Veto Players and Law Production in Parliamentary Democracies: An Empirical Analysis

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This article investigates hypotheses generated by the veto players' theory. The fundamental insight of this theory is that an increase in the number of veto players (for all practical purposes, in parliamentary systems the number of parties in government) and their ideological distance from one another will reduce the ability of both government and parliament to produce significant laws. In addition, the number of significant laws increases with the duration of a government and with an increase in the ideological difference between current and previous government. These propositions are tested with legislative data (both laws and government decrees) on working time and working conditions identified in two legislative sources: the NATLEX computerized database in Geneva (produced by the International Labour organization) and Blanpain's International Encyclopedia for Labour Law and Industrial Relations. *The data cover fifteen West European countries for the period 1981–91. The evidence corroborates the proposed hypotheses.*

Party systems have traditionally been the fundamental variable of political analysis (Duverger [1954] 1969; Lijphart 1984; Sartori 1976). On the basis of the party system of a country (roughly speaking, the number of parties in parliament and the ideological distances among them), one expects to see systematic differences regarding the relationship between parliament and government (executive dominance) as well as differences in the nature of politics (i.e., whether the system is polarized or moderate). Recently, an alternative middle-range theory was proposed. According to this theory, the fundamental political differences between countries are generated by the number of veto players (individual or collective actors whose agreement is necessary for a change of the status quo) (Tsebelis 1995a, 1995b).

The veto players' theory differs in two major respects from the middle-range theories in comparative politics mentioned above (in addition to having different independent variables).[1] First, it is policy consequential. That is, it takes policy outcomes as its primary concern and works its way backward to institutional and partisan characteristics that are responsible for the production of specific policy outcomes. Other theories result in classifications or typologies (Lange and Meadwell 1985). They make distinctions (two- and multiparty systems, presidential and parliamentary regimes, cadre and mass parties, and so on) without relating them to policy differences.

Second, the veto players' theory applies the same framework of analysis to presidential and to parliamentary regimes, to two- and to multiparty systems, and to unicameral and to bicameral legislatures. In fact, in countries where veto powers are exercised by other players, such as the president (Portugal, presidential regimes) or the second chamber (Germany most of the time, the United States, Switzerland), the number of veto players is increased and the framework applied accordingly.[2] Among other middle-range theories, only Lijphart's consociationalism has the same range of applicability. Lijphart reaches different conclusions, however. For example, he classifies the United States along with the United Kingdom as majoritarian countries, falling at the opposite end of the spectrum from Italy,[3] which represents a consensus democracy. According to the veto players' theory, the United States and Italy are categorized together as countries with multiple veto players, while the United Kingdom is distinct, as it has only one veto player.

The veto players' theory predicts that policy stability (defined as the impossibility of significant change of the status quo) will be the result of large coalition governments, particularly if the coalition partners have significant ideological differences among them. In turn, policy stability can be linked to a series of other political phenomena. As a result of this policy stability (that is, the inability to adapt to exogenous shocks), coalition governments will be short lived. A similar argument can be made about regime stability in presidential systems. Because the regime cannot adapt to

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[1] The independent variables are veto players, along with their congruence and cohesion. In a crude way, this translates to the number of parties in government, the ideological distance among those parties, and the cohesion of each one of them (instead of the parties in parliament used by the party system analyses).

[2] For the counting rules, see Tsebelis 1995a.

[3] This is the classification in *Democracies* (Lijphart 1984); subsequently, Lijphart introduced a second axis (federalism) to his analysis. The United Kingdom and the United States differ along this axis. Yet, even in this classification, Italy does not resemble the United States (if anything, the difference increases because now they differ in two dimensions as opposed to one).

sudden changes of the status quo, it may fall. In addition, if a government is unable to produce significant laws (policy stability), the judiciary may step in and play a more important role in countries with a coalition government than in countries with a single-party government. Furthermore, bureaucracies may be more independent during coalition rule than under single-party government.

Let me situate the argument proposed and tested here with respect to three different streams of relevant arguments. The first is the "divided government" literature in American politics. Some researchers (Fiorina 1992; Sundquist 1988) maintain that divided government will cause a reduction in significant legislation. The argument is very similar to the one proposed here, because divided government means that two of the veto players have significantly different preferences. Yet, empirical evidence collected by Mayhew (1991) on significant laws does not corroborate the divided government expectation.[4] Mayhew finds no significant difference in legislation between periods of unified and divided government. Does this finding falsify the veto players' theory presented here?

The difference between Mayhew's findings and those I present below is that my analysis pertains to majoritarian institutions, while in the American political system one of the veto players (the Senate) is supermajoritarian. Let me clarify the difference that makes to the veto players' argument.[5] In the U.S. Senate, individual senators can filibuster (talk nonstop in order to prevent a vote on a bill), and a three-fifths vote is required for cloture. It follows that for every important bill a minority of 41 senators can block the vote on the floor of the Senate. In order for a significant bill to pass, the required support is 60 votes (qualified majority), not 51 (simple majority). It so happens that historical cases of the minority party controlling fewer than 41 seats do not exist after 1979 (the three-fifths rule was introduced in 1975). Consequently, all significant bills have to pass through the Senate with some level of bipartisan support. This means that divided government is built into U.S. institutions not because of the requirement that all three veto players agree on a particular change of the status quo but because of the filibuster rule, which essentially prevents partisan legislation from passing the Senate. How about bipartisan legislation? It will pass the Senate (and the House) and is unlikely to be vetoed by the president regardless of his party. In the unlikely occasion that a president vetoes such legislation, the two chambers are likely to have the two-thirds majority required to override. Thus, the supermajoritarian nature of decision making in the Senate explains the peculiarity of U.S. results and places them in comparative perspective.[6]

A second stream in the literature concerns the role of veto players with respect to budget deficits or inflation (Alt and Lowry 1994; McCubbins 1991; Roubini and Sachs 1989). According to this argument, the larger the number of veto players, the more likely is each to ask for special favors for his or her constituency as a condition for supporting legislation, and the higher the deficit or inflation rate will be. This views veto players as a collective action problem, which neither reinforces nor contradicts the argument presented here. For example, according to the collective-action argument, oversized coalitions will have higher deficits or inflation than minimum winning coalitions. According to my argument, oversized coalitions will be locked into the previous policy pattern (whatever that pattern happens to be).

Finally, a third stream identifies or tests parts of the veto players' argument as presented in this article (as well as Tsebelis 1995a, 1995b). With regard to policy stability, Bawn (N.d.), in an elegant article on government spending in Germany, categorizes issues as favored by the Socialists (pro-SPD) or by the Christian Democrats (pro-CDU/CSU), and she demonstrates that participation by the SPD in the Grand Coalition in 1966 had as a consequence a significant increase in pro-SPD spending, but this spending remained constant in 1969, despite the fact that the SPD became the main party in a coalition government with the Free Democratic Party (FDP). This finding is consistent with both Bawn's hypothesis that the FDP seeks to reduce spending and the veto players' theory. Similarly, Hallerberg and Basinger (1998), in an empirical article on one significant area of legislation—the reduction of business and highest income personal taxation in advanced industrialized countries, 1986–90—discovered that tax reduction was more decisive in countries with a single-party government (whether of the Right or the Left). Kreppel (1997) found legislative output in Italy negatively correlated with the number of parties in government.

Robert Franzese (1996), in an analysis of budget deficits in advanced industrialized countries, concludes that countries with many veto players are locked into the same deficit pattern (i.e., the ones with high debt have high deficits, such as Italy, while the ones with low debt have low deficits, such as Switzerland). In contrast, countries with a single-party government (whether majority or minority) can move away from preexisting patterns (i.e., they have high or low deficits, regardless of the level of their debt). Franzese's study can be considered a crucial experiment between my veto players' theory and the collective-action view. Similarly, Daniel Treisman (1998) studied both advanced and developing countries and found that federal countries (i.e., many veto players) are locked into patterns of high (developing nations) or low (advanced nations) inflation. Finally, most of the chapters and certainly the introduction and conclusion of *Do Institutions Matter?* (Weaver and Rockman 1993) claim that countries with a multiparty parliamentary system respond to exogenous shocks in a way similar to countries with a presidential system, a finding also consistent with the veto players' theory.

With respect to other variables, Warwick (1994)

[4] For a debate on the Mayhew data set, see Kelly 1993 and Mayhew 1993.

[5] Tsebelis and Lin (1998) develop a veto players' model that includes qualified majority decision making (filibuster and veto override).

[6] For a detailed discussion along these lines see Jones 1998.

found that the ideological distance between government partners has a negative effect on the duration of government coalitions in parliamentary democracies. The conventional wisdom on coalitions was that characteristics of the parliament (number of parties, ideological distance among them) affect the duration of coalitions, because partners look at the situation in parliament to calculate their probabilities of participating in a new government (see Laver and Schofield 1990 for an overview). Warwick included both government and parliament variables in the same regression; it turns out that only the government characteristics (ideological distance between government partners) mattered, exactly as the veto players' theory predicts.

Nicos Alivizatos (1995) studied the importance of the judiciary and found that the most active judges are in the countries with many veto players, exactly as Tsebelis (1995a) expects. Similarly, Bednar, Ferejohn, and Garrett (1996), who examined the activism of the European Court of Justice, find that the introduction of qualified majority voting in the European Council (which reduces the number of veto players in European institutions) led to a significant reduction in judicial activism. Examining one particular bureaucracy (the German Bundesbank), Lohmann (1998) found that bureaucratic independence increases during periods of opposing majorities in the upper and lower houses (Bundestag and Bundesrat) of the German parliament. Her findings are also consistent with expectations generated by the veto players' theory.

This article makes a direct and cross-national test of the first and most important prediction generated by the veto players' theory: that the number of significant laws produced by a coalition government, particularly if there are important ideological differences among government partners, is significantly lower than the number of significant laws produced by single-party government or by coalitions with partners that agree. This prediction has not been tested so far directly and cross-nationally because of the difficulty of identifying significant laws across different countries in a consistent way.[7] That obstacle has been overcome by the work of Doering (1995b) and his team. I will revisit the articles in which the veto players' theory was introduced, extract their predictions, and then test these predictions using a new data set of significant laws on issues of working time and working conditions provided by Doering.

The article is organized into three parts. The first provides a simple model that adapts the veto players' theory (which is designed for multidimensional spaces) to one dimension (the traditional Left-Right political spectrum). This model predicts that an increase in the ideological distance among coalition partners adversely affects the number of significant laws enacted in a country. The second section presents the data set, which combines information about significant laws in different West European countries with data about government coalitions (composition of government and ideological position of parties on a Left-Right scale). In this part, I explain how the different variables used in this study are generated. The third section presents the results and shows that the expectations of the model are corroborated.

VETO PLAYERS, IDEOLOGY, AND LAW PRODUCTION IN ONE DIMENSION

A veto player is an individual or collective actor whose agreement is necessary for a change of the status quo. On the basis of this definition, the argument underlying the veto players' theory is very simple: A significant policy change has to be approved by all veto players, and it will be more difficult to achieve the larger the number of veto players and the greater the ideological distance among them. In a parliamentary system, veto players are the parties in government as well as other actors endowed with veto power. Let us analyze the different possibilities.

Veto players other than government parties include the upper house or the head of state. The upper house most frequently either is controlled by the same coalition as the government (Italy, Belgium, and Switzerland) or does not have the power to veto legislation (France, Spain, and the United Kingdom).[8] The only country (in our sample of 15 West European countries) that has an upper house endowed with veto powers and that is not controlled by the same parties as the lower house is Germany (for some of the period under examination). Consequently, in Germany for the periods that the upper house (Bundesrat) is controlled by a different party than the lower house (Bundestag), I add one veto player to the parties in government. Indeed, during these periods, the parties in government are hostages to the opposition party and have to secure its approval in order to pass legislation.

The head of state has no veto powers in West European countries. This statement is true not only in the cases of royalty but also for elected heads of state who are considered strong, such as the French or the Finnish president. There are two exceptions in my data set. First, the Portuguese president is endowed with veto power over legislation (an attempt to modify the constitution in this respect in 1982 failed). Consequently, whenever the president has different preferences from the governing coalition, I include one additional veto player to the calculations for Portugal.[9] Second, the French president has veto power over

[7] Hallerberg and Basinger (1998) as well as the articles in Weaver and Rockman (1993) use case studies. Bawn (n.d.) and Kreppel (1997) study only one country each (Germany and Italy, respectively), and Franzese (1996) studies deficits that result from government policies as well as activities in the private sector and the overall performance of the economy.

[8] Using Lijphart's (1984) terminology, bicameralism in the first set of countries is "congruent," while in the second set it is "asymmetric"; in both cases it is "weak." Tsebelis and Money (1997) have demonstrated that, even in these cases, upper houses certainly influence and sometimes even abort legislation. But cases of abortion are the exception rather than the rule, so we will ignore it here.

[9] Characterizing the political beliefs of General Eanes, who was in power in the first part of the period I examine, was difficult. I assimilated him with the Socialist Party, which supported his election. The problem was not repeated with Soares, who was actually a Socialist.

government decrees. There was one case in the data set when the president was supported by a different majority than the government in the data set, and in this case I increased the number of veto players by one.

In all other cases, veto players are the government partners in a parliamentary system. This statement holds on the average in the case of oversized as well as minority governments. In the case of oversized government, the agreement of all government parties is formally not necessary for legislation to be approved. By the definition of "oversized," some parties can be ignored, and legislation still can be accepted by a majority in parliament. What is formally possible may not be politically feasible, however. Trying to pass legislation against the will of minor government partners may lead to a crisis and the resignation of the government (Tsebelis 1995a). Consequently, if the passage of legislation is so important for some parties and so damaging for others, a different government would have to enact this legislation (after the dissident parties cause the government to fall).

The case of minority governments requires more explanation. The predominant belief is that a minority government corresponds to some kind of divided government in a presidential system and that legislation requires the agreement of both government and parliament to be enacted (Laver and Shepsle 1996). My argument is that the conventional wisdom is formally true, but the dynamics of a parliamentary system work differently. Minority governments are equipped with significant positional and institutional weapons that enable them (most of the time) to impose their will on parliament, just as majority governments do. The positional advantage is the location of the government party. This party is usually at the center of the political system.[10] As a consequence, it can lean slightly one way or another and find allies ready to support different pieces of legislation. The institutional advantages of a government are the control it has over the parliamentary agenda (Doering 1995c). As Doering demonstrates, there are a variety of such advantages in each country. Yet, one advantage is common to governments in all parliamentary systems: the question of confidence (Huber 1996). This weapon enables the prime minister to transform a vote on a piece of legislation into a vote for or against the government under the threat of resignation and possible new elections. Consequently, it places the opponents of a particular law under significant pressure, which enables the government effectively to control the agenda.

The conclusion of this analysis is that, in parliamentary systems, veto players are (with the exceptions mentioned above) the partners in a government coalition. The more partners there are in government, the more difficult it becomes to induce a significant change. In fact, if one defines the concept of the *winset of the status quo* as the set of points that are preferred over the status quo by the veto players, then the following two propositions can be proven (see Tsebelis 1995b, 297–301).[11]

PROPOSITION 1: *As the number of veto players increases, the winset of the status quo does not increase (i.e., policy stability does not decrease).*

PROPOSITION 2: *As the distance among veto players increases along the same line, the winset of the status quo does not increase (i.e., policy stability does not decrease).*

From propositions 1 and 2, I will produce a corollary about the relationship between the number of veto players and the ideological distance among them in a single dimension. This adaptation is necessary because the data set I analyze is in one dimension (the traditional Left-Right dimension of West European politics).

Figure 1 offers a graphic representation of a three-party government and the status quo (previous legislation in an area). Note that the three parties in government are located on a straight line. This is a restriction that I impose in order to analyze the available (one-dimensional) data. From this restriction certain interesting modifications follow of the original multidimensional model. Note also that the status quo legislation is not necessarily located on the same line, since in general a particular piece of legislation may address other issues as well as the subject matter of this study (labor legislation). In this sense, the "in one dimension" in the title of this section refers only to the position of the parties. Strictly speaking, the model is two dimensional, with the restriction that parties fall along one single dimension, while the status quo can be anywhere.

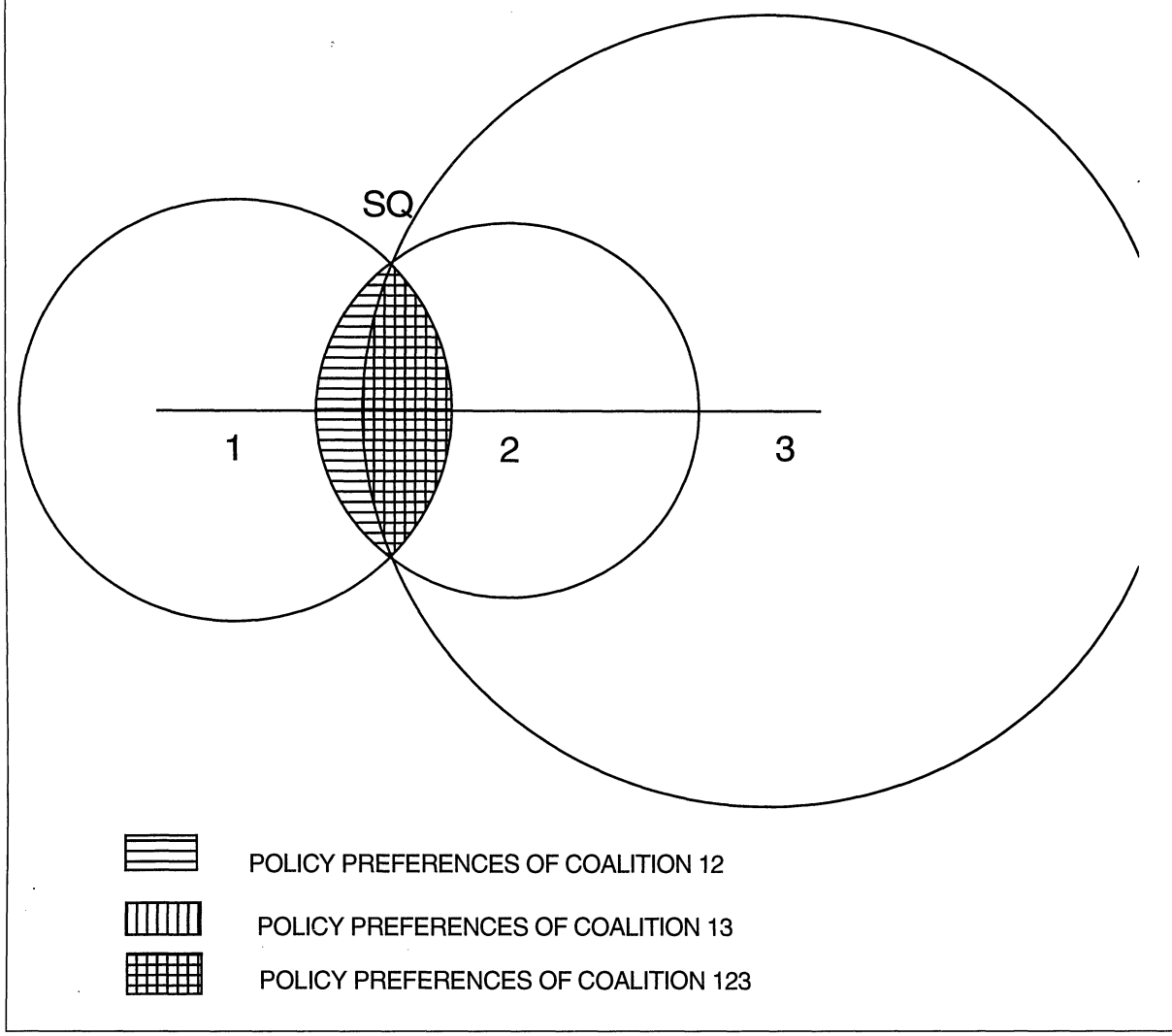
In Figure 1, the three circles indicate the areas that each party prefers over the status quo. What the coalition can do is presented inside the intersection of all three circles (the heavily shaded lens in the figure). Let us now examine two possible coalition-building processes, step by step. Assume that parties 1 and 2 get together first, and they invite party 3 to join them later. What parties 1 and 2 could do in order to change the status quo together is represented inside the wide lens in the figure (lightly shaded). If the two parties want to add party 3 to their coalition, then they will restrict the area of status-quo change to the heavily shaded lens (intersection of the preferences of all three).

A different coalition path assumes that parties 1 and 3 get together first. They can select any policy in the intersection of circles 1 and 3 (the heavily shaded area). If these two parties ask party 2 to join them in government, the addition of the new party will not restrict the ability of 1 and 3 to decide on an outcome. Indeed, nothing in the intersection of circles 1 and 3 is excluded by the addition of 2. In other words, adding one veto player in this case does not change the policymaking ability of the initial coalition.

[10] Laver and Schofield (1990) call this position the "core" and argue that such a configuration is frequent with minority governments. A similar point is made by Strom (1990).

[11] Tsebelis (1995b) proves three different propositions, one having to do with collective veto players. We will not use this proposition here, because its test would require data on the ideological cohesion of different parties in Europe.

FIGURE 1. Policy Preferences of Coalitions



Why was policymaking restricted in the first case but not in the second? The reason is that party 2 is located between parties 1 and 3, so it is impossible for the latter two to have a joint preference over the status quo that party 2 will not share. In other words, the addition of a coalition partner with preferences between the extreme coalition partners does not affect policymaking. Put differently still, the following will be tested.

COROLLARY (*of Propositions 1 and 2*): *In one dimension, policy stability depends on the maximum ideological distance among veto players, not on their number.*

Proof: We can replicate the argument made about the addition of party 2 to the coalition between 1 and 3 as many times as there are veto players (that is, parties in a coalition).

This corollary greatly simplifies our testing. Because our data are in one dimension, we have to test only the corollary instead of propositions 1 and 2. Note, however, that this corollary of the veto players' theory applies only when the ideal positions of parties are located in the same dimension (although there are ways to generalize it; see Tsebelis (n.d.).

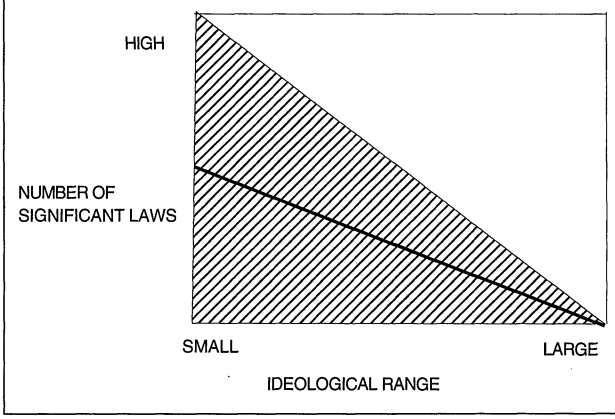
One objection to the above argument is that it does not take into account the position of the status quo. One can use Figure 1 to draw the conclusion that the winset of the status quo increases when the status quo is farther away from the party positions. In particular, if the status quo is constrained to be on the same straight line as the ideal points of the parties, then the argument can be made (and was made by one of the referees) that it is "the location of the status quo that matters, rather than range." Yet, the location of the status quo is not identifiable. That is, not only do data that locate parties not locate the status quo in the same space, but also one cannot assume that the status quo was produced by the previous government and, therefore, use the location of that government as a proxy. In many cases, the status quo for any particular law is produced by a compilation of different provisions of laws introduced by different governments, so identifying its location is practically impossible.

One can make an estimate of the winset of the status quo over the whole range of possible status quo, however. This estimate is negatively related to the range of the coalition, because if the status quo is located within the range of the coalition, its winset is empty. For example, if the whole space is the [0, 1] interval, and a coalition ranges from .5 to 1, then the winset of the status quo will be empty whenever the status quo is located in the [.5, 1] interval. If the range of the coalition shrinks to the [.7, 1] interval, then the winset of the status quo will be empty in only 30% of the cases (assuming a uniform distribution of the status quo). The same argument can be made about the significance of the possible change. If one considers significant laws the ones that move the status quo by more than w, then one would have to add w or $2w$ to the range in order to find significant changes over the whole range of status quo. Even in this restricted case, the range of a coalition, on the average, will have a negative sign in the calculations of policy change.

Let us now focus on the implications of the corollary for the data set. I (Tsebelis 1995b, 103) state that "since multiparty governments are incapable of producing significant laws (unless there is a dramatic shift in public opinion) while single-party governments are able to undertake such changes, over a long time period and in a wide set of countries one would expect to find more significant pieces of legislation in countries with fewer veto players.... The same argument should apply to government-enacted legislation (decrees)." The argument above is presented in terms of the number of veto players, but on the basis of the model I present here, if the parties are located in the same single dimension, then the argument has to be made on the basis of the ideological distance among the most extreme parties (the range of the necessary coalition). We should then expect fewer significant pieces of legislation in countries with a coalition government that has a large ideological range, and more pieces of significant legislation in countries with a small ideological range (single-party majority or minority governments have a range = 0).

Strictly speaking, in the absence of a generalized shift in public opinion,[12] a large coalition (large range) is a sufficient condition for the absence of significant legislation.[13] We can visualize and expand the argument by referring to Figure 2.[14] Because range is a sufficient condition for the absence of significant legislation, governments with large range cannot produce significant laws, but governments with a small range have the possibility of producing significant laws. The possible outcomes are presented in the shaded area. The heavy line represents the average number of significant laws. The line has a negative slope, that is, the range of a government is hypothesized to be negatively correlated with the number of significant laws. But Figure 2 leads to another expectation, one not identified in my previous research (Tsebelis 1995a, 1995b). Since large range (in the absence of a generalized shift in public opinion) is a sufficient but not necessary condition for the absence of significant legislation, the variance (strictly speaking, the residuals) in significant laws will be negatively correlated with the range of a government. Indeed, the possible number of significant laws varies on the left-hand side of the figure (among governments with small ideological range) but not on the right-hand side (among governments with large ideological range).

FIGURE 2. Expected Area of Significant Laws by Ideological Range of a Coalition



In technical terms, the veto players' theory predicts not only that the ideological range of a government will have a negative effect on the average number of laws but also that the residuals will be heteroskedastically distributed as a function of that range. I single out these expectations and call them hypotheses.

HYPOTHESIS 1: *The ideological range of a government coalition negatively affects the number of significant laws.*

HYPOTHESIS 2: *The ideological range of a coalition negatively affects the variance in the number of significant laws.* (More accurately, the residuals of the previous regression will be heteroskedastically distributed and inversely related to the range.)

I also make another argument (Tsebelis 1995a, 105):

There are two other factors that I would expect to affect the production of significant laws. The first is the length of

[12] When there is a generalized shift, even a universal coalition can enact legislation that expresses this new consensus.

[13] But not a necessary condition. Note that the model is deterministic (hence the language of necessary and sufficient conditions). This may appear strange, since we usually assume that the world is probabilistic. But determinism is not an attribute of the world but of the model. In this sense, it falls in the same category with other arguments about necessary conditions (such as Moore's [1966, 418] "no bourgeois, no democracy") as well as with game theoretic models with a single equilibrium (such as the median voter or the prisoners' dilemma, to mention only two). The fact that the model is deterministic does not mean that we can test it as such. There are measurement errors, omitted variables, and so on, that will enable us to keep the model even if we find a few falsifying instances (which will not be the case). In the remainder of this article, when I speak about the theoretical model, I will use the deterministic language; when I speak about empirical tests, I will use the probabilistic one.

[14] See Tsebelis (1995a, Table 3.1) for another version of this argument.

time that a given government stays in office. One would expect that governments take some time before they present significant laws in parliament, consequently, short-lived governments would produce less legislative work. A second factor is alternation of parties in government. A consequence of the argument presented in this section is that a government with a new coalition partner would be expected to make more changes the bigger the ideological distance of the parties that succeed each other in government.

In other words:

HYPOTHESIS 3: *Government duration and alternation of parties have a positive effect on the number of significant laws.*

Hypothesis 3 essentially introduces two control variables into hypothesis 1. It is possible that duration of a government is positively associated with production of significant laws, but the rate of production may decline over time. This means that a government will produce more significant laws in the beginning of its term than toward the end. In the third part of this article, I will operationalize and test these predictions.

THE DATA

In order to test the above hypotheses, I created a data set by merging information on significant legislation (laws and decrees) regarding working time and working conditions in fifteen countries of Western Europe for the period 1981–91 with information on coalition governments for the same countries and the same period. I received the legislation data from Herbert Doering and the coalition data from Paul Warwick. In this section, I will explain what was included in the original data sets as well as the additional manipulations for the construction of specific variables.

Significant Legislation

Doering and his team identified the number of significant laws for all Western European countries in the area of labor legislation (working time and working conditions) for 1981–91. They used the computerized database NATLEX (International Labour Organization 1999) compiled by the International Labour Organization (ILO) in Geneva. This database originated in the early 1970s, but the data set became complete only in the early 1980s. Consequently, the beginning of the data set that I analyze is January 1, 1981. The data set has been indexed by subject matter, so that one can identify all laws put to a vote and all decrees issued on any specific topic in all European countries. The ILO database is of excellent use in identifying any subject in labor legislation and has been used by Doering and his team to generate reliable numbers about pieces of legislation in different areas, but it provides no indication of "significant legislation," the dependent variable for a test of the veto players' theory.

The next step would have been to identify some proxy for importance. Size or length of legislation is inappropriate, because a law can be written to enumerate areas of applicability (in which case length is correlated with significance) or areas of exception (in which case length is negatively correlated with significance). The alternative proxies that come to mind are size of the budget needed for implementation or number of people affected by enactment. Yet, both criteria would indicate that a bill on euthanasia or on same-sex marriage would not be significant. This short discussion indicates that some commonsensical criteria for selection of "significant" laws can yield perverse results.

In the face of this problem, Doering had the brilliant idea of using the *Encyclopedia of Labor Law* to generate the variable "significant laws." The encyclopedia is edited by Roger Blanpain and is written for labor lawyers from one European country who want to practice law in another. According to the introduction, "*National Legislation* intends to make available to the subscribers and users of the Encyclopedia pertinent provisions of the *most important acts* of Parliament, governmental *decrees*, national, and interindustry wide major *collective agreements*, or other legal sources, where they cover a country as a whole" (Blanpain Suppl. 194 [July 1997]: subsection 5; emphasis in original). Each country is covered by a monograph of 150–250 pages that is authored by a law professor or a judge and that explains to readers the significant legislation in the area. The monographs have a common pattern, which facilitates subject-matter identification. Norway and Iceland are not covered. Laws covered in both NATLEX and Blanplain are considered "significant," while laws existing only in the NATLEX database are considered not to be significant.[15]

Blanpain's *Encyclopedia* also provides a validation test for the NATLEX database, since for the 1981–91 period, all the laws mentioned in Blanpain were included in NATLEX. This was not true before 1981, which, in turn, validates the cutoff point for the study. The dates of promulgation of the significant laws of each country were compared with the dates when governments were in power, so that laws were attributed to the governments that sponsored them.

Governments

The data set on governments included the dates of their beginning and end in the 15 countries of the study (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom). The study dates (January 1, 1981, and December 31, 1991) were considered the beginning or

[15] These choices are described in more detail, along with legal questions that arise when a law is inadequately or insufficiently described in Blanpain, in an essay co-authored by Georgios Trantas, the lawyer who following Doering's idea actually identified the intersection of Blanpain and NATLEX (Scholtz and Trantas 1995).

end of the government in office at that date.[16] I then calculated the duration in years of each government.

The data set used conventional methods to account for the beginning and end of governments. Warwick (1994, 27) is very explicit about what constitutes beginning: "A government typically begins when it is appointed by a head of state." As for ending, he adopts the criteria proposed by Browne, Gleiber, and Mashoba (1984, 7).[17] What matters for the veto players' theory, however, is the partisan composition of government. Two successive governments with identical composition should be counted as one, even if they are separated by an election that changes the size of the different parties in parliament.[18] The variable that enters into the veto players' analysis is not the relative strength of different parties in government or parliament but whether they agree in order to pass legislation.[19]

I created a data set of "merged" governments, that is, successive governments with the same composition were considered a single government even if separated by a resignation and/or an election. Obviously, merging affects the values of duration and the number of laws produced by a government. To account for this change, I added the number of laws produced by the different governments to be merged and credited the resulting government with this total number of laws. Duration was recalculated as the sum of the duration of consecutive governments (this excludes possible caretaker governments and periods when a resigned government waits to be replaced, which would have been included if I had recalculated on the basis of the new beginning and ending dates). As a result of merging, the number of cases in the data set decreased from 105 to 58.[20]

The difference between the merged government data set and the traditional method of counting governments becomes clear in the following two cases. First, in Greece, the Socialist government (PASOK) came into power in 1981 and, according to the data set, produced four significant laws on working time and working conditions. In 1985, the Socialists were reelected, and the new government produced two additional significant laws. According to the merged data set, the two PASOK governments are counted as one; it did not complete its legislative program in the first period and continued to change the legislative framework of the right-wing governments of 1974–81 during its second term.

The second example is drawn from France. After Mitterrand was elected president in 1981, he appointed Pierre Maurois prime minister of a coalition government, which included the Socialists and the Communists. That government produced four significant laws in the area under study. In 1983, a second Maurois government with the same party composition replaced the first. This second government stayed in power for one year, until the Communists withdrew from the coalition because of the austerity policies Mitterrand was about to impose in order to remain in the European monetary system. The second Maurois government did not produce any new laws on working time and working conditions. In my data set, the two governments count as one: In a three-year period the Socialist-Communist coalition produced four significant laws. Implicit in my account is that the second Maurois government did not produce any laws because the first had completed its work in this area.[21]

Ideology

The government data set included also the composition of different governments (the parties participating in coalitions, to which I added the position of the president of Portugal and of France as well as the Bundesrat in Germany, in the cases indicated in the first part of this article) and their ideological scores on the basis of three indices. The first was from Warwick's (1994) *Government Survival in Western European Parliamentary Democracies*. (Warwick expanded the data set collected by Browne, Gleiber, and Mashoba [1984], who had expanded the data set collected by Dodd [1976].) This index was generated from forty different measures that were developed from experts, party manifestos, and survey sources. For the governments included in this data set, the index ranged from a low of −6 (Left) to a high of 5 (Right).

The second index was provided by "Left-Right Political Scales: Some 'Expert' Judgments," based on a survey of more than 115 political scientists from Western Europe and the United States (Castles and Mair 1984, 75). The questionnaire asked each respondent to

[16] The governments at the beginning and end of the period have been truncated. They lasted longer than indicated, and they may have produced legislation after the period of this study.

[17] According to Browne, Gleiber, and Mashoba, "a government is considered terminated whenever: (1) parliamentary elections are held, (2) the head of government changes, (3) the party composition of the government changes, or (4) the government tenders its resignation, which is accepted by the head of state" (Warwick (1994, 28). On this fourth point Warwick presents a variation and counts as termination even resignations that are not subsequently accepted by the head of state.

[18] For a similar argument concerning Italian governments that succeed each other while the party (and sometimes the person) composition is the same, see Di Palma (1977, 31).

[19] It is interesting that Franzese (1996) considers two different specifications in his empirical analysis. One is based on veto players (counting only parties that were members of a government), and the other, the "bargaining" approach, weights government participants by size. The veto players' specification was significantly more accurate in predicting deficits.

[20] There were 106 political governments, but two, although formally political, had a caretaker character (were formed to take the country to elections). (1) In France, the Maurois government was appointed by Mitterrand immediately after his election and the dissolution of parliament in May 1981 (lasted thirty days). (2) In Italy, the Fanfani government was formed in April 1987 and was voted down by parliament before it could even proclaim elections (lasted eight days).

The reduced number would have been 57, but I double counted the French government during the cohabitation of 1986–88. I consider only the two participating parties as veto players with respect to legislation, but I add the president when I consider a government decree that they issued.

[21] All the calculations in this article were replicated with the traditional way of counting governments and led to the same qualitative results.

place all the parties holding seats in his/her national legislature on the Left-Right political spectrum, ranging from zero (ultraleftist) to 10 (ultrarightist), with 2.5 representing the moderate Left, 5 the center, and 7.5 the moderate Right. Castles and Mair presented the results from those countries that had at least three respondents. The ideological score reported for each party was the average of available responses. Given the ten-point scale, the potential range of responses was (0, 10). Of the parties analyzed here, however, the low score was 1.4, received by the Communist Party of France, and the high was 8.2, received by the Gaullist party.

The third index was drawn from Laver and Hunt's (1992) first dimension variable, "increase services vs. cut taxes." Respondents in their study were professional political scientists (Laver and Hunt 1992, 38–41, 122). Each was asked to locate the policy position of both the party leaders and voters for each party in his/her country on the Left-Right spectrum. Respondents were asked to evaluate not only the parties that had won seats in the most recent election but also every party that had won at least 1% of the national vote, as well as any significant regional parties. Laver and Hunt adopted a 20-point scale (to accommodate the fact that the countries in their study had up to 14 parties). For the first dimension—taxes versus public services—respondents assigned each party a score ranging from 1 ("promote raising taxes to increase public services") to 20 ("promote cutting public services to cut taxes"). Among the cases included in the data set, the first dimension variable ranged from a low of 2.1 to a high of 17.4.

Only Laver and Hunt included in their study all 15 countries examined here. Warwick did not code the parties of France's Fifth Republic and Greece. In addition, he did not score some government parties in Ireland, Italy, Spain, and Sweden. Castles and Mair did not include Luxembourg, Portugal, and Greece.

On the basis of these measures of ideology, I constructed new variables representing the range of each government according to the index as well as the alternation from one government to the next. The range variable was created by taking the absolute value of the distance between the most extreme parties of a coalition. These two parties were usually (but not always) the same for different indices. The correlations among the range variables calculated on the basis of the cases covered by all three indices were quite high.[22]

The alternation variable was calculated by finding the mid-range position of each government and taking the difference between two successive governments.[23] Because this measure was calculated using the previous government, I needed information on the government preceding the one that was in power on January 1, 1981. Again, the three different indices produced highly correlated values of alternation for the cases covered by all three indices.[24]

The New "Range" and "Alternation" Variables

The range and alternation variables covered different countries and were calculated on the basis of different questions, all of which were relevant to the Left-Right division. In order to preserve the size of the data set, as well as use all the available information, I constructed new measures of range and alternation based on the values of *all* available indices. I standardized each index and then took the average of the standardized scores that were available for each government. For standardization, I used only the values of the variables for the countries covered by all three indices. This procedure, which was run separately on all three range and alternation variables, resulted in three standardized range and three standardized alternation variables. The average range and alternation variables used all the available information in the following way: In cases for which all three indices existed, the average was calculated on the basis of all three; for countries with two indices, the average was calculated only on the two standardized indices; in the cases covered by one single analyst (Greece), I used that one standardized score. In the regressions I used the absolute value of alternation as calculated above, because it makes no difference whether a left-wing government is replaced by a right-wing government, or vice versa.

In the Appendix I present all the variables discussed above, along with others generated in order to control for other possible effects (government ideology, government control of the legislative agenda, and corporatism; see below).

TESTING THE IMPLICATIONS OF THE VETO PLAYERS' THEORY

In this section, I will test all the predictions made in section I. I test hypothesis 1 by regressing the variable *Laws* (i.e., the number of significant laws and decrees), on the variable *Range* (average normalized ideological distance of extreme partners of a government coalition, corrected for institutional rules, such as presidential veto power in Portugal). I test hypothesis 2 by analyzing the residuals of the previous regression, more specifically, by testing the squared residuals for heteroskedasticity. I test hypothesis 3 by introducing a series of additional variables: *Alternation* (absolute value of the difference between average normalized ranges of two successive governments), *Duration* (years of a government in office), and others that turn out not to be significant (as predicted).

[22] The correlations between any two of these indexes exceeded .8.

[23] The formula was (maxgovt1 + mingovt1) − (maxgovt2 + mingovt2), where max- and mingovt1 are the ideological scores of the preceding government, and max- and mingovt2 are the ideological scores of the "current" government. For instance, if a government succeeded (or "replaced") a government with the same party structure, then all the alternation variables would equal zero.

[24] The correlations between any two of these indexes exceeded .8.

TABLE 1. Bivariate Models of Significant Legislation (Tests of Hypotheses 1 and 2)

Dependent Variable	Model 1: OLS Laws	Model 2: OLS Squared Residuals	Model 3: GLS Laws
Constant	1.17*** (.22)	2.46*** (.57)	1.14*** (.20)
Range	−0.59** (.23)	−1.66** (.59)	−.58** (.22)
N	58	58	58
R^2	.106	.124	NR
Adjusted R^2	.090	.109	NR
White test	NR	7.192	NR

NR: Not relevant
Note: Standard errors are in parentheses. *p = .05, **p = .01, ***p = .001; all tests are one-tailed.

Test of Hypotheses 1 and 2

Table 1 presents three different models. The first tests the bivariate hypothesized negative relationship between range and laws. The second regresses the squared residuals of the first regression on range. According to hypothesis 2, this relationship should be negative and significant. Model 3 uses the results of the first two models to correct for the heteroskedasticity present in model 1.

There are two reasons for the simultaneous testing of hypotheses 1 and 2. First, since the theory presented here expects heteroskedasticity in model 1, the OLS estimate is inefficient, so model 3 corrects for that. The second and most important point is a general methodological one: When a theory states that high X (in our case, range) is a sufficient but not necessary condition to discourage Y (in our case, low Y is a small number of significant laws), it not only makes a simple prediction about the mean value of Y (number of significant laws) as a function of X (range) but also makes a statement about the variance of Y. It claims that the combination of high X and high Y (large range and large number of significant laws) is unlikely. Consequently, the residuals in the low X area of Figure 2 (low range side) will be large, while the residuals in the high X area (large range) will be small. Translated into statistical terms, this is heteroskedasticity and, as a result, low significance of the test of means (the traditional regression) is possible. But the appropriate test either for a theory about a sufficient but not necessary condition or for a theory identifying necessary (but not sufficient) conditions is a combination of a test of means (regression) with low statistical significance *and* a test of the variance (residuals) for heteroskedasticity. In the case at hand I have predicted that both the number of significant laws will decline with range (hypothesis 1), and that the (squared or absolute value of the) residuals of the above regression will decline with range (hypothesis 2). If both predictions turn out to be corroborated (as they are), then the confidence in the theory should be significantly higher than might be warranted by the p-value of any one coefficient.

Model 1 provides the bivariate OLS test of hypothesis 1: The relationship between range and laws is negative and significant at the .01 level. Yet, I have proposed that this relationship will be heteroskedastic, and if I am correct, then the estimation of the variance in model 1 is inefficient. In order to correct for this inefficiency, I take the squared residuals from model 1 and regress them on range in model 2. As expected, the coefficient is negative.

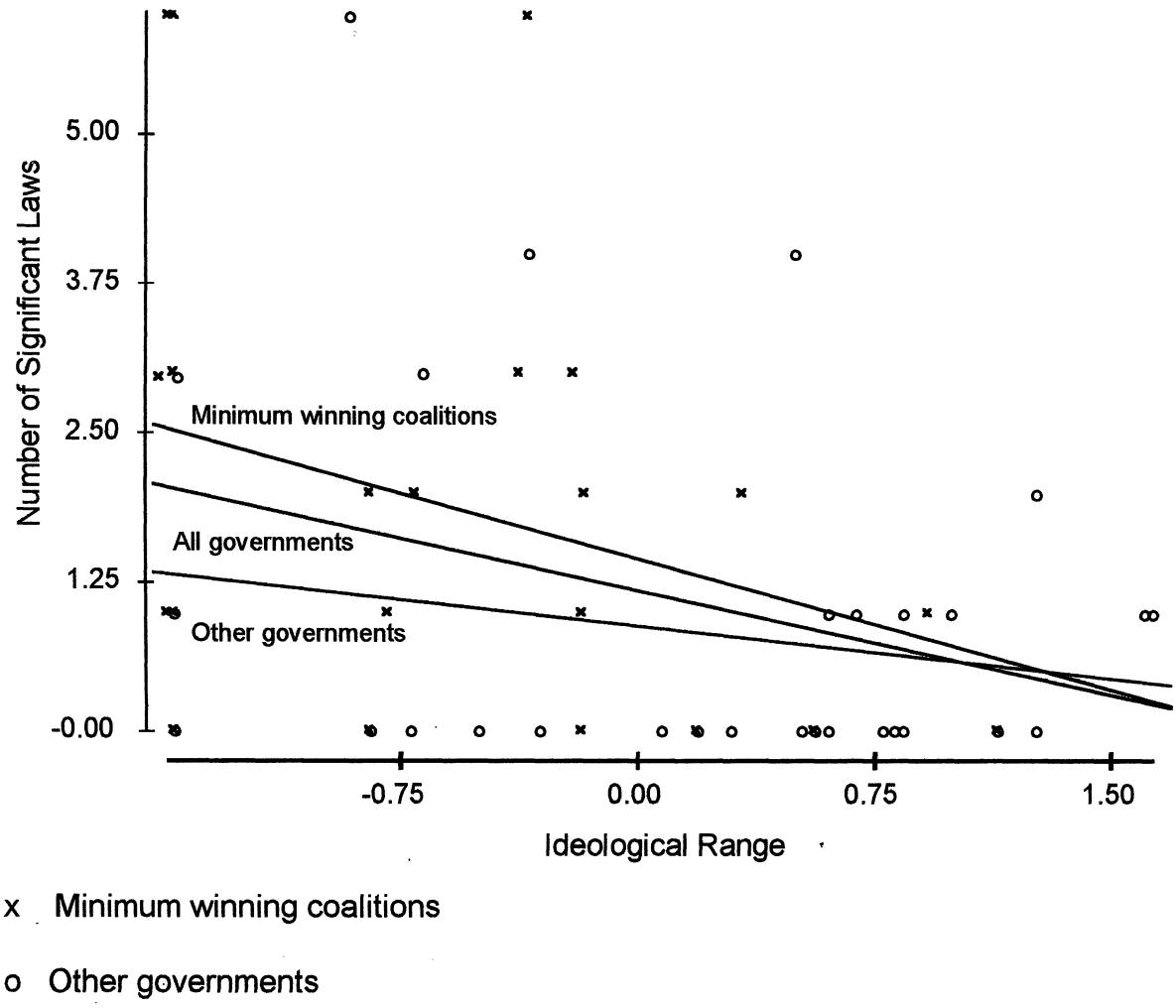
Model 2 is not an ordinary regression model, however. In fact, in a nonfinite sample its error term has a nonzero mean, is heteroskedastic, and is correlated across observations. The first and third of these problems disappear in large samples, so we can expect the coefficients estimated by this regression to be consistent (Greene 1997, 559). This is all that is required in order to correct the inefficient estimation of model 1. Model 3 uses the estimated coefficients from model 2 to correct the variance-covariance matrix in model 1, and it produces efficient estimates. (In practice I used the inverse of the square root of the predicted values from model 2 as weights for a GLS estimation.) Model 3 indicates that the negative relationship between range and laws is significant at the .01 level.

What remains to be shown is that the heteroskedasticity predicted by the theory is present in the data. For reasons explained in the previous paragraph, we cannot use the variance estimated in model 2 because "the finite sample properties of this estimator remain uncertain" (Greene 1997, 559). A series of homoskedasticity tests can be performed on the residuals, and I will use the weakest of them, introduced by White (1980). My reasoning is the following: If even the weakest test soundly rejects homoskedasticity, then there is little doubt that the error terms of model 1 are heteroskedastic. According to the White test, the statistic nR^2 from model 2 (n is the number of observations) is asymptotically distributed as chi-squared with one degree of freedom (Pindyck and Rubinfeld 1998, 158). From model 2 in Table 1 we see that the value of the nR^2 statistic is 7.192. From the chi-squared tables with one degree of freedom we obtain a one-tailed value of .00732, which permits the confident rejection of the null hypothesis of homoskedasticity (at the .01 level).

In summary, from the combination of models 1, 2, and 3 in Table 1, we find that hypotheses 1 and 2, which indicate a negative and heteroskedastic relationship between range and laws, are both corroborated at the .01 confidence level. More direct evidence is provided by figures 3 and 4.

Figure 3 presents the relationship between laws and range. For reasons I will explain below, I have separated minimum winning coalition governments (indicated by x in the figure) from the rest (indicated by

FIGURE 3. Number of Significant Laws by Ideological Range of Coalition



o).[25] The data are fitted by three bivariate regression lines. The top line summarizes the relationship between laws and range that occurs in minimum winning coalitions. The bottom line summarizes the relationship between the same variables in other governments. The middle line is the regression line for the whole data set. Comparison of Figure 3 with Figure 2 indicates the high degree of fit between theory and data (as do the regressions of Table 1).

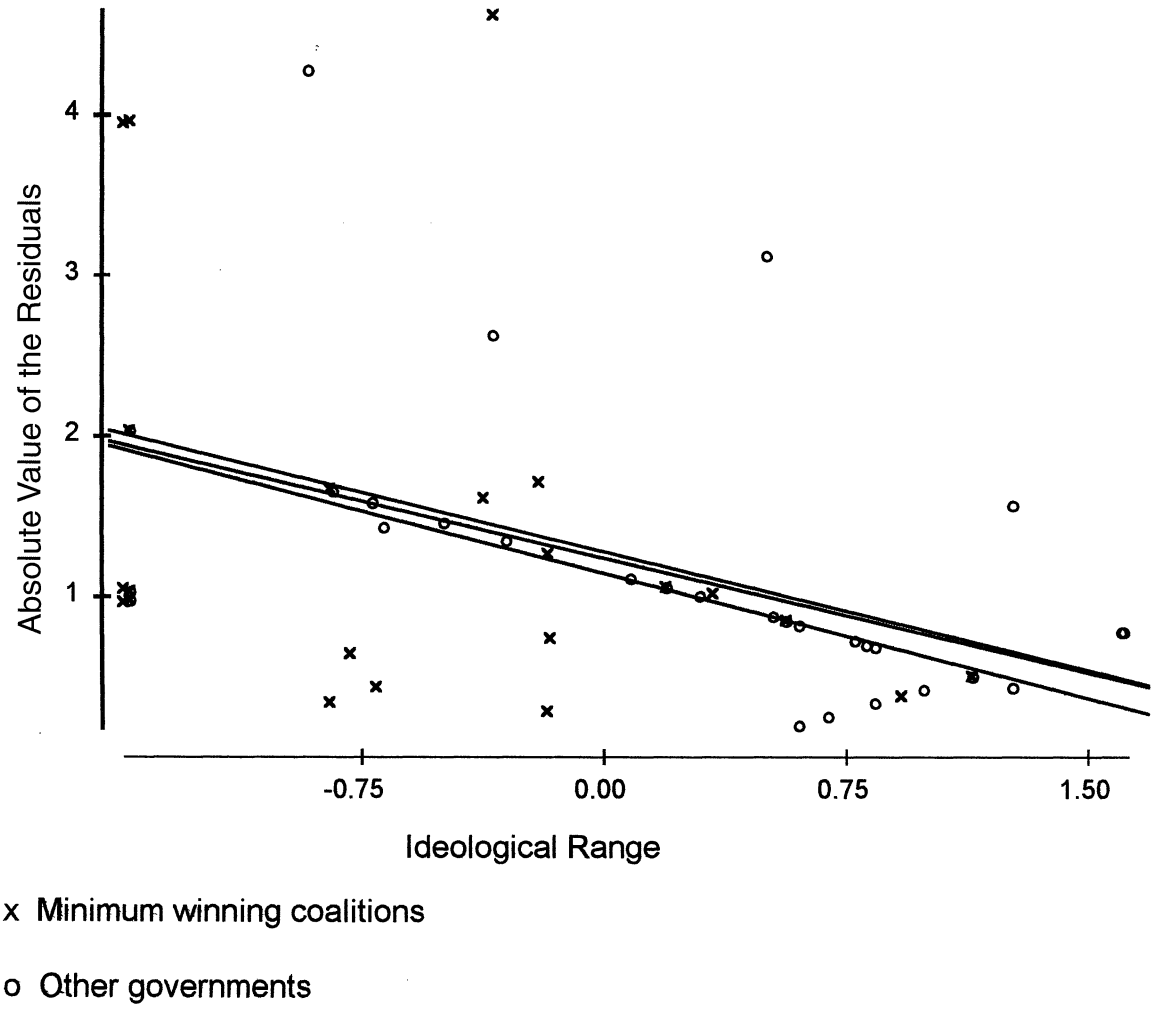
Figure 4 gives a graphic representation of the absolute value of the residuals from model 1 of Table 1. I selected the absolute value for this figure because the graphic of squared residuals is visually misleading (it eliminates small residuals and exacerbates large ones). Again, I divided governments into minimum winning coalitions and all the rest, but this time there is no difference between the regression lines representing the whole data set and each of the two parts. We can see that the slope is negative and very significant, exactly as hypothesis 2 leads us to believe.

Test of Hypothesis 3

The models in this section are multivariate and introduce a series of control variables. According to hypothesis 3, two additional control variables (duration and alternation) are expected to have positive signs. Alternation (the difference between the midpoints of the current from the previous government) is one way to provide a proxy for the status quo in case legislation was introduced by the previous government. Of course, there is no guarantee that this was actually the case. In

[25] I thank an anonymous referee for the suggestion of subdividing the data set. The division applied the definition of minimum winning coalitions (no parties included that are not necessary for a majority) with three exceptions. In Germany I had to take into account the Bundesrat if controlled by the opposition, and in Portugal, the president if his party was not included in the government; and in one case of a government decree in France I took into account the president of the Republic. In all these cases, the standard status of the government was altered to take into account the veto players' theory: for example, in Germany a minimum winning coalition government was coded as oversized if the support of an opposition controlled Bundesrat was required.

FIGURE 4. Residuals (Absolute Value) of Significant Laws by Ideological Range of Coalition



all multivariate models, heteroskedasticity is significantly reduced. In fact, the White test does not permit rejection of the homoskedasticity assumption at conventional levels of significance. This is why I will correct for heteroskedasticity only the most important of the models from Table 2.

Model 1 in Table 2 introduces both control variables in their linear form. Model 2 introduces the idea of a

TABLE 2. Multivariate Models of Significant Legislation (Tests of Hypothesis 3)

Variable	Model 1	Model 2	Model 2A MWC	Model 2B Other	Model 3	Model 4
Constant	−0.20 (.27)	.21 (.24)	−.26 (.47)	.42 (.33)	.22 (.26)	.36 (.24)
Range	−0.27 (.18)	−0.35* (.18)	−.62* (.33)	−.25 (.23)	−0.37* (.19)	−0.39* (.17)
Alternation	0.54* (.25)	0.70** (.24)	.86* (.34)	.41 (.39)	0.68** (.25)	0.53* (.23)
Duration	0.36*** (.07)	. . .	. . .	. . .	. . .	. . .
Log (Duration)		1.85*** (.38)	2.07** (.63)	1.68** (.53)	1.89*** (.42)	1.76*** (.37)
Agenda					0.0004 (.002)	
Corporation					0.034 (.25)	
Left					0.025 (.15)	
N	58	58	23	35	58	58
R^2	.518	.501	.630	.303	.503	NR
Adjusted R^2	.491	.473	.571	.236	.445	NS

MWC: Minimum winning coalitions.
NR: Not relevant
Note: Standard errors are in parentheses. *p = .05, **p = .01, ***p = .001; all tests are one-tailed.

declining rate of production of significant laws by using the natural logarithm of duration as an independent variable. This model corroborates all the expectations generated by the veto players' theory, which is why I subject it to two more tests. The first examines whether the findings hold for different subsets of the data. Models 2A and 2B separate the different governments into minimum winning coalitions (23 cases) and "others" (minority and oversized coalitions, 35 cases) and retest the model for each of these categories. The second test introduces a series of control variables in order to test for spuriousness of the results. Model 3 introduces three plausible control variables (*Agenda Control*, *Corporatism*, and *Left Ideology* of the government), which the literature suggests as alternative explanations for the findings.

As Table 2 shows, all the hypothesized relationships have the correct sign (negative for range and positive for alternation and duration). On the basis of model 2, one can say that the production of significant laws is affected negatively by the ideological range of government and positively by the difference between current and previous government (alternation); furthermore, duration increases the number of laws but at a declining rate.

Models 2A and 2B replicate the analysis for minimum winning coalitions and other governments, respectively. All the signs of the coefficients are as hypothesized, but conventional levels of statistical significance are lost, except for the case of minimum winning coalitions.

Let me now discuss model 3, which introduces three different control variables. The first is agenda control. Doering (1995c) has identified the importance of government agenda setting for both the quantity and quality of legislation produced in a country. In a nutshell, he argues that government control of the agenda increases the number of important bills and reduces legislative inflation (many small bills). Doering defines agenda control in two ways, qualitatively and quantitatively.[26] He hypothesizes a positive relationship between significant laws and agenda control. But Doering was discussing countries as units of analysis, and his measures (which I use) refer to countries. Therefore, the variance of significant legislation *within* each country cannot possibly be captured by Doering's variables.

Corporatism is the second variable introduced for control purposes. I used it as both a trichotomous variable (with Belgium, Germany, Luxembourg, and Switzerland as ambiguous cases) and a dichotomous one (with the above countries considered corporatist). Like agenda control, it is considered constant by country. In this respect, I follow most of the literature on corporatism, despite the fact that contemporary research finds significant fluctuations in the variables that comprise the concept over time (Golden, Wallerstein, and Lange n.d.).

In corporatist countries, it is argued, peak associations of employers and unions negotiate working conditions, and only if they do not agree does parliament step in and legislate or the government issue decrees. Because of this, corporatist countries (where ideological range is generally high) presumably produce less significant labor legislation. There are two problems with this argument. First, legislation is produced whether the social partners agree or not. If they agree, then the parliament or the government issues legislation or decrees that confirm the agreement. If they disagree, then the legislative institutions of the country decide on the issue. For example, at the end of the 1980s the problem in both Norway and Sweden was the need to cut wages to prevent unemployment from rising. In Norway, the social partners (unions and employers) agreed to a wage freeze and asked the social democratic minority government to put it into legislation so that it would be universally binding. The legislation was passed by parliament, while the independent unions (i.e., those not affiliated with the main confederation) complained that they were being victimized; wages declined, and unemployment did not grow very much. In Sweden, the social partners failed to agree to control wages, so the social democratic minority government introduced legislation to freeze wages. All the unions protested, the proposal was defeated, the government fell, wages continued to climb rapidly, and unemployment rose much higher than in Norway. Second, if the argument were correct, then one would expect less overall labor legislation in corporatist countries, not just less significant legislation. Yet, corporatist countries have more overall legislation in the area of working time and working conditions.

The third control variable is the ideology of each government. Since the dependent variable is labor legislation, one may assume that left-wing governments produce more of it. In my view, this interpretation ignores the possibility of right-wing governments either repealing labor laws or undoing what left-wing governments have done. Left ideology was measured exactly the same way as range and alternation, so it varies by government, and the empirical results will be conclusive.

As model 3 indicates, none of the control variables has any effect on the results of model 2. The additional three variables come out very close to zero and completely insignificant. In addition, there is no increase in the R^2 of the model, and the adjusted R^2 shrinks. It is safe to say that statistically these variables do not explain anything.

[26] The qualitative measure of agenda control scores countries as follows: (1) The government alone controls the plenary agenda of parliament; (2) the government controls a larger majority in the president's conference (the institution that controls the agenda of the parliament usually comprised of the president and vice-president of the parliament and representatives of parliamentary groups) than it controls in parliament; (3) the president's decision after consultation with party groups cannot be challenged by the chamber; (6) agenda setting is fragmented in the absence of unanimity; (7) the chamber itself determines the agenda (Doering 1995c, 225). The quantitative measure uses five additional indicators (who controls the timetable of a bill, whether parliamentary committees can rewrite it, and so on; see Doering 1995c). Doering applies factor analysis to all six indicators and takes the country loadings on the first factor (Doering 1995a, 684). In my analyses I used both measures with similar results.

Finally, in order to make sure that these results are not generated because of peculiarities in any one country, I examined the points of highest leverage (the four cases), in the upper left quarter of Figure 3, in order to make sure that they do not reflect unusual situations. These four points represent governments of Belgium, Sweden, Greece, and the United Kingdom. In the case of the first two countries, the governments produced an extraordinary amount of laws because their ideological range was unusually small. In the case of the second two countries, the rule was single-party government, and two of them (both comprised of two or more actual governments) produced a high number of significant laws. Even without these cases, the negative relationship between range and significant laws is preserved, although statistical significance is lost.

Since some of the numbers in the table do not lend themselves to an immediate political interpretation, I will provide one. The numbers will appear "small" because I am dealing with a single area of legislation. One would have to aggregate across different areas to find the overall effect.[27]

Model 2 corroborates all the predictions of the theory, and additional variables suggested by the literature do not improve upon it. Model 4 replicates model 2 by using GLS (I used the same technique for weighing observations as in Table 1). My numerical analysis will be based on model 4, which is both theoretically supported and empirically corroborated. Given that the coefficient of the natural logarithm of duration is positive, we can say that the effect of duration on government legislation is twofold. On the one hand, duration has a positive effect on legislation; on the other, the rate of law production declines with duration.

For the range variable, the coefficient is −.39. The highest normalized value of range is approximately 1.6, while the lowest (any single-party government) is approximately −1.5. The difference between these two governments in their capacity for producing laws is that the single-party government on average produces 1.2 laws more than the largest coalition.

Finally, with respect to alternation, the coefficient (.53) should be interpreted as follows. The highest value of alternation in the data set represents the shift from Callaghan and Labour (recall the wave of strikes in Britain's "winter of discontent") to Thatcher and the Conservatives in 1979, with a value of 3.0 (although 1979 is not in the data set, the government in place before 1981 is required for calculating the value of alternation). The lowest possible alternation (i.e., keeping the ideological range intact from one government to the next) receives a score of .13. The difference between these two extreme governments in terms of law production is approximately 1.5 significant laws in the area under examination. This is the substantive interpretation of the coefficients.

Let us examine the policy significance of these findings. Taken together, hypotheses 1, 2, and 3 indicate that coalitions with wide ideological range are unlikely to produce significant legislation, while coalitions with small range and single-party governments may or may not. In other words, policy stability is the characteristic of the first, while the possibility of significant policy change is the characteristic of the second. Policy stability is another way of saying that the composition of the government or the political institutions of a country enable political actors credibly to commit that there will be no significant policy changes. This, in turn, reduces the uncertainty for actors in the civil society in making their own decisions. In particular, actors in the economy may make investment decisions without fear that the legislative environment is going to change.

At the other extreme, the possibility for single-party or small-range government to change the status quo significantly may enable a country to adapt more easily to exogenous policy shocks. Hallerberg and Basinger (1998) offer an example in their analysis of tax laws. Once the United States under Reagan reduced taxes for companies and individuals in the highest personal income bracket, other industrialized countries followed. Rates were adjusted by larger or smaller amounts. Among those that made large adjustments were the single-party labor governments of New Zealand and Australia. These governments were leftist (although moderate), and in principle they were not advocates of tax reductions for the rich. Once they decided to decrease taxes, however, partisanship was immaterial: The reductions were comparable to those of Thatcher's Conservative government in the United Kingdom.

This article does not argue in favor of either policy stability or instability. Similarly, it does not argue for government flexibility or credible commitments. Furthermore, governments that take decisive steps and overshoot may then correct their actions, and governments that take small steps may make several at a time and arrive at the same outcome in the long run. The argument is that, depending on government composition (or on institutional structures that consistently produce single or multiple veto players), one can get either policy stability or the potential for policy change, but not both.[28]

[27] In this aggregation, one would have to replicate the logic of this analysis, not extrapolate mechanically the results. For example, the positions of government parties on environmental issues should be considered in order to predict environmental legislation, not the Left-Right scale used here. It is perfectly reasonable to expect that a government which is composed of parties close to one another on the the Left-Right scale and which produces many significant laws on labor may produce few significant environmental laws if the veto players are distant from one another in the environmental policy dimension.

[28] Both may occur if a single-party government can find a way to commit credibly, for example, by appointing an independent agency and assigning jurisdiction, or by claiming that the status quo is its own ideal point. I am not going to enter into that discussion. The bottom line is that multiparty governments have difficulty changing the status quo, while single-party governments do not (see the discussion on taxation above).

CONCLUSION

I have presented the implications of the veto players' theory when parties are located in a one-dimensional space, based on data on significant pieces of legislation in 15 West European countries. All the expectations of the theory were corroborated by the data. The number of significant laws varies inversely with the ideological range of governments that produce them (hypothesis 1). In addition, the relation is heteroskedastic with respect to the range of the coalition (hypothesis 2). Each one of these relations is significant at the .01 level, which increases confidence in the theory. The explanation for both these relationships is that a wide range is a sufficient (but not necessary) condition for the absence of significant legislation. Finally, the number of significant laws increases in proportion to the natural logarithm of government duration (the rate of production declines over tenure) and in proportion to the difference between the ideological position of the current and previous government (hypothesis 3).

With this analysis, the missing empirical link between veto players and a series of important features of parliamentary systems has been established. If there are many veto players separated by large ideological distance, then legislation can only be incremental. If an exogenous shock occurs, a government such as this cannot handle the situation and cannot agree on the necessary policies (unless public opinion is unanimous on the subject). That is why Franzese (1996) found a locked pattern of debt and deficit: Countries with high (low) debt (accumulated deficits) have high (low) deficits. When an exogenous shock creates a pressing problem, the multiparty government unable to handle it will resign and be replaced by government with fewer veto players or narrower ideological range (i.e., a government that can deal with the crisis). This explains the low longevity of multiparty governments established by Warwick (1994). Similarly, in the absence of political leadership, a series of nonpolitical actors, such as bureaucracies and judges, may step in to fill the void. That is why the judiciary (Alivizatos 1995) or bureaucracies (Lohmann 1998) become more important and independent in countries or in periods with multiparty government.

Finally, it is interesting that in the aggregate (when countries are the units of analysis) more veto players mean less government control of parliamentary agenda. Why is government control of the agenda negatively correlated with a high number of veto players? Is it a coincidental or a causal relation? Several arguments can be made that it is not a mere correlation.

While a causal argument going from agenda control to veto players is difficult to make (most of the time the party system precedes institutional arrangements of agenda control), a strategic one is possible. In countries with strong government control of the agenda, party negotiations for coalition governments will end with a minority government or one with few veto players, because government can use agenda control to produce the outcomes it wants. Conversely, in countries without government agenda control, parties will form oversized coalitions in order to make sure they control the legislature and avoid losing legislative battles by a few votes.

Moving to the reverse side of the argument, a causal connection going from veto players to agenda control is straightforward: When veto players are numerous, they cannot pass through parliament the many and significant pieces of legislation required for agenda control. This argument considers legislation on agenda control to be a collection of significant pieces of legislation. Consequently, we expect not to see agenda control in countries with many veto players, because they cannot pass the legislation required to accomplish this.

A third argument can be made: Veto players and agenda control have common origins. The same sociological and historical factors that fragment a country into many competing parties (none of which has a majority) make these parties suspicious of one another and distrustful of allowing whoever is in government to have significant control over legislation.

In summary, there are three explanations for the negative relationship between number of veto players and government agenda control. One is strategic and views government agenda control as a legislative weapon that reduces the need for veto players. One is causal and connects many veto players with the absence of the significant legislation required for government agenda control. One attributes the connection to common historical and sociological reasons. Which is closer to the truth? This is a major question for further investigation.

APPENDIX: THE DATA USED IN ANALYSIS

COUNTRY	GOVT #	NUMBER OF LAWS	DURATION	DBW RANGE	DBW ALTER	DBW LEFT	CM RANGE	CM ALTER	CM LEFT	LH1 RANGE	LH1 ALTER	LH1 LEFT	RANGE	ALTERNATION	LEFT	AGENDA	CORP
Austria	16	0	2.2822	0	0	−3	0	0	3	0	0	10.7	−1.4698891	−0.135516	−1.5045063	−76	1
Austria	17	1	3.2712	6	6	0	3.8	3.8	4.9	4.7	4.7	13.05	0.92684693	1.02106799	0.14614056	−76	1
Austria	19	2	4.6849	5	−1	−0.5	2.8	−1	4.4	2.9	−1.8	12.15	0.33717832	−0.4127555	−0.2529225	−76	1
Belgium	28	1	0.6986	4	−1	−1	3.8	−1.5	4.4	5.8	−4.6	9.7	0.69793142	−0.5949802	−0.7233674	37	0
Belgium	30	6	5.3973	1	5	1.5	2	4.8	6.8	4.8	10.2	14.8	−0.3380444	1.28779991	1.32666122	37	0
Belgium	32	0	3.3644	4	−5	−1	4.3	−4.3	4.65	5.8	−10.2	9.7	0.81448431	−1.5093754	−0.6509937	37	0
Denmark	22	1	1.5178	0	−4	−3	0	−2.9	3.8	0	−8.3	9.1	−1.4698891	−1.1878289	−1.4960116	26	1
Denmark	24	4	5.4438	6	8	1	1.6	5.4	6.5	5.6	11	14.6	0.5067353	1.66400836	1.08310401	26	1
Denmark	27	0	2.4356	4	0	1	2.5	−0.9	6.05	4.9	0.7	14.95	0.30217281	−0.1913456	1.00163469	26	1
Denmark	28	0	1.0247	2	2	2	0.6	1.9	7	1.4	3.5	16.7	−0.8435515	0.40433015	1.77831408	26	1
Finland	41	1	1.8904	6	0	−2	4.3	0.5	3.95	10.2	1.7	9.6	1.61002872	−0.0054502	−1.1252261	43	1
Finland	43	0	0.2164	4	2	−1	3.1	1.2	4.55	8.8	1.4	10.3	0.84382768	0.23551495	−0.5962802	43	1
Finland	44	1	3.8055	4	0	−1	3.1	0	4.55	8.8	0	10.3	0.84382768	−0.135516	−0.5962802	43	1
Finland	45	2	3.2712	5	1	−0.5	4.2	1.1	5.1	8.8	0	10.3	1.27136469	0.06626394	−0.3082369	43	1
Finland	46	0	0.5562	5	0	−0.5	4.2	0	5.1	8.8	0	10.3	1.27136469	−0.135516	−0.3082369	43	1
Finland	47	0	0.6712	2	3	1	2	2.2	6.2	3.5	5.3	12.95	−0.3008542	0.61233064	0.7661823	43	1
France	44	0	0.3836	...	...	...	1.6	2.4	7.4	0.4	4.7	13.8	−0.8493387	0.56170074	1.27744095	−116	−1
France	46	4	3.0356	...	...	...	1.2	−1.2	2	4.6	−4.6	4.4	−0.3401545	−0.6338992	−3.0335485	−116	−1
France	48	0	1.6329	...	...	...	0	1.2	2.6	0	4.6	6.7	−1.4706067	0.3765448	−2.2919408	−116	−1
France	49	2	1.9479	...	...	...	1.6	9.6	7.4	0.4	14.2	13.8	−0.8493387	2.30565595	1.27744095	−116	−1
France	49b	1	1.9479	...	...	...	5.6	5.6	7.4	7.3	7.3	10.35	1.61558856	1.2214101	0.55584765	−116	−1
France	50	1	3.1233	...	...	...	4	−5.6	4.6	6.9	−7.3	10.15	0.99432062	−1.4787645	−0.7018626	−116	−1
France	52	0	0.6082	...	...	...	1.2	−2.8	3.2	2.2	−4.7	7.8	−0.7110389	−0.878403	−1.8013221	−116	−1
Germany	18	0	1.6877	3	0	−1.5	3.4	0	5	9.2	0	11.1	0.78384814	−0.135516	−0.4832779	52	0
Germany	19	2	8.5863	1	2	−0.5	1.6	1.8	5.9	2.2	7	14.6	−0.6991476	0.56039905	0.52294385	52	0
Germany	23	0	0.9452	3	−2	−1.5	3.4	−1.8	5	9.2	−7	11.1	0.78384814	−0.831431	−0.4832779	52	0
Greece	1	1	0.7918	...	...	...	...	...	...	0	0	15.7	−1.4921627	−0.1455598	1.48647733	−103	−1
Greece	2	6	7.8493	...	...	...	...	...	...	0	−16.8	7.3	−1.4921627	−2.5353865	−2.0273683	−103	−1
Greece	4	3	2.0822	...	...	...	...	...	...	0	16.8	15.7	−1.4921627	2.24426699	1.48647733	−103	−1
Ireland	12	1	0.4384	0	0	0	0	0	6.3	0	0	13.8	−1.4698891	−0.135516	0.65601224	−132	−1
Ireland	13	0	0.5671	6	0	0	3.2	−2.2	5.2	8.2	−6.4	10.6	1.14756549	−0.6565946	−0.1086348	−132	−1
Ireland	14	0	0.6438	0	0	0	0	2.2	6.3	0	6.4	13.8	−1.4698891	0.38556265	0.65601224	−132	−1
Ireland	15	0	4.0438	6	0	0	3.2	−2.2	5.2	8.2	−6.4	10.6	1.14756549	−0.6565946	−0.1086348	−132	−1
Ireland	16	0	2.1781	0	0	0	0	2.2	6.3	0	6.4	13.8	−1.4698891	0.38556265	0.65601224	−132	−1
Ireland	17	1	2.4356	2	2	1	0	0	6.3	3.3	3.3	15.45	−0.7876704	0.20691206	1.14372759	−132	−1
Italy	43	0	0.3973	3	0	−1.5	2.3	0	4.25	4.9	0	11.55	0.08443101	−0.135516	−0.6376518	13	−1
Italy	44	0	1.3041	4	1	−1	2.8	0.5	4.5	7.2	2.3	12.7	0.60905845	0.11597571	−0.276103	13	−1
Italy	46	0	0.3781	4	0	−1	2.8	0	4.5	7.2	0	12.7	0.60905845	−0.135516	−0.276103	13	−1
Italy	47	0	3.4000	4	0	−1	2.8	0	4.5	7.2	0	12.7	0.60905845	−0.135516	−0.276103	13	−1
Italy	51	1	3.3315	4	−2	−1	2.8	−1.8	4.5	7.2	3.4	12.7	0.60905845	−0.3382921	−0.276103	13	−1
Italy	56	0	0.7014	4	0	−1	2.8	0	4.5	7.2	0	12.7	0.60905845	−0.135516	−0.276103	13	−1
Luxembourg	13	3	3.4137	2	3	1	...	...	...	5	2.2	11.7	−0.1942706	0.4274905	0.47731602	−98	0
Luxembourg	14	3	7.2740	3	−5	−1.5	...	...	...	2.2	−7.2	8.1	−0.3702881	−1.3567996	−1.2418089	−98	0
Netherlands	17	0	0.3973	3	7	1.5	1.7	5.8	6.55	3.8	14.4	15.5	−0.1687582	1.77181639	1.3518943	188	1

COUNTRY	GOVT #	NUMBER OF LAWS	DURATION	DBW RANGE	DBW ALTER	DBW LEFT	CM RANGE	CM ALTER	CM LEFT	LH1 RANGE	LH1 ALTER	LH1 LEFT	RANGE	ALTERNATION	LEFT	AGENDA	CORP
Netherlands	18	0	0.6110	3	−6	−1.5	3.1	−4.8	4.15	7.8	−11.6	9.7	0.5696836	−1.7181916	−0.9245622	188	1
Netherlands	20	0	0.2685	2	1	−1	1.3	1.8	5.05	3.2	4.6	12	−0.4949353	0.35362214	−0.2144876	188	1
Netherlands	21	1	6.2603	3	5	1.5	1.7	3	6.55	3.8	7	15.5	−0.1687582	0.95802152	1.3518943	188	1
Netherlands	23	0	2.1205	3	−6	−1.5	3.1	−4.8	4.15	7.8	−11.6	9.7	0.5696836	−1.7181916	−0.9245622	188	1
Portugal	9	0	2.1096	6	2	2	...	...	...	3	0	15.5	0.52338297	0.13155029	1.65857762	10	−1
Portugal	12	2	1.9836	2	−8	−2	...	...	...	5.2	−8.2	11.4	−0.1633636	−1.8463158	−0.7448208	10	−1
Portugal	13	3	5.6411	0	2	−1	...	...	...	5.2	0	11.4	−0.6767255	0.13155029	−0.3583576	10	−1
Spain	1	0	1.5562	0	0	0	0	0	7.1	0	0	9.4	−1.4698891	−0.135516	0.2740796	−90	−1
Spain	3	3	8.7644	0	−6	−3	0	−7	3.6	0	−5.6	6.6	−1.4698891	−1.6512969	−1.9025064	−90	−1
Sweden	15	0	0.3370	3	1	0.5	2.2	2.2	6.6	6.2	0.6	13.9	0.19505089	0.20351854	0.88562562	173	1
Sweden	16	6	1.3068	1	−2	−0.5	0.4	−1.8	5.7	2.8	−3.4	12.2	−0.9170605	−0.6607291	0.13039289	173	1
Sweden	17	3	8.6986	0	−5	−3	0	−5.6	2.9	0	−9.2	7.6	−1.4698891	−1.590545	−1.9657146	173	1
Sweden	22	0	0.2384	3	7	0.5	2.2	7.4	6.6	6.2	12.6	13.9	0.19505089	1.8447262	0.88562562	173	1
United Kingdom	17	6	10.8329	0	10	2	0	11	7.8	0	23.6	17.2	−1.4698891	3.00132899	2.0796292	−123	−1

Note: Government duration measured in years. DBW: Range, alternation, and Left scores provided by Warwick (1994). CM: Range, alternation, and Left scores provided by Castles and Mair (1984). LH1: Range, alternation, and Left scores provided by the first dimension in Laver and Hunt (1992). Range, alternation, and Left: Standardized scores, see text for definitions. Agenda control: Index provided by Doering (1995c). Corporatism: see text for definition.

REFERENCES

Books and Periodicals

Alivizatos, Nicos. 1995. "Judges as Veto Players." In *Parliaments and Majority Rule in Western Europe*, ed. Herbert Doering. New York: St. Martin's. Pp. 566–89.

Alt, James E., and Robert C. Lowry. 1994. "Divided Government, Fiscal Institutions, and Budget Deficits: Evidence from the States." *American Political Science Review* 88 (December): 811–28.

Bawn, Kathleen. N.d. "Money and Majorities in the Federal Republic of Germany: Evidence for a Veto Players Model of Government Spending." *American Journal of Political Science*. Forthcoming.

Bednar, Jenna, John Ferejohn, and Geoffrey Garrett. 1996. "The Politics of European Federalism." *International Review of Law and Economics* 16 (September): 279–94.

Blanpain, Roger. 1977 and after; continuously updated. *International Encyclopedia for Labour Law and Industrial Relations*. Amsterdam: Kluwer.

Browne, Eric, Dennis Gleiber, and Carolyn Mashoba. 1984. "Evaluating Conflict of Interest Theory: Western European Cabinet Coalitions, 1945–80." *British Journal of Political Science* 14 (January): 1–32.

Castles, Francis G., and Peter Mair. 1984. "Left-Right Political Scales: Some 'Expert' Judgments." *European Journal of Political Research* 12 (March): 73–88.

Di Palma, Guiseppe. 1977. *Surviving without Governing: The Italian Parties in Parliament*. Berkeley: University of California Press.

Dodd, Lawrence C. 1976. *Coalitions in Parliamentary Government*. Princeton, NJ: Princeton University Press.

Doering, Herbert. 1995a. "Is Government Control of the Agenda Likely to Keep Legislative Inflation at Bay?" In *Parliaments and Majority Rule in Western Europe*, ed. Herbert Doering. New York: St. Martin's. Pp. 654–87.

Doering, Herbert. 1995b. *Parliaments and Majority Rule in Western Europe*. New York: St. Martin's.

Doering, Herbert. 1995c. "Time as a Scarce Resource: Government Control of the Agenda." In *Parliaments and Majority Rule in Western Europe*, ed. Herbert Doering. New York: St. Martin's. Pp. 223–46.

Duverger, Maurice. [1954] 1969. *Political Parties: Their Organization and Activity in the Modern State*. London: Methuen.

Franzese, Robert John. 1996. *The Political Economy of Over-Commitment: A Comparative Study of Democratic Management of the Keynesian Welfare State*. Chapter 3, Ph.D. diss. Harvard University.

Fiorina, Morris P. 1992. *Divided Government*. New York: Macmillan.

Golden, Miriam, Michael Wallerstein, and Peter Lange. N.d. "Postwar Trade Union Organization and Industrial Relations in Twelve Countries." In *Continuity and Change in Contemporary Capitalism*, ed. Herbert Kitschelt, Peter Lange, Gary Marks, and John Stephens. Cambridge: Cambridge University Press. Forthcoming.

Greene, William H. 1997. *Econometric Analysis*. 3d ed. Englewood Cliffs, NJ: Prentice-Hall.

Hallerberg, Mark, and Scott Basinger. 1998. "Internationalization and Changes in Tax Policy in OECD Countries: The Importance of Domestic Veto Players." *Comparative Political Studies* 31 (June): 321–52.

Huber, John. 1996. "The Vote of Confidence in Parliamentary Democracies." *American Political Science Review* 90 (June): 269–82.

Jones, David. 1998. *Parties and Gridlock*. Ph.D. diss. University of California at Los Angeles.

Kelly, Sean Q. 1993. "Divided We Govern? A Reassessment." *Polity* 25 (Spring): 475–84.

Kreppel, Amie. 1997. "The Impact of Parties in Government on Legislative Output in Italy." *European Journal of Political Research* 31 (April): 327–50.

Lange, Peter, and Hudson Meadwell. 1985. "Typologies of Democratic Systems: From Political Inputs to Political Economy." In *New Directions in Comparative Politics*, ed. Howard Wiarda. Boulder, CO: Westview. Pp. 80–112.

Laver, Michael, and W. Ben Hunt. 1992. *Policy and Party Competition*. New York: Routledge, Chapman and Hall.

Laver, Michael, and Norman Schofield. 1990. *Multiparty Government:*

The Politics of Coalition in Europe. Oxford: Oxford University Press.

Laver, Michael, and Kenneth A. Shepsle. 1996. *Making and Breaking Governments: Cabinets and Legislatures in Parliamentary Democracies*. New York: Cambridge University Press.

Lijphart, Arend. 1984. *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-one Countries*. New Haven, CT: Yale University Press.

Lohmann, Susanne. 1998. "Federalism and Central Bank Independence: The Politics of German Monetary Policy, 1957–1992." *World Politics* 50 (April): 401–46.

Mayhew, David R. 1991. *Divided We Govern*. New Haven, CT: Yale University Press.

Mayhew, David R. 1993. "Reply: Let's Stick with the Longer List." *Polity* 25 (Spring): 485–88.

McCubbins, Mathew D. 1991. "Government on Lay-Away: Federal Spending and Deficits under Divided Party Control." In *The Politics of Divided Government*, ed. Gary W. Cox and Samuel Kernell. Boulder, CO: Westview. Pp. 113–53.

Moore, Barrington, Jr. 1966. *Social Origins of Dictatorship and Democracy*. Boston: Beacon.

Pindyck, Robert S., and Daniel L, Rubinfeld. 1998. *Econometric Models and Economic Forecasts*. New York: McGraw-Hill.

Roubini, Nuriel, and Jeffrey Sachs. 1989. "Government Spending and Budget Deficits in the Industrialized Countries." *Economic Policy* 8 (April): 100–32.

Sartori, Giovanni. 1976. *Parties and Party Systems*. New York: Cambridge University Press.

Scholtz, Evi, and Georgios Trantas. 1995. "Legislation on Benefits and on Regulatory Matters: Social Security and Labor Matters." In *Parliaments and Majority Rule in Western Europe*, ed. Herbert Doering. New York: St. Martin's. Pp. 628–53.

Strom, Kaare. 1990. *Minority Government and Majority Rule*. New York: Cambridge University Press.

Sundquist, James L. 1988. "Needed: A Political Theory for the New Era of Coalition Government in the United States." *Political Science Quarterly* 103 (Winter): 614–24.

Treisman, Daniel. 1998. "Decentralization and Inflation in Developed and Developing Countries." University of California at Los Angeles. Mimeograph.

Tsebelis, George. 1995a. "Decision-Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism, and Multipartyism." *British Journal of Political Science* 25 (June): 289–326.

Tsebelis, George. 1995b. "Veto Players and Law Production in Parliamentary Democracies" In *Parliaments and Majority Rule in Western Europe*, ed. Herbert Doering. New York: St. Martin's. Pp. 83–111.

Tsebelis, George. N.d. "Veto Players and Institutional Analysis." *Governance*. Forthcoming.

Tsebelis, George, and Jih-wen Lin. 1998. "Veto Players and the American Constitution." Paper presented in the annual meeting of the American Political Science Association, Boston.

Tsebelis, George, and Jeannette Money. 1997. *Bicameralism*. New York: Cambridge University Press.

Warwick, Paul. 1994. *Government Survival in Western European Parliamentary Democracies*. New York: Cambridge University Press.

Weaver, R. Kent, and Bert A. Rockman. 1993. *Do Institutions Matter*? Washington, DC: Brookings Institution.

White, Halbert. 1980. "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity." *Econometrica* 48 (May): 817–38.

Electronic Source

International Labour Organization. 1999. NATLEX: The ILO's National Labour Law Database. http://natlex.ilo.org/ (accessed March 15, 1999).