

## Electoral Institutions, Parties, and the Politics of Class: Explaining the Formation of Redistributive Coalitions

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There is considerable variation in the extent to which governments redistribute income, and there is broad agreement that the explanation for such redistribution lies in the design of political institutions and partisan responses to inequality (see also the chapters by Brandolini and Smeeding, Beramendi and Cusack, and Rueda, this volume). But just how politics shapes distributive politics is still not well understood. Allan Meltzer and Scott Richard's (1981) political economy model of redistribution, which is the best known, captures the key intuition that democratic institutions empower those who stand to benefit from redistribution and that redistribution is greater the more unequal the distribution of income. There is some evidence to support the first implication, although it is disputed (see Ross 2006), but most of the variance in redistribution is probably within the same regime type. According to data from the Luxembourg Income Study (LIS), for example, the reduction in the poverty rate in the United States as a result of taxation and transfers was 13 percent in 1994, whereas the comparable figure for Sweden was 82 percent. (The poverty rate is the percentage of households below 50 percent of the median income.) To explain this variance, we have to look at political and economic differences *among* democracies, and here the second implication—that inequalitarian societies redistribute more—turns out to be of little help. In fact, the empirical relationship between inequality and redistribution is the opposite of the predicted one (see Benabou 1996; Moene

and Wallerstein 2001; Perotti 1996). Not only does Sweden redistribute more than the United States does, but it is also a much more egalitarian society. So the explanation for why some democracies redistribute more than others would seem to lie more or less wholly outside the standard framework in political economy to explain democratic redistribution. This chapter seeks to help fill this gap in our understanding.

One possible explanation is that the power of the working class and left political parties varies across countries (see, for example, Hicks and Swank 1992; Huber and Stephens 2001; Korpi 1983, 1989). Since it is plausible that redistribution is a function of government policies, and since such policies reflect the preferences of those who govern, looking for differences in government partisanship is a promising avenue. Furthermore, if left governments not only redistribute more but also reduce the inequality of earnings by, say, investing heavily in public education, partisanship may also explain why equality and redistribution tend to covary. Indeed, there is much evidence to the effect that government partisanship helps explain cross-national differences in redistribution (Boix 1998; Bradley et al. 2003; Kwon and Pontusson 2003), and our findings corroborate this evidence (see also the chapters by Beramendi and Cusack and by Rueda, this volume). But looking at government partisanship raises another puzzle: why are some democracies dominated by left governments while others are dominated by right governments?

Although government partisanship is often assumed to reflect the level of working class mobilization, we argue that it is in fact mainly determined by the differences in coalitional dynamics associated with particular electoral systems. Table 4.1 shows the strong empirical relationship using a new data set on parties and legislatures (see Cusack and Engelhardt 2002; Cusack and Fuchs 2002). The figures are the total number of years with right and left governments in seventeen advanced democracies between 1945 and 1998, organized by type of electoral system. Mirroring a similar finding by Bingham Powell (2002), we find that about three-quarters of governments in majoritarian systems were center-right, while three-quarters of governments under PR (proportional representation) were center-left (excluding here "pure" center governments). The numbers in parentheses convey a sense of the evidence at the level of countries, which are classified according to whether they had an overweight (more than 50 percent) of center-left or center-right governments during the 1945 to 1998 period.

Our explanation for the association in table 4.1 builds on an emerging literature on the effects of electoral formula on economic policies and outcomes (see, for example, Austen-Smith 2000; Persson and Tabellini 1999, 2000, 2003; Rogowski and Kayser 2002). In particular, we argue that the electoral formula affects coalition behavior and leads to system-

Table 4.1 Electoral System and Number of Years with Left or Right Governments, 1948 to 1998

	Government Partisanship		Proportion of Right Governments
	Left	Right	
Electoral system			
Proportional	342 (8)	120 (1)	0.26 0.75
Majoritarian	86 (0)	256 (8)	

Source: electoral system, Lijphart (1994); government partisanship: Cusack and Fuchs (2002), Cusack and Engelhardt (2002).

Note: Excludes governments that are classified as "centrist" on the Castles and Mair scale (Castles and Mair 1984).

atic differences in the partisan composition of governments—hence to different distributive outcomes. The explanation we propose assumes that parties represent classes, or coalitions of classes, and that it is difficult for parties to commit credibly to electoral platforms that deviate from the preferences of their constituents. We make a critical departure from the standard models based on Meltzer-Richard by allowing taxes and transfers to vary across classes, thereby transforming redistributive politics into a multidimensional game. In particular, we move away from a simple rich-poor model to one in which the middle class fears taxation by the poor, even as it faces an incentive to ally with the poor to take from the rich. The only constraint is that the rich cannot "soak" the middle class and poor under democracy—a condition that can be justified on empirical, normative, and institutional grounds.

Based on these very general assumptions, our argument is that in a two-party majoritarian system the center-right party is more likely to win government power, and redistribute less, than would be true in a multiparty PR system, where the center party is more likely to ally with parties to its left. The intuition is that in a majoritarian system where parties cannot fully commit, the median voter faces low taxes if a center-right party deviates to the right if elected, but high taxes and redistribution to low-income groups if a center-left party in government deviates to the left. With PR, on the other hand, the middle class party has an incentive to form a coalition with the left party because together they can "exploit" the rich. No such exploitation of the poor is feasible under realistic assumptions. Remarkably, therefore, the same set of assumptions about redistributive policies leads to opposite predictions about government partisanship depending on the electoral system. We also discuss

how these results are modified by the presence of large Christian Democratic (CD) parties, which organize groups from different classes, and we derive implications for understanding the distribution of pre-fisc income. We test the model on postwar data for redistribution and government partisanship for advanced democracies since the Second World War.

### The Argument

In a 2006 article in the *American Political Science Review* (Iversen and Soskice 2006), we spelled out a formal model of coalition formation and redistribution. Here we provide an informal version of this model and discuss two implications that were not part of the original model: the role of Christian democracy and the implications of the argument for educational spending and distribution of earnings.

Assume that there are three equally sized income classes in an economy,  $L$ ,  $M$ , and  $H$  (going from low to high income). Under PR, there are three parties,  $L$ ,  $M$ , and  $H$ , each representing one of the groups and sharing its goals (parties are distinguished from classes by italics). Because there is no reason for parties in a PR system to deviate from the preferences of their constituents, we refer to them as representative parties. No party has an absolute majority, so a government can be formed only through a coalition of two parties. Assume, for simplicity, that  $M$  is the formateur and has to choose a coalition partner. The implications of our argument also apply when the formateur is randomly chosen, but it is easier to explain the logic when that distinction always falls on the middle party.<sup>1</sup> Since there is evidence that center parties are more likely to be chosen as the formateur, controlling for party size, it is also not an unrealistic assumption (Warwick 1996).<sup>2</sup>

The key intuition of our PR coalition argument is that a party is less capable of looking after its interest if it is excluded from the coalition. Since  $M$  benefits more from taxing an unprotected  $H$  than from taxing an unprotected  $L$ ,  $M$  will choose  $L$  as its coalition partner. This can be modeled in a number of different ways; the only bargaining structure that is excluded is a take-it-or-leave-it offer from  $M$ .<sup>3</sup> The basic point is that it pays for  $L$  and  $M$  to form a coalition and take resources (in the form of tax revenues) from the excluded  $H$  party rather than for  $H$  and  $M$  to form a coalition to take resources from an excluded  $L$ . If we assume that the division of the pie between the coalition partners conforms to Rubinstein bargaining theory, both coalition members will end up with approximately the same shares under the reasonable assumptions that both discount the future at the same rate and that there is no significant first-mover advantage. All that matters for our

conclusion is that the pie is larger when the excluded party has more resources.

The key implication for coalition behavior also follows if resources (tax revenues) are coming from both the middle- and upper-income groups (which is the assumption in the original formal model), as long as redistribution is subject to a “nonregressivity” constraint. This constraint, which also plays a role in the majoritarian case, is that the poor cannot be left with nothing if the middle and upper classes get something, and that the middle class also has to get something if the upper class does. If it holds, the size of the pie that is being split between the coalition partners will be smaller if  $M$  allies with  $H$  than if  $M$  allies with  $L$ , since  $L$  must get something whenever higher-income classes do.

The nonregressivity assumption can be justified on a number of grounds. Empirically, it is an accurate description of reality since available evidence shows that redistribution is always at least mildly progressive, and it is also common to assume that democratic governments are constrained by a basic notion of fairness (see, for example, Roemer 2004).<sup>4</sup> In our own view, the constraint can also be understood as reflecting the wider institutions of advanced democracies. These include a free press, free trade unions and other forms of association, the ability to demonstrate collectively, and so on. These wider institutions underwrite the ability of both lower and middle classes to take collective action if right wing domination of the legislature or the executive leads to attempts to exploit less-privileged groups. But again, the key intuition for the PR case is that there is a cost of being excluded from the government, and that this cost is rising in income. As long as this is the case, PR systems will privilege center-left coalitions and such coalitions will redistribute more than center-right coalitions.

Majoritarian systems operate quite differently. If we assume that Duverger’s law holds, the three parties are now replaced by two, a center-left ( $LM$ ) party and a center-right ( $MH$ ) party, both competing for the vote of  $M$ . If both parties could credibly commit to an  $M$  platform, then each would win 50 percent of the time. But modern approaches to political parties avoid this restrictive assumption and instead allow the possibility that either party will deviate from its platform after the election (see, for example, Persson and Tabellini 2003).<sup>5</sup> Specifically, if  $M$ -voters believe that there is some possibility that an  $LM$  government will be tempted to move left and an  $MH$  government to move right, then a fundamental center-right bias in majoritarian systems arises. This is because, *ceteris paribus*,  $M$  has less to fear from an  $MH$  government moving right than from an  $LM$  government moving left, assuming that fiscal policies are nonregressive. In the former case, the benefits going to  $M$  will be reduced, but there will be an offsetting reduction in taxes as  $H$  maximizes

its own net income (while avoiding regressive taxation) by setting taxes and benefits to zero. In the latter case,  $M$  will be taxed harder by  $L$ , even as benefits are reduced, since this maximizes transfers to  $L$ . Hence, if the probability of deviating from the median voter platform is the same in both parties,  $M$  has a higher expected payoff from an  $MH$  government than from an  $LM$  government. Because parties understand the importance of convincing voters that they are truly committed to middle class interests—especially left parties, since they cannot win without convincing voters they are *more* committed to the middle class—they are prone to elect strong leaders who are willing to ignore the pressures from the party base and are capable of doing so. We therefore refer to majoritarian parties as leadership parties. Yet, without the possibility of writing legally binding contracts between parties and  $M$ , platform commitment can never be complete, and there will always be a risk of deviation from the platform. Of course, center-left parties may sometimes succeed in electing leaders who are believed to be more credibly committed to an  $M$  platform than center-right parties (think of Tony Blair), but over longer periods of time we expect a center-right bias on average.<sup>6</sup>

Note that the insights of this model are completely lost in one-dimensional models such as Meltzer-Richard's, or indeed in power resource theory, where the contestation occurs along a single dimension. The reason is that these models artificially impose a symmetry on the distributive game where the interests of  $M$  are always equally well aligned with the interests of  $L$  and  $M$ . With three parties in a PR system, this means that  $M$  is equally likely to ally with  $H$  as it is to ally with  $L$ . Likewise, in a majoritarian system, any deviation from an  $M$  platform is equally threatening to  $M$  whether it comes from the center-left or center-right party (for example, the center-left party is forced to share with  $M$  even if  $L$  sets policies).

There is one important qualification to our argument. The center-left bias of PR systems is less pronounced in countries with large Christian Democratic parties. Among the latter, the proportion of center-left governments, measured as in table 4.1, is reduced to 57 percent, whereas it is 63 percent for the sample as a whole. This also implies that for PR countries without strong CD parties, notably Scandinavia, the center-left advantage is more pronounced: 71 percent. The reason for this difference, we believe, has to do with the cross-class nature of CD parties. Because these parties include constituencies from  $L$  and  $M$  as well as  $H$ , differences in distributive preferences between these groups must be negotiated out within the party. This means that the parties can still be said to be representative of their constituents, but also produces a more center-oriented platform than we would usually associate with a center-right party. This in turn makes CD parties more attractive coalition partners for "pure" center, or middle class, parties. The logic that leads center

parties to ally with the left is therefore broken, and in countries where CD and center parties have at times held a majority of seats (such as Germany and Italy), the influence of the left has been reduced. Where such CD-center majority coalitions have not been feasible, as has often been the case in Belgium and the Netherlands, we observe frequent coalitions between CD and left parties that produce a unique blend of policies where transfers are high and redistributive but some of these nevertheless are directed to those with high incomes. Where Christian democracy has been politically dominant, it stands to reason that the focus in social policy has been on insurance than on redistribution, since the former is more palatable across classes than redistribution.

Finally, our coalition argument is not restricted to redistribution through transfers but can also help explain variance in the pre-fisc distribution. Standard microeconomic theory says that the relative wages of two individuals will be equal to the ratio of their marginal productivities (absent any influences that might result from market imperfections). Since the ratio of marginal productivities is closely related to the human capital ratio, the distribution of educational attainments plays a large part in determining the underlying distribution of earnings from employment. Our argument suggests that electoral systems also affect the distribution of educational spending, and hence relative marginal productivities and earnings. In particular, center-left governments have an incentive to spend more on  $L$ 's education than do center-right or middle-of-the-road governments. And they have a lesser incentive to spend on  $H$ 's education. Indeed, if  $H$  opts for private education, and if there are positive externalities for  $M$  from educational expenditure on  $L$  (for example, economies of scale in school buildings), then  $M$  has an increased incentive to opt for an  $LM$  coalition.<sup>7</sup>

The argument is bolstered by evidence in Charles Boix (1998), Ben Ansell (2005), and Marius Busemeyer (2007). All of these studies find that left governments spend notably more on primary and secondary education than right governments do, and in Torben Iversen and John D. Stephens (2008) this spending is linked to better literacy test scores at the low end of the distribution (using OECD adult literacy surveys). This study also finds that governments dominated by Christian Democratic parties spend less on public education, which again translates into lower international literacy test scores. If PR affects partisanship, therefore, there is a *prima facie* case that the electoral system is an important determinant of the compactness of the skill distribution. In turn, this means that PR produces both a more equal pre-fisc distribution of income and more redistribution—an association that runs counter to the second core implication of the Meltzer-Richard model that redistribution is tied to pre-fisc inequality (Meltzer and Richard 1981).

Table 4.2 The Payoffs for the Middle Party (or the Middle Class) from Different Party or Coalition Choices, Depending on the Electoral System

	Choose LM Party or Coalition	Choose MH Party or Coalition
PR system	Half the proceeds from taxing H or half the proceeds from taxing both M and H	Half the proceeds from taxing L or half the proceeds from taxing both M and H minus the share going to L
Majoritarian system	Pr(LM party represents M)*targeted spending on M - Pr(LM party represents L)*taxes on M	Pr(MH party represents M)*targeted spending on M

Source: Authors' compilation.  
Note: Optimal choices are shaded.

Table 4.2 summarizes the key ideas in the theoretical argument. It shows M's (or M's) expected payoffs from supporting different parties, or coalitions, contingent on the electoral rule. Since we know that M's party choice determines the outcome of majoritarian elections, and since M's choice of coalition partner in a PR system determines whether LM governments will be more frequent, the key results of the model are captured by mapping M's (or M's) choice of coalition partner (or party).

Note that in a PR system the incentive of M to pick L as a coalition partner holds whether we assume that revenues come only from taxing the excluded party or from taxing both the middle and upper classes (M and H). In the latter case, the result follows from the fact that L can never be entirely shut out from sharing in redistributive spending, even when L is not in the coalition. This implies that M has to share with both L and H in an MH coalition, whereas M only has to share with L in an LM coalition. M therefore has a common interest with L in soaking the rich. In a majoritarian system, by contrast, the main concern of M is to avoid being soaked by the poor. Although both parties present the same median voter platform—targeted benefits to M (and some sharing with L to satisfy the nonregressivity constraint)—if there is a probability that LM will become dominated by L, LM has every reason to soak both the rich and the middle class (this is the subtraction from M's expected payoff), whereas an H-dominated MH party is constrained by nonregressivity to leave L and M no worse off. That means cutting taxes—and hence its own losses—to zero (and thus making no subtraction from M's payoff). With an equal chance of the parties deviating from their electoral plat-

forms, M is therefore predisposed to vote for MH. The same nonregressivity assumption that leads the middle class to support center-left governments under PR rules thus causes it to support the center-right under majoritarian rules (the shaded cells). The model therefore implies that the electoral system is associated with both different tendencies in government partisanship and different levels of redistribution. The next section tests these propositions.

### The Evidence

The purpose of this chapter is to show that electoral systems (E) explain the partisan composition of government (P), and in turn that P explains redistribution (R). The basic forms of the structural estimating equations are therefore:

$$P = f(E) \text{ with } f' > 0 \tag{4.1}$$

$$R = g(P) \text{ with } g' > 0 \tag{4.2}$$

Equation 4.1 follows if the probability of deviating from a median voter platform under majoritarian rules is the same for the center-left and center-right, and assuming nonregressivity. Equation 4.2 clearly holds when redistribution refers to transfers to the poor. (We report results for the poverty rate later in the section.) However, we also want to define redistribution more broadly as the percentage change in the Gini coefficients from before taxes and transfers to after taxes and transfers. With this definition, it is easy to see that equation 4.2 holds when the electoral system is PR, since we have already established that L and M are both better off under an LM than under an MH government. It is also the case that L is always better off under an LM government in a majoritarian system as long as there is some probability that L will set policies in the LM party but not in the MH party. On the other hand, if L sets policies in LM, M will be worse off under a center-left government (which is why M is inclined to vote for MH). Whether the Gini falls when going from an LM to an MH government therefore depends on whether the gain to L exceeds the loss to M if the two governments are run by L and H, respectively. (There are obviously no differences if they are both run by M.) This is clearly the case, since L gains the tax revenues from both M and H while M loses only the tax that M has to pay. Therefore, regardless of whether we focus on redistribution to the poor or overall redistribution in terms of the percentage reduction in the Gini coefficient, center-left government always redistributes more than center-right governments do.

Note that equation 4.2 does not necessarily imply that an LM (or MH)

government redistributes the same under different electoral systems. We cannot say anything about that in general, since it depends on the probability of deviating from the median voter platform. Yet, since  $M$  will avoid voting for  $LM$  unless the probability of deviation is thought to be very low, we should expect  $LM$  in a majoritarian system to be more centrist than  $LM$  in a PR system. That would imply an effect of electoral system on redistribution that is independent of the effect of partisanship.

### The Data

We base our analysis of redistribution on the Luxembourg Income Study, which has been compiling a large database on pre- and post-tax-and-transfer income inequality during the past three decades. The LIS data used for this study cover fourteen countries from the late 1960s (the first observation is 1967) to the late 1990s (the last observation is 1997). All fourteen countries have been democracies since the Second World War. There are a total of sixty-one observations, with the number of observations for each country ranging from two to seven. About one-fifth of the observations are from the 1970s and late 1960s, about 40 percent from the 1980s, and the remainder from the 1990s. The data are based on separate national surveys, but considerable effort has gone into harmonizing (or "Lissifying") them to ensure comparability across countries and time. The LIS data are widely considered to be of high quality and the best available for the purposes of studying distribution and redistribution (see Brady 2003; OECD 1995).

As noted earlier, we use the data specifically to explore the determinants of redistribution as measured by the percentage reduction in the Gini coefficient from before to after taxes and transfers. The Gini coefficient, which is perhaps the best summary measure of inequality, varies from zero (when there is a perfectly even distribution of income) to one (when all income goes to the top decile). Using an adjusted version of the LIS data—constructed by Evelyn Huber, John Stephens, and their associates (Bradley et al. 2003)<sup>8</sup>—we include only working-age families, primarily because generous public pension systems (especially in Scandinavia) discourage private savings and therefore exaggerate the degree of redistribution among older people. Furthermore, because data are only available at the household level, income is adjusted for household size using a standard square root divisor (see OECD 1995).

On the independent side, the key variables for explaining redistribution are government partisanship and electoral system. The first is an index of the partisan left-right "center of gravity" of the cabinet based on the average of three expert classifications of government parties' placement on a left-right scale, weighted by their decimal share of cabinet portfolios. The index goes from left to right and is standardized to vary

between zero and one. The measure was conceived by Donald Gross and Lee Sigelman (1984) and has been applied to OECD countries by Thomas Cusack in a recent comprehensive data set on parties and partisanship (see Cusack and Fuchs 2002; for details, see Cusack and Engelhardt 2002). The expert codings are from Francis Castles and Peter Mair (1984), Michael Laver and Ben Hunt (1992), and John Huber and Ronald Inglehart (1995).

One issue raised by this measure is how we can be sure that partisan effects are due to differences in "who governs" as opposed to differences in voter preferences. Our argument is that the electoral system affects the party composition of governments and hence government policies—not that electorates in different countries want different governments and policies (although that might also, of course, be the case). One way of making sure is to compare the ideological center of gravity of the government to the ideological position of the median voter. Since the position of each party represented in the legislature is known, we can use the position of the party with the median legislator as a proxy for the median voter preference. Hence, we also test our model using this relative center of gravity measure. In cases with single-party majority governments (such as the current British Labour government) where the government party controls the median legislator by definition, we use the *mean* position of the legislative parties weighted by the parties' seat shares (so that the Labour government would be recorded as being left of center).<sup>9</sup>

Turning to measurement of electoral system, the theoretical distinction between majoritarian two-party systems and proportional multiparty systems is roughly matched by differences in actual electoral systems (see table 4.3). With the partial exception of Austria (because of the historically strong position of the two main parties), all PR systems tend to have multiple parties and coalition governments, whereas the non-PR systems have few parties and frequent single-party majority governments (although Australia and Ireland *have* experienced several instances of coalition governments).<sup>10</sup> This is indicated in the third column of table 4.3 using Markku Laasko and Rein Taagepera's (1979) measure of the effective number of parties in parliament.<sup>11</sup> France is somewhat of an outlier among the majoritarian cases, but the second round of voting in the French runoff system usually involves candidates from only two parties.

The division of countries into two electoral systems is bolstered by the quantitative proportionality measure in the last column. This is a composite index based on Arend Lijphart's measure of the effective threshold of representation and Michael Gallagher's measure of the disproportionality between votes and seats (data are from Lijphart 1994). Note that the index is consistent with the division into a majoritarian and a proportional group: there are no cases that should be "switched" based on their

Table 4.3 Key Indicators of Party and Electoral Systems

	Electoral System	Effective Number of Legislative Parties	Proportionality of Electoral System
Majoritarian			
Australia	majoritarian <sup>a</sup>	2.5	0.19
Canada	SMP	2.2	0.13
France	run off <sup>b</sup>	3.8	0.16
Ireland	STV <sup>c</sup>	2.8	0.70
Japan	SNTV <sup>d</sup>	2.7	0.61
New Zealand	SMP	2.0	0.00
United Kingdom	SMP	2.1	0.16
United States	SMP	1.9	0.39
Average		2.5	0.30
Proportional			
Austria	PR	2.4	0.89
Belgium	PR	5.2	0.86
Denmark	PR	4.4	0.96
Finland	PR	5.1	0.87
Germany	PR	2.6	0.91
Italy	PR	4.0	0.91
Netherlands	PR	4.6	1.00
Norway	PR	3.3	0.76
Sweden	PR	3.3	0.90
Average		3.9	0.90

Source: electoral system: Lijphart (1994); effective number of legislative parties: Laakso and Taagepera (1979); proportionality of electoral system: Lijphart (1994).

<sup>a</sup> The use of the single transferable vote (STV) in single-member constituencies makes the Australian electoral system a majority rather than plurality system.

<sup>b</sup> The two-round runoff system has been in place for most of the postwar period, with short interruptions of PR (1945 until early 1950s and 1986 to 1988).

<sup>c</sup> The Irish STV system is unique. While sometimes classified as a PR system, the low constituency size (five or less) and the strong centripetal incentives for parties in the system makes it similar to a median voter-dominated single member plurality (SMP) system.

<sup>d</sup> The single nontransferable voting (SNTV) system in Japan (until 1994) deviates from SMP in that more than one candidate is elected from each district, but small district size and nontransferability makes it clearly distinct from PR list systems.

value on the index. All our results go through if we use this index instead of the PR-majoritarian dichotomy.

We also controlled for variables that are commonly assumed to affect redistribution or partisanship. Here we provide these variables, with definitions, sources, and a short discussion of causal logic. Country means and a correlation matrix are provided in table 4A.2.

*Pre-tax-and-transfer inequality:* This variable is included to capture the Meltzer-Richard logic that more inequality leads to more redistribution. It is measured as the earnings of a worker in the ninetieth percentile of the earnings distribution as a share of the earnings of the worker with a median income. We are using earnings data, despite their limitations, because the Meltzer-Richard model applies to individuals, not households. The data are from OECD's wage dispersion data set (unpublished electronic data).

*Constitutional veto points:* This is a composite measure of federalism, presidentialism, bicameralism, and the frequency of referenda, based on Evelyn Huber, Charles Ragin, and John Stephens (1993). The more independent decision nodes there are, the more veto points. The left in countries with many veto points may have found it harder to overcome opposition to redistributive spending.

*Unionization:* According to power resource theory, high union density should lead to more political pressure for redistribution and a stronger left, while simultaneously reducing primary income inequality. The data are from Jelle Visser (1989, 1996).

*Voter turnout:* Lijphart (1997) argues that there is much evidence to the effect that voter non-turnout is concentrated among the poor. Higher turnout may therefore be associated with less redistribution. The turnout data are from annual records in Thomas Mackie and Richard Rose (1991) and International Institute for Democracy and Electoral Assistance (1997).

*Unemployment:* Since the unemployed receive no wage income, they are typically poor in the absence of transfers. All countries have public unemployment insurance, so higher unemployment is "automatically" linked to more redistribution. We use standardized rates from OECD (various years).

*Real per capita income:* This is a standard control to capture "Wagner's Law," which says that demand for social insurance is income-elastic. The data are expressed in constant 1985 dollars (Heston, Summers, and Aten 2002).

*Female labor force participation:* Women's participation in the labor market is likely to affect redistributive spending because it entitles some women to benefits (unemployment insurance, health insurance, and so on) for which they would otherwise be ineligible. Since women tend to be lower-paid, their labor force participation may also increase support for the left and for redistributive policies. The measure is female labor force participation as a percentage of the working-age population and is taken from OECD (various years).

### The Statistical Model

Our starting point for estimating the first structural equation (equation 4.1) is a simple error correction model. In this model, current redistribution,  $R_{i,t}$ , is equal to past redistribution plus a contribution from redistributive partisan policies,  $P_{i,t}$  (and potentially other factors), that deviate from policies that would preserve the status quo level of redistribution:

$$R_{i,t} = \lambda \cdot [\alpha + \beta \cdot P_{i,t} - R_{i,t-1}] + R_{i,t-1} + u_{i,t} \quad (4.3)$$

where  $\lambda$  is speed with which redistribution changes in response to changes in policy, and  $u$  is identically and independently distributed with mean 0 and variance  $s_u^2$ .

With our data on redistribution, however, we cannot estimate this model directly, since the observations on the dependent variable for each country are unequally spaced, varying between two and as many as ten years. To deal with this missing data problem, we develop a modified version of the model where we substitute the above expression for  $R_{i,t-1}$ ,  $R_{i,t-2}$ , and so on, until we get to another observation of the lagged dependent variable. This procedure yields the following expression:

$$\begin{aligned} R_{i,t} &= \lambda \cdot \alpha \cdot \sum_{s=0}^N (1-\lambda)^s + \lambda \cdot \beta \cdot \sum_{s=0}^N (1-\lambda)^s \cdot P_{i,t-s} + (1-\lambda)^{N+1} \\ &\quad \cdot R_{i,t-N+1} + \sum_{s=0}^N (1-\lambda)^s \cdot u_{i,t-s} \end{aligned} \quad (4.4)$$

or

$$\begin{aligned} R_{i,t} - (1-\lambda)^{N+1} \cdot R_{i,t-N+1} &= \lambda \cdot \alpha \cdot \sum_{s=0}^N (1-\lambda)^s + \lambda \cdot \beta \cdot \sum_{s=0}^N (1-\lambda)^s \\ &\quad \cdot P_{i,t-s} + \sum_{s=0}^N (1-\lambda)^s \cdot u_{i,t-s} \end{aligned} \quad (4.5)$$

The second term in the last expression is a measure of the cumulative effect of partisanship over a period of  $N$  years, where  $N$  is the gap between the current and previous observation ( $s$  is the lag in years). Of

course, insofar as other variables affect redistribution, we need to calculate the cumulative effects of these in precisely the same manner as for partisanship. Since we have annual observations for partisanship and all control variables, the estimated model is based on complete time series except for the dependent variable. The model is estimated by choosing a value for  $\lambda$  that maximizes the explained variance.

Given our assumptions, the composite errors are serially uncorrelated,<sup>12</sup> but because the error term depends on  $N$ , there is heteroscedasticity. The reported standard errors adjust for such heteroscedasticity, but not for contemporaneous correlation of errors because the latter tends to be inaccurate when there are few observations over time (Wallerstein and Moene 2003). In practice, however, the results are very similar when also adjusting for contemporaneous correlation (known as panel-corrected standard errors; see Beck and Katz 1995), and we therefore do not report them here.

The model used to explain partisanship in the second part of the analysis (equation 4.2) is a straightforward OLS regression that is explained later.

### The Findings

We present the findings in two parts. In the first part, we use partisanship and electoral system as explanatory variables to account for differences in the level of redistribution (equation 4.1). In the second part, we use partisanship as the dependent variable, testing the proposition that the electoral system shapes coalition behavior and therefore the composition of governments (equation 4.2).

**Redistribution** We begin our presentation with the results from estimating a simple baseline model with economic variables only (model 1 in table 4.4). As expected, female labor force participation and unemployment are associated with more redistribution. Contrary to Wagner's Law, higher per capita income slightly reduces redistribution, although the result is not statistically significant across model specifications.

As in other studies, we also find that inequality of pre-tax-and-transfer earnings has a *negative* effect on redistribution, contrary to the Meltzer-Richard model expectation. This negative effect is statistically significant at a .01 level, and the substantive impact is strong: a one-standard-deviation increase in inequality is associated with a 0.3-standard-deviation reduction in redistribution.

Yet the effect of inequality *reverses* (though the positive effect is not



the effect of compressing the skill distribution at the low end if we measure skills by performance on standardized adult literacy tests (for additional evidence, see Ansell 2005; Busemeyer 2007). Given this, excluding partisanship produces an omitted variable bias on the coefficient for inequality.

The most important result in table 4.4 is that right partisanship has a strong and statistically significant negative effect on redistribution, regardless of whether we use the absolute (column 2) or the relative (column 3) measure of partisanship. A one-standard-deviation shift to the right reduces redistribution by about one-third of a standard deviation. This confirms previous research, especially David Bradley et al. (2003), and it adds the finding that partisanship matters *even* when measured relative to the ideological center of the legislature. This is important to our story because it implies that political parties, and the coalitions they form, matter for redistribution—not just differences in the preferences of electorates.

The results also suggest that multiple veto points, as expected, reduce redistribution and that PR has a direct (positive) effect on redistribution. The latter effect holds regardless of which measure of electoral system in table 4.3 we use. Our model does suggest one possible reason for this, because if the probability of left deviation from a median voter platform is not too high, center-left governments always redistribute more to the poor under PR than under majoritarian rule. To test this we ran the same model using the percentage reduction in the poverty rate instead of the reduction in the Gini coefficient as the dependent variable. Consistent with this proposition, it turns out that whereas the effect of partisanship is about the same, the direct effect of PR is now notably stronger.<sup>13</sup>

There may also be effects of electoral systems that we have not modeled. Torsten Persson and Guido Tabellini (2003), for example, argued that single-member plurality systems give politicians an incentive to target spending on geographically concentrated constituencies, whereas PR, with ideally only one electoral district, encourages politicians to spend more on universalistic benefit programs. Since universalistic programs are likely to be more redistributive than geographically targeted programs, this would mean that PR has a direct effect on redistribution. But our focus is on the effect of electoral systems on partisanship, to which we now turn.

*Partisanship* Although both government partisanship and the electoral system are important in explaining redistribution, partisanship itself is

Table 4.4 Regression Results for Reduction in Inequality (Standard Errors in Parentheses)

	(1)	(2)	(3)
Inequality	-16.75*** (5.68)	13.17 (9.36)	12.48 (8.96)
Political-institutional variables			
Government partisanship(right)	—	-2.38*** (0.73)	—
Government partisanship relative to median legislator	—	—	-2.93*** (0.75)
Voter turnout	—	0.01 (0.10)	-0.06 (0.10)
Unionization	—	0.16* (0.09)	0.15* (0.09)
Number of veto points	—	-1.57*** (0.62)	-1.79*** (0.59)
Electoral system (PR)	—	5.00** (2.15)	4.44** (2.06)
Controls			
Per capita income	-0.001*** (0.00)	-0.001 (0.00)	-0.001 (0.000)
Female labor force participation	0.73*** (0.11)	0.36* (0.20)	0.45** (0.20)
Unemployment	0.81*** (0.27)	0.99*** (0.27)	1.08*** (0.26)
$\lambda$	.4	.7	.7
R-squared	0.648	0.746	0.765
Observations	47	47	47

Source: Luxembourg Income Survey (LIS).

Note: Standard errors are in parentheses. All independent variables are measures of the cumulative effect of these variables between observations on the dependent variable.

\*p < .10; \*\*p < .05; \*\*\*p < .01 (two-tailed tests)

significant) when we include controls for the political-institutional variables (models 2 and 3). One likely reason for this change was suggested earlier: left governments, as well as strong unions and PR, not only cause an increase in redistribution but also reduce inequality through public spending on primary and secondary education. Iversen and Stephens (2008), show that there is a strong positive effect of left partisanship on spending on all types of public education, and demonstrate that this has

shaped by the distinct coalitional politics associated with different electoral systems. A key implication of our argument is that center-left governments tend to dominate over long periods of time under PR, whereas center-right governments tend to dominate under majoritarian institutions. Although the electoral system has a direct effect on redistribution, partisanship, we argue, is one of the key mechanisms through which it exerts an effect on redistribution.

We use the partisan center of gravity (CoG) index as a dependent variable and indicators for party and electoral systems as independent variables. We have data for eighteen countries that have been democracies since the Second World War, beginning with the first democratic election after the war and ending in 1998. One country—Switzerland—has a collective executive that prevents coalition politics from having any influence on the composition of the government. We therefore exclude this case from the analysis, although every result reported in this section goes through with Switzerland included.<sup>14</sup>

Table 4.1 is a simple cross-tabulation of electoral systems and government partisanship using annual observations as the unit of analysis. Governments are coded as being left-of-center if their position on the composite left-right index is to the left of the overall mean. This is somewhat arbitrary since the mean may not correspond to a centrist position. An alternative would be to define the center as the middle of the scale. But in two of the three expert surveys, the middle of the scale is not explicitly defined as centrist in terms of an absolute standard, and experts may well equate it instead with the *observed* center of a party system, whether or not this center is shifted to the left or right. In practice, this choice has little effect on the results.

Identifying a centrist position, however, is important for a different reason. If an *LM* leadership party in a majoritarian system is centrist, then the model implies that it stands a good chance of winning. Observing such a party in government is therefore consistent with the model. At the same time, it cannot be counted as confirmatory evidence, since we do not have any independent measure with which to determine whether the party platform is credible. The relative frequency of center and center-right governments therefore cannot be hypothesized a priori. Moreover, because our theory implies that the political space in majoritarian systems is tilted to the right (owing to strategic voting in a setting of incomplete platform commitment), if we include governments that are centrist in an absolute sense, these would be counted as center-left in terms of their relative position. Using a scale such as the composite CoG index, the results would therefore be biased against the theory, since the center on this scale is almost certainly affected by relative assessments. Our solution is to use one of the component measures in the

CoG index by Castles and Mair (1984) to exclude governments that are centrist in the absolute sense. The Castles-Mair measure is the only one that explicitly defines the middle value (3) as a party having a centrist left-right ideology.<sup>15</sup>

As pointed out at the beginning of this chapter, in a simple cross-tabulation of electoral system and government partisanship there is only one country, Germany, that does not conform to the predicted pattern. In this case, there were thirty-four years with center-right governments and only sixteen years with center-left governments. As we suggested earlier, a possible explanation is the role of the German Christian Democrats (CDU/CSU). This party is usually seen as a coalition of groups from different locations in the income distribution, where group differences are worked out through intra-party bargaining (as we would expect in a representative party). The Christian Democrats can therefore credibly claim to be closer to the center than a typical conservative party representing mainly high-income voters. This helps explain why the small, pivotal liberal party (FDP) chose to ally with CDU/CSU instead of the Social Democratic Party (SPD) during most of the postwar period. But note that even in this special case government policies are heavily influenced by PR, since the right has, in effect, gained access to government power only by accepting a compromise with lower-income groups that involves at least some redistribution.

Germany aside, we can question the results in table 4.1 for the same reason that was pointed out when we used the government CoG measure to explain redistribution: those results could reflect differences in voter preferences rather than in coalitional party politics. Note, however, that strategic voting in majoritarian systems is expected to shift the legislative center to the right, and the distribution of seats in PR systems should not matter so long as coalitions can be formed that are either to the left or to the right of the center. So evidence on absolute differences in partisanship is clearly relevant to our theory. Still, using the relative measure of partisanship allows us to exclude explanations that emphasize the distribution of voter preferences, and it serves as a useful robustness test. In table 4.5, governments are therefore coded as center-left (center-right) only if they are to the left (right) of the legislative median (or the legislative mean in cases with single-party majority governments). This does not change the results very much, although they are (not surprisingly) slightly weaker. About two-thirds of governments under PR are now to the left of the legislative median, whereas two-thirds of governments under majoritarian institutions are to the right. As before, all of the countries conform to this pattern except one.<sup>16</sup>

What alternative explanations might there be for the pattern observed

Table 4.5 Electoral Systems and the Number of Years with Governments Further to the Left or to the Right than the Median Legislator, 1945 to 1998

Electoral system	Government Partisanship		Proportion of Right Governments
	Left	Right	
Proportional	291 (9)	171 (0)	0.37
Majoritarian	116 (1)	226 (7)	0.66

Source: electoral system, Lijphart (1994); government partisanship: Cusack and Fuchs (2002), Cusack and Engelhardt (2002).

Note: Excludes governments that are classified as "centrist" on the Castles-Mair scale (Castles and Mair 1984).

in table 4.5? Because we use the difference between the position of the government and the median legislator, we have limited such alternatives to variables that affect the *post-election* partisan composition of governments. We thus implicitly "control" for all variables that may affect the distribution of preferences in the electorate. Although there are obviously a plethora of situationally specific factors that shape each instance of government formation, it is not easy to think of variables that would *systematically* bias the composition of governments in one ideological direction or the other.

To our knowledge, there are only two candidates for such variables in the existing literature. The first goes back to Stein Rokkan's (1970) well-known explanation for the choice of electoral systems (see also Alesina and Glaeser 2004; Boix 1999). Rokkan argued that at the time of the extension of the franchise, when a united right faced a rising but divided left, the governing right chose to retain majoritarian institutions. Conversely, when a divided right faced a rising and united left, the response was to opt for PR. If this pattern of fractionalization persisted into the postwar period, the right would tend to have an advantage in majoritarian systems, while the left would tend to have an advantage under PR (in the latter case because the transaction costs of bargaining presumably rise with the number of parties). This would produce the pattern that our model predicts, but for different reasons.

A simple test of this argument is to see whether there is a relationship between party fragmentation and electoral system in the expected direction. For this purpose, we use a variable in the Cusack-Engelhardt data

set, which is the difference between party fractionalization on the left and right, where fractionalization is defined in the usual way as one minus the sum of the squared seat shares held by parties to the left or to the right of the center (Rae 1968). There is in fact no significant correlation ( $r = -0.15$ ), which could mean either that Rokkan was wrong or that the relationship between fractionalization and electoral systems has changed over time. Either way, fractionalization should not affect the relationship between electoral system and partisanship in the period on which we focus here.

To confirm this, we ran a simple multiple regression, using partisanship as the dependent variable and electoral system and fractionalization as independent variables (see table 4.6).<sup>17</sup> Note that the coefficient for electoral system variable is very similar whether fractionalization is included or not (compare columns 1 and 2). In substantive terms, going from a majoritarian to a PR system shifts the center of gravity of the government by a factor that is roughly equivalent to moving from an average Christian democratic government to a social democratic government, or from a conservative government to a Christian democratic government. Not surprisingly, greater fractionalization on the left than on the right *does* lead to more right-leaning governments on average. But this is not relevant to our story.

The second argument is that vote-seat disproportionalities may favor the right under majoritarian institutions. The explanation would be that the boundaries of electoral districts in majoritarian democracies were drawn up before the full impact of the industrial revolution, which led to an underrepresentation of urban areas, where the left had the strongest support (Cox and Katz 2002; Monroe and Rose 2002; Rodden 2005). Although subsequent redistricting may have addressed some of these inequities, they could still play a role in explaining why the left is disadvantaged in majoritarian systems (PR being more unbiased by design). We tested this possibility using a variable that is simply the difference between the legislative seat share of right parties and these parties' share of the vote. It is referred to as "right overrepresentation" in table 4.6.

In contrast to left-right fragmentation, this variable does not register any significant effect, and the sign is in fact in the wrong direction (see column 3). This is somewhat puzzling, since there is a positive bivariate correlation between this variable and government partisanship ( $r = .37$ ), as well as between this variable and electoral system ( $r = .51$ ). The explanation is probably very simple, however. Remember that we are modeling government partisanship, not the governing party's margin of victory. The latter does not matter in majoritarian "winner-take-all" systems.

Hence, the only scenario in which the vote-seat disproportionality would affect government partisanship is when the right loses the electoral vote but wins a majority of seats. As illustrated by the British case, such instances are rare. In only one postwar election (1951) did the Conservative Party win more seats than Labor despite losing the popular vote, and in another (1974) Labor in fact came out on top despite getting fewer votes.<sup>18</sup>

The last two columns use the *absolute* government CoG measure as the dependent variable, which maximizes the cross-national variance in partisanship. But when entered simultaneously, neither fragmentation nor overrepresentation registers a significant effect. The electoral system, on the other hand, continues to have roughly the same impact as before. Finally, the last column tests three variables that may reasonably be expected to affect the distribution of voter preferences, and hence the political center of a country. Predictably, high unionization rates are associated with more left-leaning governments, but the effect is weak and statistically insignificant. Electoral participation and female labor force participation (both of which might be expected to benefit the left) are also insignificant, and the signs are in the wrong direction.<sup>19</sup> The electoral system remains the sole variable with a strong and statistically significant effect.

### Conclusion

Distribution and redistribution vary to a surprising extent across democracies that are roughly at similar levels of development. In this chapter, we have argued that much of this variance can be explained as the result of differences in electoral systems and the class coalitions they engender. To explain redistributive policies under democracy, it is essential to understand that policies are multidimensional and that groups have to form partisan coalitions to govern. Both features of redistributive politics are assumed away in standard political economy models, such as those that follow the setup in Meltzer and Richard (1981). If we permit allocation profiles across classes that do not have to conform to a linear tax, the incentives of the middle class to ally with the left and right will vary depending on the institutional conditions. There are two opposing incentives for the middle class: it has an incentive to ally with the poor to avoid exploit the rich, but it also has an incentive to support the rich to avoid being exploited by the poor. In a majoritarian two-party system, the latter motive dominates because the middle class cannot be sure that the poor will not set policies in a governing center-left party. In a PR multi-party system, on the other hand, the first motive dominates because the

Table 4.6 Regression Results for Government Partisanship, 1950 to 1996

	(1)	(2)	(3)	(4)	(5)
Government	Government	Government	Government	Government	Government
CoG Minus	CoG Minus	CoG Minus	CoG Minus	CoG	CoG
Legislative	Legislative	Legislative	Legislative	CoG	CoG
Median	Median	Median	Median	CoG	CoG
0.653***	0.664***	0.663***	0.501***	0.501***	0.375
(0.039)	(0.033)	(0.051)	(0.46)	(0.46)	(0.453)
-0.173***	-0.147***	-0.184***	-0.174***	-0.174***	0.176**
(0.054)	(0.047)	(0.063)	(0.063)	(0.063)	(0.077)
—	0.241**	—	0.201	0.201	—
—	(0.094)	—	(0.116)	(0.116)	—
—	—	-0.036	0.077	0.077	—
—	—	(0.101)	(0.104)	(0.104)	—
—	—	—	—	—	0.001
—	—	—	—	—	(0.005)
—	—	—	—	—	-0.004
—	—	—	—	—	(0.003)
—	—	—	—	—	0.004
—	—	—	—	—	(0.004)
0.37	0.54	0.49	0.49	0.55	0.49
17	17	17	17	17	17
Adjusted R-squared	Adjusted R-squared	Adjusted R-squared	Adjusted R-squared	Adjusted R-squared	Adjusted R-squared
Observations	Observations	Observations	Observations	Observations	Observations

Source: Authors' calculations.  
 \*\* p < .05; \*\*\* p < .01 (two-tailed tests).  
 Note: Standard errors are in parentheses.

middle class party *can* make sure that a coalition with the left party will not deviate from pursuing their common interest in taxing and redistributing from the rich. Center-right governments therefore tend to dominate in majoritarian systems, whereas center-left governments tend to dominate in PR systems.

Insofar as governments also affect the pre-fisc distribution of income through educational spending, the argument also helps us understand why relatively egalitarian countries tend to be associated with high redistribution. But it also leaves a number of puzzles for future research. First, proportional representation appears to be less closely related to redistribution in Latin America and perhaps other new democracies. Is this because strong presidents, who are essentially majoritarian in nature, often coexist with PR electoral institutions? Is it because parties are less organized around class? Or is it because the poor have little collective action capacity in these countries while the rich can threaten coups? Future work will have to pay more attention to the nonelectoral aspects of the political system as well as to the organization of interests. On the latter point, it seems plausible that better measures of differences in the collective action capacity of the poor will also explain some of the residual variance in redistribution for rich democracies.

Another puzzle is why some countries moved to PR electoral systems in the 1920s or earlier. In all these countries, at least one, and usually several, center-right parties supported the move. Even if this was initially a political mistake, there have been many opportunities for the center and right to move the system back to majoritarian elections since then, but they have not. Elsewhere we have suggested that the explanation may be related to the fact that the shift occurred in countries where employers and unions had made massive investments in training systems that essentially created cospecific assets, which in turn had to be protected politically and economically (Cusack, Iversen, and Soskice 2007). Political protection implied the representation of asset-owners in national decision-making bodies with authority to regulate these assets, either directly (say, through certification and standard setting) or indirectly (say, through the administration of unemployment benefits). Economic protection implied insurance against the risk of losing the value of the investment—a matter that was critical to skilled workers who could lose their jobs and have difficulty finding others if their skills were specific. PR systems and the corporatist institutions that tend to accompany them offered both representation (for example, through strong legislative committees with close ties to the bureaucracy) and a credible commitment to insurance against income loss as a result of a center-left bias of governing

coalitions. In our view, the relationship between the organization of production, political representation, and social insurance is a major area for future research.

Finally, the argument may be expanded to explain changes in partisan advantage over time. Although we have abstracted from differences in the dispersion of the earnings distribution, it may be conjectured that as pre-fisc income inequality grows, middle class fears of being soaked by the poor grow in majoritarian systems, while their incentive to join the poor in soaking the rich intensifies under PR. Thus, contrary to Meltzer-Richard, rising inequality in majoritarian systems may be associated with a greater advantage for the right. This is in fact what Nolan McCarty, Keith Poole, and Howard Rosenthal (2006) found in a new study of polarization and partisanship in the United States. Whether the opposite is true in PR countries is an interesting question for future research.

## Appendix

Table 4A.1 Country Means for the Variables Used in Regression Analysis

	Redistribution (Reduction in Gini)	Inequality (Wages)	Partisanship (Right)	Voter Turnout	Unionization
Australia	23.97	1.70	0.47	84	46
Austria	—	—	0.30	87	54
Belgium	35.56	1.64	0.36	88	48
Canada	21.26	1.82	0.36	68	30
Denmark	37.89	1.58	0.35	84	67
Finland	35.17	1.68	0.30	79	53
France	25.36	1.94	0.40	66	18
Germany	18.70	1.70	0.39	81	34
Ireland	—	—	0.42	75	48
Italy	12.13	1.63	0.37	93	34
Japan	—	—	0.78	71	31
Netherlands	30.59	1.64	0.31	85	33
New Zealand	—	—	0.43	85	23
Norway	27.52	1.50	0.15	80	54
Sweden	37.89	1.58	0.17	84	67
United Kingdom	22.67	1.78	0.52	76	42
United States	17.60	2.07	0.40	56	23

Veto points	Electoral System (PR)	Left Fragmentation	Right Over- Representation	Per Capita Income	Female Labor Force Participation	Unemployment
3	0	-0.39	0.10	10,909	46	4.63
1	1	-0.18	0.04	8,311	51	2.76
1	1	-0.34	0.27	8,949	43	7.89
2	0	0.18	-0.11	11,670	48	6.91
0	1	-0.40	0.07	9,982	63	6.83
1	1	-0.18	0.09	8,661	66	4.48
1	0	0.10	0.09	9,485	51	4.57
4	1	-0.13	0.15	9,729	51	4.86
0	0	-0.33	0.70	5,807	37	9.09
1	1	0.20	0.08	7,777	38	8.12
1	0	0.22	0.28	7,918	56	1.77
1	1	0.18	-0.36	9,269	35	4.62
0	0	-0.40	0.98	—	47	—
0	1	-0.02	-0.32	9,863	52	2.28
0	1	-0.40	-0.03	9,982	63	6.83
0	0	0.08	0.07	9,282	54	5.01
5	0	0.00	-0.17	13,651	53	5.74

Source: Luxembourg Income Study (LIS).

Note: Time coverage is 1950 to 1996, except for redistribution and inequality, which are restricted to the available LIS observations.



8. We are grateful to these authors for letting us use their data.
9. We did the same in a small number of cases where the government position was equivalent to the median legislator but the government was not a single-party majority government.
10. Ireland is perhaps the most ambiguous case, but it is not part of the redistribution regression, and the results for partisanship are not sensitive to the particular electoral system measure we use or to whether Ireland is included or excluded.
11. The effective number of parties is defined as one divided by the sum of the square root of the shares of seats held by different parties (or one divided by the Herfindahl index).

12. 
$$E \left[ \sum_{s=1}^{N_1} [(1-\lambda)^s u_{i,t-s}] \cdot \sum_{s=1}^{N_2} [1-\lambda]^s u_{i,t-(N_1+s)}] \right] = 0$$
, since the errors in the first square bracket run from  $u_{i,t}$  to  $u_{i,t-N_1}$  and in the second from  $u_{i,t-(N_1+1)}$  to  $u_{i,t-(N_1+1)-N_2}$ .
13. The effect of going from a majoritarian system to a PR system is to increase redistribution to the poor by 0.7 standard deviations, whereas the effect on the Gini coefficient is 0.5 standard deviations.
14. Because right parties cannot be excluded from government power in Switzerland, we should expect redistribution to be lower than in other PR countries. This is in fact the case, since the average pre- to post-tax-and-transfer reduction in the Gini is 9 percent in Switzerland, whereas it is 28 percent in other PR countries.

15. We also excluded centrist governments from the PR cases because they neither confirm nor disconfirm the theory (although bias is less of a concern here). In total, 95 of 734 country-years were coded as centrist on the Castles-Mair scale. The "outlier" is no longer Germany since most governments in that country have in fact been to the left of the median, even as they have tended to be to the right compared to other PR systems. Instead, the deviant case is France, where slightly more than half (twenty-nine of fifty-two) of the observations are to the left of the legislative median. This is because the party with the median legislator tends to be very right wing, whereas French governments sometimes include representation from more moderate parties. The rightist orientation of French politics is also clearly evident in the fact that every president in the postwar period, except for François Mitterrand, has been from a right-of-center party.
17. Since there is little meaningful variance in electoral systems over time, we simply ran a cross-section regression on the averages from 1950 to 1996 (for which we have complete data on several control variables). It is of course possible, indeed standard, to pool the country time series while correcting for serial correlation by adding a lagged dependent variable (PCTS). Our results hold up in such a specification—indeed, the levels of signifi-

cance improve notably—but as demonstrated in Goodrich (2004), it is misleading to use PCTS regressions when nearly all the evidence is cross-sectional.

18. The right overrepresentation variable, defined as the difference between right seats and vote shares, overstates the right advantage in the case of Britain. The reason is that the Liberal Party is located between Labor and the Conservatives and always gets fewer seats than votes. As a result, *both* Labor and the Conservatives tend to get more seats than implied by their votes. However, we resisted the temptation to "finesse" the measure to reflect this and other unique national circumstances.
19. The same is true for other potential variables that we tested, such as unemployment, the size of the industrial workforce, and income per capita.

## References

- Alesina, Alberto, and Edward Glaeser. 2004. *Fighting Poverty in the United States and Europe: A World of Difference*. Oxford: Oxford University Press.
- Ansell, Ben. 2005. "From the Ballot to the Blackboard? Partisan and Institutional Effects on Human Capital Policy in the OECD." Unpublished paper. Department of Government, Harvard University.
- Austen-Smith, David. 2000. "Redistributing Income Under Proportional Representation." *Journal of Political Economy* 108(6): 1235–69.
- Beck, Nathaniel, and Jonathan Katz. 1995. "What to Do (and Not to Do) with Time-Series Cross-Section Data." *American Political Science Review* 89(September): 634–48.
- Benabou, Roland. 1996. "Inequality and Growth." In *National Bureau of Economic Research Macro Annual*, edited by Ben S. Bernanke and Julio J. Rotemberg. Cambridge, Mass.: MIT Press.
- Boix, Carles. 1998. *Political Parties, Growth, and Equality*. New York: Cambridge University Press.
- . 1999. "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies." *American Political Science Review* 93(3): 609–24.
- Bradley, David, Evelyn Huber, Stephanie Möller, François Nielsen, and John D. Stephens. 2003. "Distribution and Redistribution in Post-industrial Democracies." *World Politics* 55(2): 193–228.
- Brady, David. 2003. "Rethinking the Sociological Measure of Poverty." *Social Forces* 81(3): 715–52.
- Bussemeyer, Marius. 2007. "Social Democrats and Education Spending." Working paper 07/2. Leipzig: Max Planck Institute for the Study of Societies.
- Castles, Francis, and Peter Mair. 1984. "Left-Right Political Scales: Some Expert Judgments." *European Journal of Political Research* 12(1): 73–88.
- Cox, Gary W., and Jonathan N. Katz. 2002. *Elbridge Gerry's Salamander: The Elec-*



- total Consequences of the Reappointment Revolution. Cambridge: Cambridge University Press.
- Cusack, Thomas R., and Lutz Engelhardt. 2002. "The PGL File Collection: File Structures and Procedures." Wissenschaftszentrum Berlin für Sozialforschung.
- Cusack, Thomas R., and Susanne Fuchs. 2002. "Documentation Notes for Parties, Governments, and Legislatures Data Set." Wissenschaftszentrum Berlin für Sozialforschung.
- Cusack, Thomas, Torben Iversen, and David Soskice. 2007. "Economic Interests and the Origins of Electoral Institutions." *American Political Science Review* 101(3): 373–91.
- Goodrich, Benjamin. 2004. "Problems with and Solutions for Two-Dimensional Models of Continuous Dependent Variables." Unpublished paper. Department of Government, Harvard University.
- Gross, Donald A., and Lee Sigelman. 1984. "Comparing Party Systems: A Multidimensional Approach." *Comparative Politics* 16(4): 463–79.
- Heston, Alan, Robert Summers, and Bettina Aten. 2002. Penn World Table Version 6.1. Center for International Comparisons at the University of Pennsylvania (CICUP).
- Hicks, Alexander, and Duane Swank. 1992. "Politics, Institutions, and Welfare Spending in Industrialized Democracies, 1960–1982." *American Political Science Review* 86(3): 649–74.
- Huber, Evelyne, Charles Ragin, and John Stephens. 1993. "Social Democracy, Christian Democracy, Constitutional Structure, and the Welfare State." *American Journal of Sociology* 99(3): 711–49.
- Huber, Evelyne, and John D. Stephens. 2001. *Development and Crisis of the Welfare State: Parties and Policies in Global Markets*. Chicago, Ill.: University of Chicago Press.
- Huber, John D., and Ronald Inglehart. 1995. "Expert Interpretations of Party Space and Party Locations in Forty-two Societies." *Party Politics* 1(1): 73–111.
- International Institute for Democracy and Electoral Assistance (IDEA). 1997. *Voter Turnout from 1945 to 1997: A Global Report on Political Participation*. Stockholm: IDEA Information Services.
- Iversen, Torben, and David Soskice. 2006. "Electoral Institutions and the Politics of Coalitions: Why Some Countries Redistribute More Than Others." *American Political Science Review* 100(2): 165–81.
- Iversen, Torben, and John D. Stephens. 2008. "Partisan Politics, the Welfare State, and Three Worlds of Human Capital Formation." *Comparative Political Studies* 41(4–5): 600–637.
- Korpi, Walter. 1983. *The Democratic Class Struggle*. London: Routledge & Kegan Paul.
- . 1989. "Power, Politics, and State Autonomy in the Development of Social Citizenship: Social Rights During Sickness in Eighteen OECD Countries Since 1930." *American Sociological Review* 54(3): 309–28.
- Kwon, Hyeok Yong, and Jonas Pontusson. 2003. "The Zone of Partisanship: Par-

- ties, Unions, and Welfare Spending in OECD Countries, 1962–1999." Unpublished paper. Cornell University, Department of Political Science.
- Laasko, Markku, and Rein Taagepera. 1979. "Effective Number of Parties: A Measure with Applications to Western Europe." *Comparative Political Studies* 12(3): 3–27.
- Laver, Michael, and W. Ben Hunt. 1992. *Policy and Party Competition*. New York: Routledge.
- Lijphart, Arend. 1994. *Electoral Systems and Party Systems: A Study of Twenty-seven Democracies, 1945–1990*. New York: Oxford University Press.
- . 1997. "Unequal Participation: Democracy's Unresolved Dilemma." *American Political Science Review* 91(1): 1–14.
- Mackie, Thomas T., and Richard Rose. 1991. *The International Almanac of Electoral History*, 3rd ed. London: Macmillan.
- McCarty, Nolan, Keith Poole, and Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, Mass.: MIT Press.
- Meltzer, Allan H., and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89(5): 914–27.
- Milanovic, Branko. 2000. "The Median-Voter Hypothesis, Income Inequality, and Income Redistribution: An Empirical Test with the Required Data." *European Journal of Political Economy* 16(3): 367–410.
- Moene, Karl Ove, and Michael Wallerstein. 2001. "Inequality, Social Insurance, and Redistribution." *American Political Science Review* 95(4): 859–74.
- Monroe, Burt L., and Amanda G. Rose. 2002. "Electoral Systems and Unimagined Consequences: Partisan Effects of Districted Proportional Representation." *American Journal of Political Science* 46(1): 67–89.
- Organization for Economic Cooperation and Development (OECD). Various years. *Labor Force Statistics*. Paris: OECD.
- . 1995. "Income Distribution in OECD Countries: Evidence from the Luxembourg Income Study." *Social Policy Studies* 18.
- Osberg, Lars, Timothy Smeeding, and Jonathan Schwabish. 2003. "Income Distribution and Public Social Expenditure: Theories, Effects, and Evidence." Unpublished paper. Maxwell School, Syracuse University.
- Perotti, Roberto. 1996. "Growth, Income Distribution, and Democracy: What the Data Say." *Journal of Economic Growth* 1(2): 149–87.
- Persson, Torsten, and Guido Tabellini. 1999. "The Size and Scope of Government: Comparative Politics with Rational Politicians." *European Economic Review* 43(4–6): 699–735.
- . 2000. *Political Economics: Explaining Economic Policy*. Cambridge, Mass.: MIT Press.
- . 2003. *The Economic Effects of Constitutions*. Cambridge, Mass.: MIT Press.
- Powell, G. Bingham. 2002. "PR, the Median Voter, and Economic Policy: An Exploration." Paper presented to the meetings of the American Political Science Association. Boston, Mass., August 29–September 1, 2002.

## Chapter 5

- Rae, Douglas. 1968. "A Note on Fractionalization of Some European Party Systems." *Comparative Political Studies* 1(3): 413–18.
- Rodden, Jonathan. 2005. "Red States, Blue States, and the Welfare State: Political Geography, Representation, and Government Policy Around the World." Unpublished paper. Department of Political Science, Massachusetts Institute of Technology.
- Roemer, John. 2004. "Does Democracy Engender Equality?" In *Political Knowledge and the Public Interest*, edited by Edward J. Mansfield and Richard Sisson. Columbus, Oh.: Ohio State University Press.
- Rogowski, Ronald, and Mark Andreas Kayser. 2002. "Majoritarian Electoral Systems and Consumer Power: Price-Level Evidence from the OECD Countries." *American Journal of Political Science* 46(3): 526–39.
- Rokkan, Stein. 1970. *Citizens, Elections, Parties: Approaches to the Comparative Study of the Processes of Development*. Oslo: Universitetsforlaget.
- Ross, Michael. 2006. "Is Democracy Good Enough for the Poor?" *American Journal of Political Science* 50(4): 860–74.
- Visser, Jelle. 1989. *European Trade Unions in Figures*. Deventer, Netherlands: Kluwer Law and Taxation.
- . 1996. "Unionization Trends Revisited." Unpublished paper. University of Amsterdam.
- Warwick, P. V. 1996. "Coalition Government Membership in West European Parliamentary Democracies." *British Journal of Political Science* 26(4): 471–99.
- Wallerstein, Michael, and Karl Ove Moene. 2003. "Earnings Inequality and Welfare Spending: A Disaggregated Analysis." *World Politics* 55(4): 485–516.

## Economic Institutions, Partisanship, and Inequality

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There is a "transatlantic consensus" on the recent developments in economic inequality (Atkinson 1999). This is the widely shared view that the waxing wage and income inequality seen in the principal Anglo-Saxon countries during the last decades is also reflected in similar rises within most other developed economies. Wages and salaries have grown ever more disparate as the skill premium ineluctably increases (Nickell and Bell 1996; see also Gottschalk and Smeeding 1997). In turn, as capital reaps ever greater rewards, those who depend on their own labor are losing out in both absolute and relative terms (Phillips 2002). And, finally, with the retreat of government—a widespread trend over the last two decades—the dampening effect of the welfare state has been weakened in terms of its ability to ameliorate the inequalities generated by labor, financial, and other markets (Korpi and Palme 2003). In the context of these processes, it is widely believed that within the industrialized countries inequality in income continues to increase.

We join other scholars in questioning this "consensus" view; our principal criticism, which we substantiate here, is that it exaggerates the uniformity in trends toward egalitarian societies (Bradley et al. 2003; Gottschalk and Smeeding 2000; Iversen and Soskice 2003; Kenworthy and Pontusson 2005). This lack of convergence ultimately stems from institutional and partisan differences across systems. Both the market and the state shape the distribution of income. However, the roles they play differ across the variety of income dimensions. The important question here is not so much whether politics makes a difference for inequality, but how political and institutional factors work their effects on inequality