, about 93 percent of the lagged budget composition persists in the following year in weakly nationalized party systems, but only about 82 percent in highly nationalized party systems. Moreover, according to the results of a Wald test, the hypothesis $\beta=1$, can be rejected in the latter case (p-value=0.016), but not in the former (p-value=0.236).

Finally, model 6 tests the effect of an increase in the number of electoral parties, measured again according to the Laakso and Taagepera's index, on the government spending on subsidies and transfers. The argument, provided and empirically supported by Mukherjee (2003: 707), is that, when the number of parties in a legislature increases, therein implying a greater representation of special interests and different constituencies, individual parties have stronger incentives to support spending on subsidies and transfers as it provides more "pork" to satisfy the demands of their constituencies.

Although there is a high correlation between party linkage and the number of electoral parties (+0.71), according to our argument a strong impact of the number of parties on the composition of public spending should not be expected. When the number of parties in a legislature increases, this does not imply that only national or social interests were represented. On the contrary, the higher the number of parties in a legislature, the higher the probability of finding subnational parties. And given that they represent local interests, highly fragmented legislatures should be more prone to public good spending. In sum, the relationship between the number of parties in a legislature and the composition of public spending is not so clear as Mukherjee claims. Our argument is strongly supported by model 6: the number of electoral parties is not statistically significant.

Table 5

THE COMPOSITION OF PUBLIC SPENDING IN OECD COUNTRIES, 1970-1998

Dependent variable: *Transfers*	**Models**					
Independent variables	**1**	**2**	**3**	**4**	**5**	**6**
Intercept	-0.53 (2.25)	0.15 (2.28)	-2.52 (2.00)	0.11 (2.51)	2.21 (2.89)	0.43 (2.34)
$Transfers_{-1}$	0.87*** (0.05)	0.88*** (0.05)	[1.00]	0.87*** (0.05)		0.88*** (0.05)
Linkage	-0.002 (0.006)	-0.003 (0.005)	-0.003 (0.006)			
Age	0.28** (0.14)	0.36*** (0.13)	0.20 (0.13)	0.37*** (0.14)	0.35*** (0.13)	0.36*** (0.13)
Unemployment	0.14** (0.06)	0.13** (0.06)	0.12* (0.07)	0.13** (0.06)	0.15** (0.07)	0.13** (0.06)
EOGDP	0.04 (0.03)					
Federalism	-0.38 (0.44)					
District Magnitude				0.003 (0.007)		
ENEP						-0.001 (0.001)
Spline					-4.53 (3.76)	
Spline* $Transfers_{-1}$					0.93*** (0.06)	
(1-Spline)* $Transfers_{-1}$					0.82*** (0.07)	
Wald test: $\beta_{10}=1$ (p-value)					0.236	
Wald test: $\beta_{11}=1$ (p-value)					0.016	
R^2	0.896	0.893	0.082	0.893	0.896	0.893
N	91	91	91	91	91	91

*** $p<0.01$, **$p<0.05$, *$p<0.1$

Notes: OLS estimates. Values corresponding to Panel Corrected Standard Errors (PCSE) are given in parentheses.

5. CONCLUSIONS AND EXTENSIONS

According to our theoretical arguments and empirical findings, the degree of party linkage or the nationalization of party systems is more relevant than differences in electoral systems to explain fiscal choices. Since both factors are different from both theoretical and statistical standpoints, the choice of one of them as independent variable is a relevant issue.

A second result of the paper is that the degree of party linkage is not statistically significant to explain differences in the share of transfers on public expenditure for the European OECD countries over the period 1970-1998. Our findings do not support that the share of transfers to families over total public expenditure —proxy of "universal" public expenditure— was higher when subnational parties and interests disappear from national politics. However, this second conclusion is subject to further analysis. In this paper we have followed the same criteria than Milessi-Ferreti *et al* (2002). Direct expenditure is assumed as targetable expenditure, and transfers to families are assumed to enjoy a limited scope for targeting them geographically. But this distinction is relatively crude as the following examples illustrate. First, direct expenditure on national public goods is enjoyed by citizens all over the country. Second, transfers to unemployed may be really targeted to lagged regions or regions in crisis[14]. Third, transfers to families made by subcentral governments in federal countries just benefit their residents (so they have a geographical target). In our opinion, a more careful and detailed analysis of expenditure is necessary before discarding the hypothesis that the degree of party linkage is irrelevant to explain differences in the composition of public expenditure. This is a future extension of this paper. Probably we should change the scope of the mechanism. More than explaining the composition of public expenditure at the highest aggregation level, we should focus on individual expenditure programs.

On the contrary, we have found support for the relationship between the degree of party linkage and the rigidity of expenditure structure: when local or regional parties or interest disappear from national politics, politicians tend to enjoy a lower rigidity or a higher margin of maneuverability to change the composition of public spending. In other words, budget composition persists to a greater extent in weakly than in highly nationalized party systems. The mechanism behind this argument is that in weakly nationalized party systems, subnational parties are an additional relevant actor, making political changes in expenditure composition more difficult. This relationship should be analyzed in depth in future research in both theoretical and empirical grounds.

[14] This is the case, for instance, of the Spanish *Plan de Empleo Rural,* designed to benefit unemployed workers in the primary sector. Most of them are resident in Andalousia.

Finally, we think that our results should stimulate the analysis of others plausible connections between the degree of party linkage and fiscal choices. For instance, it would be interesting to check the potential relevance of this factor to explain the success in fiscal consolidation process. Do countries with a more nationalized party system enjoy a higher capacity to expenditure cuts and then more fiscal discipline?.

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SÍNTESIS

PRINCIPALES IMPLICACIONES DE POLÍTICA ECONÓMICA

La composición del gasto público —tanto económica como funcional— es un factor relevante para el diseño y evaluación de los efectos de la política presupuestaria. Por ello la existencia de diferencias permanentes en el tiempo en la composición del gasto entre países ha dado pie al estudio de sus determinantes. Las aproximaciones económicas estándar suelen partir del modelo de votante mediano e incluir en las especificaciones econométricas variables como la renta per cápita, la ratio de precios entre sector público y privado, la tasa de desempleo, la población total, la densidad o la estructura demográfica. Sin embargo, estas variables no explican plenamente las diferencias entre países.

En la búsqueda de factores adicionales, la investigación teórica y aplicada ha encontrado en las características de los sistemas electorales una variable a tener presente. En este documento mostramos que, más que en los sistemas electorales en si, la atención debería enfocarse hacia el grado de nacionalización de los sistemas de partidos a la hora de analizar el margen de maniobra con que cuentan los gobiernos.

El segundo objetivo de este documento es examinar en qué forma ese grado de nacionalización del sistema de partidos afecta al presupuesto. Exploramos dos posibilidades: la relación del primero con la participación de las transferencias a los hogares en el gasto público; y el efecto del grado de nacionalización sobre la rigidez en la composición del gasto público. En el primer caso, la idea es que en los países con un grado de nacionalización más elevado, los intereses regionales tienen menor repercusión en la toma de decisiones públicas; lo que, a su vez, prima a los programas de transferencia universales respecto al gasto directo —consumo e inversión—, más vinculado al territorio. En el segundo caso, el punto de partida es la observación de que el proceso presupuestario es una negociación multilateral entre múltiples actores. En este contexto, la existencia de partidos de ámbito regional genera costes de transacción adicionales a la hora de introducir cambios en los programas de gasto y, por tanto, mayor rigidez en su composición.

Para contrastar estos argumentos usamos una base de datos económicos y políticos que integra 141 elecciones en 18 países occidentales europeos durante el período 1970-1998. Nuestros resultados demuestran que el grado de nacionalización del sistema de partidos no es estadísticamente significativo a la hora de explicar las diferencias en el nivel de las transferencias, pero sí para dar cuenta de la rigidez presupuestaria por el lado del gasto.

En todo caso, la primera de estas dos conclusiones debe ponerse en cuarentena, por los posibles problemas de medición en las variables. En el documento se sigue el mismo criterio que Milessi-Ferreti *et al* (2002): el gasto directo sería el gasto asignable territorialmente, las transferencias a los hogares serían gasto "universal" para el conjunto de ciudadanos de cada país. Sin embargo, esta distinción plantea problemas.

Algunos ejemplos serían el hecho de que el gasto en bienes públicos puros de ámbito estatal es gasto universal; las transferencias a desempleados pueden estar de facto diseñadas para favorecer especialmente a determinados territorios atrasados, o a aquellos cuyas economías experimentan un choque asimétrico negativo; las transferencias a familias ejecutadas por gobiernos subcentrales en países descentralizados sólo benefician a sus residentes, al tiempo que pueden estar siendo cofinanciadas por el gobierno central. En futuros trabajos quizá deberíamos cambiar el alcance del mecanismo. Más que explicar la composición del gasto a un nivel tan agregado como el que se ha planteado hasta ahora en la literatura, habría que centrar la atención en programas de gasto individuales.

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Junto al original del Papel de Trabajo se entregará también un resumen de un máximo de dos folios que contenga las principales implicaciones de política económica que se deriven de la investigación realizada.

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