Policy Consequences of SMD versus PR,

A Survey

Michael D. McDonald

Department of Political Science
Binghamton University, SUNY
Binghamton, NY 13902-6000
U.S.A.

Phone: 607 777 – 2946
Fax: 607 777 – 2675

mdmcd@binghamton.edu

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Democracy is supposed to provide "the people" with control over public policy. For any group larger than a small committee, elections are the only fair and efficient means for exercising popular control. They are fair insofar as they provide open access to parties of all stripes to compete for decision-making power, grant all adult citizens their right to vote, and give each vote equal weight. They are efficient inasmuch as any number of voters, from a few dozen to several hundred million, can go on record in just a few short hours and record their preferences. With people's preferences recorded, electoral system rules translate party votes into party seats; thereafter, the processes of forming governments and making policies get under way.

As simple, straightforward, and linear as this process can sound, there is a curious and important fact about the election-to-policy progression. Nations that organize their elections under proportional representation (PR) electoral rules have a decidedly leftward policy tilt compared to nations that organize their elections under single-member district (SMD) electoral rules. Whether the outcome of interest is defined as government decisions as such or as consequences of government decisions, nations that use PR rules are more likely to produce results associated with ideas of the political Left than are nations that use SMDs (see, e.g., Lijphart 1999, chapter 16, for a wide-lens look at policy and electoral institutions; see Crepaz 1996 and 1998 for evidence linking policy consequences—such as income distribution, labor relations, inflation, and unemployment—to electoral rules and related political features).

The fact of this matter is curious because it is far from self-evident why nations with different electoral rules would produce different policies. Do citizens in PR and SMD countries hold different policy preferences? If so, why would that be? Do electoral rules, associated as they are with different forms of party systems, encourage parties to put different policies on offer? Do electoral systems translate voter preferences in biased ways? Do the systems, associated as they are with coalition versus single-party governments, produce policy negotiations that encourage Left- versus Right-favored governments and, through them, policies?

Whatever the answers, they are important. On the one hand, if policy differences reflect more left-leaning preferences in PR systems, we have evidence that democracies are working as they are supposed to work—i.e., policies follow from the people's preferences. If, on the other hand, electoral rules themselves encourage parties to put different policies on offer, translate the people's preferences in biased ways, or lead to government formation processes with left-leaning policy consequences, then the institutional arrangements of the two broad forms of electoral systems or their attendant political consequences have a causal efficacy all their own. Institutions, then, would have to be deemed to matter in a very big way, perhaps so much as to trump the people's preferences contrary to the promise of democracy. And there is a third possibility. Electoral rules may encourage the people to express their preferences in ways that produce more left- or right-leaning policies. That would mean that democracy works as it is supposed to—policy follows from preferences—but the ends toward which it works depend on how electoral arrangements encourage citizens to express their preferences.

The purpose of this essay is to survey the literature on the policies produced in PR and SMD systems with an eye toward evaluating whether the policy differences are policy associations or policy consequences. By associations, I mean policy differences that follow from preference differences that only coincidentally relate to the type of electoral system. By consequences, I mean policy differences that causally result from using one type of electoral system versus the other.

My principal theme is that the association between types of electoral systems and policy is a "reliable quantitative theoretical generalizations with theoretical bite", of the sort that will put empirical analysts amidst the "context of discovery" (Achen 2002, 442) of how representative democracy actually works. In the background is a sub-theme, in the form of a question: How can we reconcile theories that propose to explain outcomes on the basis of institutionally-based incentives and those that give a large role to preferences?

For convenience, I consider the policy process as a sequence across six nodes in the representational process—from (1) citizens' privately held preferences, to (2) voters' expressed preferences, to (3) expression of preferences conditional on party system policy offerings, to (4) translation of party votes to party seats, to (5)

parliamentary choice of party governments, and to (6) governments choice of policies. For clarity, I survey the literature in reverse order of the policy sequence. The survey begins with a compilation of policy choices and consequences in PR versus SMD systems. I then turn to discuss literature on six possible explanations, working from government policy choices, which might depend on the electoral system rules, back through the expression of citizen preferences, which might depend on the electoral system rules.

(1) Governments choose broadly versus narrowly distributive policies depending on whether party constituents are geographically defined versus organized in free-population-alignments not much constrained by geography.

(2) Government formation, while straightforward given the usual single-party parliamentary majority of SMDs, is biased leftward under PR rules.

(3) Translating votes into seats, while reasonably straightforward under PR, has a rightward bias under SMD rules

(4) Party policy offerings in PR versus SMD systems present voters with policy options that constrain voters to make relatively left-leaning choices under PR.

(5) Electorates in the two systems have similar preferences but express themselves differently when considered as electorates collectively due to turnout differences, which depend on the electoral rules.

(6) Citizens in PR and SMD systems have similar private policy preferences but express them differently depending on the electoral system types.

Before concluding I consider briefly whether electoral system to policy connection is brought about not through circumstances at one or more of the six nodes but as a spurious consequence of other societal forces.

Electoral System and Policy Connections

"Do institutions matter?" is a question that has helped to organize the research program of political science and the sub-field of political economy in economics for the last generation, since the time William Riker (1980) and Douglass North (1980) first asked the question. The non-obvious reasons for the relationship between electoral systems and public policy stand as a monument under construction in answer to their question. By the end of this section I will have shown that the body of research looking into whether different government policies are associated with a choice to use a PR or SMD electoral institution clearly establishes policy differences across system types.

An early (perhaps the first systematic) attempt to show how and why public policy is connected to electoral systems came from G. Bingham Powell (1982). In a sequenced set of analyses Powell showed lower levels of and smaller increases in income taxes exist in nations with majoritarian electoral laws, essentially SMD systems, compared to PR systems (Powell 1982, 190-200). Powell also reports SMD systems were connected to more restrictive abortion policies over the first two-thirds of the twentieth century (Powell 1982, 198 and n. 29).

In the decade of the 1990s, Arend Lijphart and Markus Crepaz (1991; 1995) argued that policy choices of governments in several policy domains are coordinated differently and have different results depending on whether a nation is operating according to a "consensus" or "majoritarian" form. Consensus democracy uses rules and institutions that encourage wide participation in government and broad-based agreement on public policies. In its most encompassing form, consensus democracy is a dual-dimensional concept: (1) an executive-parties dimension, and (2) a federal-unitary dimension. The executive-parties dimension, which most often serves as the basis for predicting policy choices, is predominantly a matter of using PR versus SMD electoral rules. Its five elements include (1) executive power concentrated in single- versus multi-party cabinets, (2) executive dominance versus executive-legislative power balance, (3) two- versus multi-party systems, (4) disproportional versus proportional electoral outcomes, and (5) pluralist versus corporatist interest group patterns (Lijphart 1999, 3 and 243-57). The combination of five characteristics sharply distinguishes PR and SMD systems. Every SMD nation scores lower on this

combination than every PR nation, and among nineteen established Western democracies[1] (not, here, including Portugal and Spain) the correlation between the executive-parties dimension (1971-96) and the SMD/PR dichotomy is .87.

Throughout the 1990s, Crepaz and Lijphart showed that consensus democracy is associated with distinctly different policies outputs and outcomes than those in majoritarian democracies. The outputs in consensus as compared to majoritarian systems include larger public economies, pro-environmental policies, greater active labor market policies, higher welfare spending, more decommodification (defined below), aversion to the death penalty, low incarceration rates, more foreign economic assistance, and less military spending (Crepaz 1995; 1998; Lijphart 1999, 275-300). The apparent policy outcomes—economic and societal results thought to be a consequence of policy outputs—include energy conservation, lower unemployment, and greater income equality (Birchfield and Crepaz 1998; Crepaz 1996a; 1996b, Lijphart 1999; 275-300).

Evelyne Huber, Charles Ragin, and John Stephens developed a state-centered model of the welfare state effort and reported findings in line with those reported in Crepaz and Lijphart's work (Huber, Ragin, and Stephens 1993). Among the several elements in their empirical model, the Huber-Ragin-Stephens analysis includes a composite scoring of power dispersion associated with constitutional structure. One

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[1] Data from Lijphart (1999, 312).

Most of the empirical literature I survey relies on analyses of 'established' democracies that have been around since the Second World War (Lijphart 1984, 38), which Wilensky (2002) calls rich democracies (see Persson and Tabellini 2003, however, for an analysis that reaches beyond this set). At the conclusion of the twentieth century, fifteen of twenty-one established democracies were using some form of PR, five were using some form of districts with a plurality or majority decision rules, and one was using a parallel system of PR to elect some members and SMDs to elect others.

PR takes a variety of forms (Blais and Massicotte 2002, 47) and of those forms Austria, Belgium, Denmark, Finland, Iceland, Israel, Luxembourg, Netherlands, Norway, Sweden, and Switzerland use a form of party-list system. Ireland uses the single transferable vote. Germany, Italy (from 1994), and New Zealand (from 1996) use a mixed system with elections in SMDs and compensatory seats to adjust results toward nationwide party-vote and -seat proportionality. SMD systems, too, take a variety of forms (Blais and Massicotte 2002, 46) with Canada, the United Kingdom, the United States using first-past-the-post decision rule; France (from 1958 onward but for its 1986 election) uses a second-round runoff, and Australia uses an alternative vote rule. Japan, from 1996, uses a parallel system, before which it used a semi-proportional system of multi-member districts with limited voting (using the limited voting special case of the single non-transferable voting after 1946 until the change to its parallel system in 1996).

Discussions below usually catalogue France and New Zealand as SMD systems, include Japan (which is not much in play in the discussions) under PR systems, and ignore what, for other purposes, are important distinctions within the twofold system types.

of the elements is whether a nation's electoral system is PR or SMD, where SMD is taken to be indicator of dispersed power (see Huber, Ragin, and Stephens 1993, 722 n. 10). They find dispersed power is often strongly and most often statistically significantly negatively correlated with several indicators of welfare state effort in cross-sectional analyses (Huber, Ragin, and Stephens 1993, 739 Table 7). These negative relationships hold up when numerous political, social, economic, and administrative features of states are included in a pooled cross-sectional time-series analysis of social security spending and general government revenue among 17 OECD countries. Dispersed power, in part indicated by holding elections under SMDs, inhibits welfare state expansion.

It is not just as if policy differences are related to constellations of constitutional arrangements. Table 1 reports policy output and outcome differences are associated with the use of PR and SMD systems standing alone. Social security transfers as a percentage of GDP are almost three points higher in PR systems compared to SMD systems.[2] A similar difference exists for Gøsta Esping-Andersen's welfare index, which he labels decommodification—i.e., a composite summary indicator of social services rendered as a matter of right such that maintenance of one's livelihood is possible without relying on the market (Esping-Andersen 1990, 22). General social spending and total government spending are also higher, on average, among PR than SMD systems, though less reliably so compared to the two preceding welfare indicators. The three outcome variables—wage inequality, per capita income, and CO_2 emissions as a ratio of GDP—also differ in ways one would expect for government action more (PR) or less (SMD) associated with the political Left. Inequality is uniformly higher under SMD than under PR. Income is generally higher under SMD systems. And CO_2 emissions, standardized by output, are generally lower under PR than SMDs.

[Table 1 about here]

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[2] Arguably the 2004 expenditures could have New Zealand categorized in the PR grouping, as are the Germany and (today's) Italian mixed systems (and Japan's limited-vote and parallel systems). However, spending policies, and most other policies, are slow to change. Given New Zealand's use of SMD until voters in a 1993 referendum opted for a corrective mixed system, first used in 1996, I classify New Zealand among the SMD systems (see fn. 1). A case application analysis of policy making in New Zealand should prove to be instructive, in due time.

The list could go on. Roger Myerson constructed a model of controlling political corruption by considering how voters might be able to police corruption under PR and SMD rules (Myerson 1993). His initial thinking was that because SMD rules create such a high barrier to entry while PR often makes it relatively easy for a politician to launch a new party, PR would provide voters with the more effective electoral structure for policing corruption. He later amended his thinking to take into account the countervailing tendency of PR systems to produce coalition governments (Myerson 1999). Assuming corrupt parties will compromise on any substantive policy dimension but not compromise at all on their ability to operate in a corrupt manner, the post-election bargaining gives voters little incentive to try to police corruption unless they can assume non-corrupt parties will comprise a parliamentary majority. Consistent with this amended model, Jana Kunicová and Susan Rose-Ackerman find lower levels of perceived corruption in PR systems than in SMD systems (Kunicová and Rose-Ackerman 2004; see also Kunicová nd). Torsten Persson and Guido Tabellini fine tune the analysis and find that, as Myerson's countervailing tendencies predict, accountability promoting tendencies under SMDs increase voters' ability to control corruption but barriers to entry make the policing function more difficult (Persson and Tabellini 2003, 187-217).

Consistent with the heavier reliance on markets than government planning under SMD versus PR, Ronald Rogowski and Mark Kayser model and estimate the effect on price levels under the two electoral formats (Rogowski and Kayser 2002). PR systems with their associated systems of coordinated capitalism favor producer over consumer interests according to their model, and as a result PR systems can be expected to and do lead to higher priced goods and services than those under SMD.

Finally, Persson and Tabellini, in addition to their several findings on PR systems relatively large welfare states and attendant larger governments, find they are likely to run higher deficits, follow different political-economic cycles, and respond differently to shocks (Persson and Tabellini 2003). SMD systems are more prone to cutting taxes and spending as election seasons approach while PR systems tend to expand welfare programs during election years. When an economy is shocked by a downturn, the tendency among SMD systems is to cut taxes, but PR systems produce

a ratchet effect by allowing spending to rise during downturns and doing little to scale it back during upturns.

In sum, government policies and their presumed social and economic effects under PR are consistent with the political preferences associated with the political Left, more so than under SMDs. There is robust evidence of larger, more generous, and more socially protective welfare states under PR than SMDs, along with larger governments generally, more redistributive tax polices, more liberal abortion policies, more pollution control, more liberal criminal justice policies, more foreign economic aid, and higher deficits. Associated with these policies, presumably, are societal outcomes of higher consumer prices, more income equality, lower per capita income, and less pollution. There is also a set of mixed findings on corruption, which is undesirable from any perspective, Left or Right or … . The corruption-related results, however, are informative with respect to the general proposition that electoral system differences lead to differences in the ways governments operate because, as Powell so firmly and thoroughly makes the case, PR systems put their emphasis on representativeness whereas SMD systems emphasize accountability (Powell 2000). An inclusive system encourages politicians to distribute the goods of government to broad encompassing groups; an accountable system encourages targeted government benefits.

Policy Choices Considered in Sequence

There are lots of curious correlations in the social sciences, of course, and correlation is not causation, of course, and …; thus, the interesting question to ask is this: <u>Why</u> are policies favored by the political Left more prevalent in PR than SMD systems? I consider six possibilities, working back in sequence from government decisions to voter choices and preferences.

Government Choices

The predominant theoretical framework for much of the thinking about how SMD and PR systems influence governments' policy decision making uses the tools and models of economics to model government policy making as a delegation game. Politicians are the agents and voters the principals. In most models, politicians are

motivated to win office, and voters are motivated to secure net benefits from government (see, e.g. Lizzeri and Persico 2001, but see Austen-Smith 2000, where the assumption is that politicians seek to maximize votes in legislative two-party systems associated with SMDs but to pursue policy objectives where benefits go to the economic cleavage affiliated with their respective parties under legislative multi-party systems associated with PR). To gain and hold office requires different distributions of goods and services depending on how the election is conducted. Under PR, politicians have an incentive to favor broad programs with benefits going to dispersed interests; under SMD, politicians have an incentive to pursue policies that provide benefits to geographically concentrated groups.

The broader versus narrower policy equilibria hold whether the model is founded on competition among all parties during an election season or, after the election and government formation, by incumbent parties wanting to secure re-election (compare Lizzeri and Persico 2001; Persson and Tabellini 2000). In the forward looking model, SMD parties are encouraged to make targeted promises while PR parties offer broad-based policy promises, due to the way the constituencies are configured in larger (PR) versus smaller (SMD) district magnitudes (Persson and Tabellini 2003). In effect, with the notable exception of David Austen-Smith's model, all parties and their politicians recognize that offering and providing broad policies serves their interest under PR but narrow, targeted policies serve their interest under SMDs. The result is that, once in a position to decide policy, parties in government will favor broadly distributive policies under PR more so than under SMD. Hence, there are more generous and widely distributed forms of social protection, more redistributive taxing and spending, less market reliance, and a more even distribution of post-policy income under PR than under SMD rules.

There is no stretching of one's imagination to extend the logic of these incentives to explain differences in pollution policy and maybe even abortion policy, although I know of no attempt as yet to do so expressly. Modeling the likely effects of systems types on deficits is also no stretch, though models typically have to lean heavily on incentives at the time of bargaining over government formation. There is, however, no clear expectation, at least that I can see coming from this theoretical framework, leading to more liberal incarceration rates or more foreign economic aid.

For that reason, and others (below), one has to wonder whether these and the other policies favored by the Left are more prevalent among PR-system governments because PR systems typically have more left-leaning governments.

Government Formation

The 1970s and 1980s bore witness to numerous studies of aggregate public finance, with special attention to the overall size of national public economies and with a particular emphasis on the scope, generosity, and levels of social protection provided by welfare states. A connection to electoral systems was still a while away. This was a period when the study of public policy was organized around such questions as "does politics matter?" and "do parties matter?" (Wilensky 1975; Castles 1982). The contrary possibility, that politics and parties do not matter, had to deal with the fact that the resources available are a potent force when it comes to matters of the political economy. Politics is not a cause as such but a translational force. Governments are disinclined to provide much of anything—welfare, education, infrastructure, ...—unless the money is there to collect in taxes. The political desire and will to provide goods and services translate available economic resources into outcomes, but the will goes for little or nothing when revenue sources are meager. Or, as Otto von Bismark observed, 'politics is the art of the possible.'

This was translated into the political power perspective on policy making. Where Left parties can win enough votes to be major players in decisions in relatively affluent nations (Korpi 1978; 1983) or, in such nations, where labor organizations are strong enough for employers and government to sense a need to accommodate them, the available resources are translated into a large public sector with generous provisions of welfare and other forms of social protections (Katzenstein 1985). In combination, "[a] strong union-social democratic party alliance is the most consistent promoter of a ... generous welfare state (Huber and Stephens 2001, 41).

The proposition that policies favored by the Left are the result of Left parties occupying pivotal positions in parliaments and governments has held up fairly well through time (e.g., Korpi 1989; Blais, Blake, and Dion 1993; Cusack 1997; Rueda and Pontusson 2000; McDonald and Budge 2005; Iversen and Soskice 2006). Michael McDonald and Ian Budge analyzed the size of governments, generosity of welfare

policy, and foreign economic aid as a ratio of defense spending and found the Left-Right position of the median party in parliament (MPP) to be the operative political force leading to policy regimes with larger public economies, more generous welfare states, and more economic foreign assistance (McDonald and Budge 2005, 214-25). Lijphart's consensus democracy indicator is reliably related to all three policy regime features in bivariate analyses, but with the Left-Right position of the MPP in the same equation, the estimated effect of consensus democracy falls to essentially zero. They conclude that their median mandate thesis "reveals how policies follow from preferences, not processes, … Once we enter a control for the … median party in parliament, it is the preferences that stand up as determining, while the process of negotiation becomes simply the way in which they are effected" (McDonald and Budge 2005, 236).

Like other analyses that find a Left-Right effect on policy, their median mandate analysis is aggregated over time. This leaves one to wonder whether some other persistent feature of the political systems, such as their electoral systems, is a more serious competitor for explaining policy than McDonald and Budge allow. The slow pace of policy change is an obstacle to uncovering political effects because a change of government from Left control to Right control, or vice versa, cannot reasonably be expected to show itself immediately. Policy choices have a momentum all their own, which is seldom easily overturned in a year or two—or three or four (McDonald and Budge 2005, 171-97).

The analysis of government spending by Andre Blais and his colleagues is an often-cited work in this particular regard (Blais, Blake, and Dion 1993). They show that in a series of twenty-eight cross-sectional analyses, one per year from 1960 through 1987, Left-Right partisanship of governments has virtually no predictive power for government spending. However, after analyzing the data aggregated in a pooled cross-national time series, a small partisan effect appears: "governments of the left spend a little more than those of the right. Parties do make a difference, but a small one. The difference, … , is confined to majority governments and takes time to set in" (Blais, Blake, and Dion 1993, 57).

Budge, McDonald, and their colleagues have recently undertaken an analysis similar to Blais et al. (Budge et al. 2006), except they measure Left-Right positions

using the Comparative Manifesto Project (CMP) data in place of the designation of whether a party is considered Left-Center-Right, apply the measurement to the MPP, and address the slow pace of policy by using a twenty year moving average of the MPP position to indicated the governing position in a country in a given year.[3] Their spending data and the centralization control variable cover the 1972 through 1995 and come from various reports by the IMF (see McDonald and Budge 2005, 167).

The pooled analysis results are stronger than those reported by Blais et al, but similarly do show a Left-Right partisan effect.

$$G\$_t = 5.92 + .81\ G\$_{t-1} + 2.54\ C - .056\ MPP\ LR_{MA20}$$
$$\quad (.85)\quad (.03)\qquad (.39)\quad (.016)$$

where $G\$_t$ and $G\$_{t-1}$ are variables indicating central government spending as a percentage of GDP in the current and preceding years, C_t is a three category variable indicating government revenue centralization (-1 = low; 0 = medium; 1 = high), and $MPP\ LR_{MA20}$ is the twenty year moving average of the MPP Left-Right position. All three independent variables are statistically significantly related to government spending. The slow pace of change is indicated by the .81 coefficient on spending in the previous year. The political effect of a shifting center of gravity in parliament of, say, ten points on the CMP Left-Right scale (something like from a typical social democratic party's standing to a typical liberal party's standing) is estimated to result in just over a half a percentage point shift (.056 X 10 = .56) in the short-run. In the long-run, however, the effect will be to shift spending by almost three percentage points—i.e., (.056 / (1 - .81) = .29) and (.29 x 10 = 2.9).

The important results come from year-by-year analyses of cross-sections, shown in Table 2. Blais and his colleagues found statistically significant effects of governments, at the p < .1 level, in only six of twenty-eight years. Worse, in twelve years the estimated effects of the Left-Right bent of governments ran in the direction opposite to that hypothesized. In Table 2 all estimated effects are in the proper direction; in nineteen of twenty-four years the effect is statistically significant, at least at the p < .1 level and more often beyond; and the coefficients themselves are reasonably stable except during the period surrounding the first oil shock of the 1970s.

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[3] The choice of twenty-years comes from a .81 estimated per annum stability in total government spending as a percentage of GDP (see below). At that level of stability, it takes about 20 years for ninety-nine percent of an effect to be incorporated—i.e., $1 - .81^{20} = .99$.

There is not a small and conditional effect of partisan politics on policy but a robust one.

[Table 2 about here]

Could all this predictability be the result of washing out dynamic variation in the within-nation political series by using the twenty-year moving average? Not at all, Figure 1 serves as a visual check. The MPP Left-Right moving averages in five nations show how governing positions track through time. As probably all observers would anticipate, the governing positions in Ireland and France moved from Right to Left from the early-1970s through the mid-1990s. The governing positions in Britain, as everyone knows, moved from Left to Right. The governing position in Sweden underwent a bit of a power balance shift as the right-of-center MUP gained ground while the SDA had its grip on parliament and governments loosened and, itself, moved rightward after 1975. Only in Belgium, among these five nations, is there little movement to report. The CMP Left-Right scores capture the movements and, with that, predict the policy effects.

[Figure 1 about here]

Given both the ability of Left-Right MPP positions to predict changing policy outcomes year-by-year, it is difficult to think that Left-Right is standing in for some other persistent feature of politics, such as electoral systems. But as social theorizing and testing would have it, these results cannot be taken as the final words. Torben Iversen and David Soskice work from the perspective of the political power school of Walter Korpi, Huber, Stephens, Jonas Pontusson and many others, and accept that Left governments produce policies favored by the political Left. However, they continue on to ask why PR systems produce so many more governments on the Left than SMD systems (Iversen and Soskice 2006). Of the left-leaning and right-leaning governments (i.e., not counting centrist governments) that formed in the period 1945 to 1998, Iversen and Soskice report PR systems have Left governments two-thirds of the time compared to only one-third of the time for SMD systems (Iversen and Soskice 2006, Table 4). The reasons for this, they argue, come from a twofold combination. First, coalition governments are likely under PR. Second, centrist parties representing the median voter can bargain with parties on the Left for tax rates and benefits by extracting redistributive effects that favor both, the Centrists and the

Left, at the expense of the parties of the Right and their relatively rich constituents. Were the centrists to ally with the right, there is little room for extraction from the poor so as to redistribute from them to middle and upper incomes (assuming "net taxes and transfers must be non-regressive" Iversen and Soskice 2006 [p. 4 forthcoming ms.]). Under SMD systems and their usual single-party governments, as Iversen explains in a separate analysis (Iversen 2005, discussed below), voters are biased to support the right-leaning party to avoid taking the risk of allying with the left-leaning party that, as a single-party Left government, will possibly soak both the rich and the middle class in order to redistribute to the less-well off.

A key idea in the Iversen-Soskice argument is that negotiating over government formation is biased leftward. Evidence from McDonald, Silvia Mendes, and Budge indicates there is no such bias (McDonald, Mendes, and Budge 2004). Table 3 reports the results of their analysis of the correspondence between the Left-Right position of the MPP and governments in 15 parliamentary democracies. Consistent with Powell's analysis of one-off incongruence between governments and parliaments (as well as citizens and governments) there are notable distortions (Powell 2000; see also Powell and Vanberg 2000; Huber and Powell 1994). Some form of one-off mismatch between the Left-Right position of governments and parliaments exists everywhere but Ireland, Portugal, and Spain.[4] All that says, however, is that there usually is some form of mismatch; a government stands more to the Left than the MPP or more to the right than the MPP. Across time these Left and Right distortions tend to cancel, with the result that there is no systematic bias running in either direction. If anything, as the regression results show, there is a slight tendency for governments in these PR systems to be slightly more centrist than their MPPs.

[Table 3 about here]

Given a left-leaning tendency in governments under PR but no bias in the selection of governments by parliaments, the issue moves one step back and asks why MPPs are more left leaning under PR versus SMD rules. We turn to two possibilities. (1) Do SMD electoral rules bias the translation of votes into seats in a

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[4] Tests of significance, converting the standard deviations in Table 3 to standard errors, show distortion values are statistically significantly different from zero in all but these three countries (see also McDonald and Budge 2005, 126).

rightward direction? (2) Do the policy offerings of parties bias the selection of a parliamentary median leftward under PR, rightward under SMDs, or both?

Biased Translations by Rules or Parties?

George Bush won the 2000 U.S. presidential election despite Al Gore winning a plurality of the popular vote. The translation of votes into a winner via the Electoral College was biased in favor of the party on the Right. Such notable mistranslations of minority party votes into winners occur elsewhere, though not often (see, e.g., McDonald and Budge 2005, 22). In more subtle ways, however, vote to seat translations are often systematically biased, such that when both of two major parties have a 50% expected vote percentages one party wins a majority, leaving the party with an equal vote to hold a minority of seats (see, e.g., Tufte 1973).

In the case of the 2000 presidential election one can also consider what would have been the match between the winner's policy position and that of the median voter had the Electoral College bias not existed. Given the Left-Right offerings of Gore Democrats, a Gore government would have stood to the Left of the median voter. Some form of bias in the outcome was inevitable by the party system, i.e., by the policy positions of parties on offer. This sort of party-system bias is almost always present under SMD rules. The major parties stand apart (Adams 2001a; 2001b), but usually one party somewhat distant from the median voter wins a parliamentary majority. In the U.S., for example, Robert Erikson, Michael MacKuen, and James Stimson show that the two major parties are about 20 units apart (on the CMP Left-Right metric) and the median voter is in the space somewhere between them (Erikson, MacKuen, and Stimson 2002, 265). And it is not as if much, if any, convergence toward the median voter takes place after the election. Once elected, U.S. presidents govern from a position corresponding to the one they and their party staked out in the pre-election platform (McDonald, Budge, and Hofferbert 1999; see Sullivan and O'Connor 1972 for an analysis of pre-election differences between major party candidates for the U.S. House of Representatives and of the winning candidates' follow though once elected).

The following two sub-sections consider whether an electoral system bias or a party-system bias, most especially under SMD rules but with some attention to PR

biases, can explain the relatively Left standing of parliaments under PR compared to SMDs.

Votes, Seats, Policy. Ever since Frances Edgeworth provided his quantitative analysis of how votes translate into seats under SMD rules, researches have been finding biases in the translation (Edgeworth 1898). He identified a bias in favor of the Progressives, and against Moderates, in the 1898 election to the London County Council (Edgeworth 1898, 540-1). David Butler found a bias favoring the Conservatives in the 1950 British election (Butler 1951, 329-33). He remarked that the cause of that bias is the "ineradicable" inefficient residential distribution of Labour voters compared to Conservative voters (Butler 1951, 331). Large numbers of Labour voters are concentrated residentially, and the concentration creates what Erikson calls an accidental gerrymander favoring the party with middle and upper income supporters (Erikson 1972), because their votes are more efficiently distributed. Labour votes (in the Butler analysis) tend to get wasted by their concentration in overwhelmingly safe Labour districts. The same sort of accidental gerrymander exists in the U.S. (Erikson 1972; Gelman and King 1994) and most SMD systems (Gudgin and Taylor 1979).

There is, however, as Butler also noted, another source of bias that often runs in the counterbalancing direction. Because turnout among lower income persons is relatively low, discouraged in part by the fact that elections in their districts are often not competitive, fewer votes nationwide elect more seats (Erikson 1972; see Campbell 1996 for a detailed analysis of turnout-effect biases in favor of Democrats in the U.S.). Due to these countervailing tendencies, Edward Tufte, who implicitly considers the gerrymander and turnout biases in combination, finds a pro-Democratic party bias in the U.S. and no bias in UK elections, up to 1970 (Tufte 1973). Moreover, biases tend to ebb and flow in favor of one party then the other, due to the mix of accidental gerrymander versus turnout effects and to the way in which minor parties influence the vote distribution between (usually) the two major parties (see, e.g., Johnston, Pattie, Dorling, and Rossiter 2001, 13, for a description bias in UK elections, which switches from a pro-Conservative bias 1945 to 1970, to no bias 1970 to 1987, and to a pro-Labour bias since; see Gelman and King 1994 for changes in bias in the U.S.).

What sort of systematic policy effect can one expect biases to have, when they do exist? The answer depends very much on the political system in question. And the answer has to take on considerations beyond the winning party—i.e., the party with a parliamentary majority—receiving a couple of seat percentage points more or less than its fair share. As remarked, it is not often that a winning party receives its seat majority without having received a plurality of votes. Governing with, say, 57% of the seats instead of a fair-share, say, 54% does not much change the position of the MPP—if it changes it at all where parties are cohesive.

With that thought in mind, McDonald and Budge (2005, chapter 7) consider the issue of electoral system bias from a different perspective—although, upon reflection, a better term than electoral system bias would be a "lack-of-alternation and electoral system bias." They define electoral system policy bias as the difference between the policy position of the MPP and the policy position of the party preferred by the median voter.[5] They define party system bias as the policy position difference between the median voter's position and the position of the party closest to the median voter. Their results are reproduced in Table 4—where overall electoral bias, column 1 under bias, is a combination of (a) electoral system bias, column 2, plus (b) party system bias, column 3.

[Table 4 about here]

All five SMD systems are biased to the Right, in terms of overall bias, and most of that overall bias comes from a rightward bias due to the electoral system translation. (Data on France cover the Fifth Republic, but thereby include the 1986 election.) Among the PR systems there is no statistically significant general tendency of bias one way or the other. With so few cases per nation, no SMD nation's bias is statistically significant, but a relatively strong rightward tilt is present everywhere but New Zealand. McDonald and Budge are not concerned to analyze the possible reasons for the electoral system bias, but two things are clear. In the two SMD nations with the largest bias, France and Britain, the bias comes from an available third party being preferred by the median voter and long periods of majority status of

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[5] Notice that this definition of electoral system bias produces average results that depend on the time period covered, here the postwar years from the early 1950s through 1995. It is because time comes into play that, when averages are being discussed, a better term would be lack-of-alternation and electoral system bias.

a party on the Right. That is, the relative lack of alternation between Left and Right holds important sway over the results and over the performance of democracies more generally.

For reasons of party system nonviable party offerings around the Center (discussed below), SMD systems that do not have frequent alternations in parliamentary majorities have governments standing persistently and considerably to one side or the other of the party preferred by median voters—empirically, in Britain and France, persistently to the right. Frequent alternations would produce average bias values near zero to overcome this. Alternations are less critical under PR systems, because center parties are likely to be the MPP.

In sum, SMD systems translate voters' expressed preferences into parliamentary majorities, which by definition are the MPPs, with a rightward bias. PR systems operate in a mostly neutral manner. This raises the possibility that the electoral systems' policy differences are in some measure a result of biases in the translation phase of the process, rather than a leftward bias in the government negotiation stage under multi-party parliaments when PR is used.

Party System Biases. A neutral translation, <u>given</u> the parties on offer, is taking a lot as given. How the agenda is set for voters by parties on offer could very well be important. Intuitively one might expect that PR systems with their usual multi-party systems to offer voters more choices across the Left-Right dimension, occupying spaces Left, Center, and Right, while SMD systems leave large gaps in the space. Given that SMD parties do not converge (see Grofman 2004 on the theoretical development of the convergence proposition since Downs; see also Schofield and Sened 2005), Powell and his colleague, Georg Vanberg, find large amounts of incongruence between the position of median voters and the SMD majority party in parliament (Powell 2000; Powell and Vanberg 1999). The two major parties are positioned some distance from the Center, and therefore even when the parliamentary majority party is the one preferred by the median voter it stands some distance away from the median voter (as illustrated in Erikson, MacKuen, and Stimson 2002, 265).

McDonald and Budge, like Powell and Powell-Vanberg, find three times more incongruence between MPP and median voter positions under SMD compared to PR

systems (McDonald and Budge 2005, 126-7), and they find much of the incongruence under SMDs can be attributed to sparse party offerings—a party system effect. When the incongruence is taken to the next step and bias is considered—i.e., incongruence to the left at one election might be balanced by incongruence to the right at the next election—the party system bias is not of much concern. The bias results attributable to party system effects are reported here in Table 4 (above). The average for PR systems is a statistically insignificant leftward bias of a half a point on the CMP metric, essentially nothing to speak of, and a statistically insignificant 0.7 units rightward on the CMP metric in SMD systems, also nothing much to speak of.

Left-Right is an important dimension of politics, but it certainly does not tell us all we need or want to know about party policy position taking. Parties typically categorized as Left, Center, and Right do not all bundle the mix of policies in a similar manner (see, e.g., Benoit and Laver 2006; Laver and Benoit 2005). A choice between Left and Right might be real and meaningful on questions of, say, immigration, but small and meaningless on questions of social protection via the welfare state.

Unfortunately, evidence on policy-specific distinctions among parties, at this time, appears to depend on the choice of data. Using the CMP data, Budge and McDonald find that no party in established democracies takes a stand decidedly against 'welfare-ism' and that only in Australia, Denmark, Italy, Sweden, and the U.S. do parties persistently offer a choice between moderate and strong support for the welfare state (Budge and McDonald 2006). Elsewhere all major parties are pro-welfare. On the other hand, using Benoit and Laver's expert-survey data on party positions, Left-Right and pro- versus anti-welfare, McDonald finds that, but for Japan where the entire party system tends toward moderation on pro- versus anti-welfare position and for a few Western European so-called radical-right parties (see Norris 2005, Table 3.1, for a listing), the expert survey positions of Left-Right match up in an essentially one-to-one relationship with pro- versus anti-welfare (McDonald 2004; but see also Laver and Benoit 2004). That is, in the expert survey data, all parties of the Left are pro-welfare; all parties of the Center are centrist on welfare; and all parties of the Right (up through parties in the conservative party family but not all parties in the radical-right family) are anti-welfare. Whether party systems always provide a real and meaningful choice over degrees of social protection from a more or less

hearty welfare state, as the expert data suggest, or a modest choice in a few countries but no choice in most countries, as the CMP data suggest, is going to have to await more critical attention to measurements of party positioning on policy sub-categories.[6]

Considered overall, on the basis of available evidence, one can say, tentatively, that to the extent biases enter the representational process when moving from voters to parliaments, the source of that bias appears to come from the electoral system much more so than from the party system policy offerings. But, again, this is not the end of the story. Besides giving more attention to policy position sub-category measurements, one needs also to ask, bias relative to what? Are the median voters themselves leaning more to the Left or Right in the two types of electoral systems? I turn to that consideration next.

Voter and Citizen Preferences

When Powell considered the leftward policy tilt under PR relative to SMDs, with particular attention to the welfare policy domain, he introduced his analysis with the following remarks.

> One obvious explanation for the welfare bias of the PR systems is often overlooked ..., but of potentially great importance: a welfare bias in the preferences of citizens of those societies. That is, it is possible to have a welfare policy bias in conjunction with good, representative correspondence between the preferences of citizens and polices ... . On the other hand, if the citizens in the two institutional types are similar in their welfare preferences, then the policy outcomes imply either that citizens in the PR systems are getting more welfare than they wish or that citizens in the SMD systems are getting less welfare than they prefer (Powell 2002, 4).

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[6] In the absence of that more critical attention to measurement, it is worth remarking that a recent analysis by Steve Lem shows that the welfare-specific policy positions of MPPs based on the CMP data, but not the CMP's Left-Right MPP scores, produce pooled and year-by-year results similar to those reported for overall spending predicted from MPP Left-Right, reported here in the text (above) and Table 2, where for Lem the dependent variable is Lyle Skruggs' (UConn) annual scores on decommodification (Lem 2005).

McDonald and Budge report that median voters in PR systems generally stand to the Left of median voters in SMD systems. Furthermore, they find, the correspondence between median voters and MPPs is nearly one-to-one (with a rightward bias due to electoral-system effects under SMDs as already noted). And, they find, the Left-Right position of MPPs is a prime political variable for predicting policy choices (McDonald and Budge 2005, 205-26). Those findings, perhaps, suggest that Powell's observation is right on the mark—"good, representative correspondence between the preferences of citizens and polices" could explain the policy differences.

Let us assume, if only for the next few paragraphs, that these are the facts. Could the difference in electoral systems, itself, be responsible for the difference in expressed policy preferences? Yes, for two reasons. PR systems tend to have higher voter turnout rates than SMD systems. Perhaps more inclusive electoral participation, which presumably brings more lower-income persons to the polls, moves the median voter to the Left under PR relative to SMDs. Also, foreknowledge of the probability of coalition versus single-party majority governments could make voters in PR systems relatively more willing to cast a vote for the Left.

Turnout. Robert Franseze reports that relatively high turnout levels have an effect on government transfers (Franseze 2001). Carles Boix finds high turnout increases the size of public sector revenues and nonmilitary expenditures (Boix 2003, 182-203). As Boix notes, this turnout influence washes out what he once found to be an effect of PR systems compared to SMD systems (Boix 2003, 189; compare Boix 2001).

Turnout is generally higher in PR compared to SMD systems (in Boix's analysis by nine percentage points, Boix 2003, 189 fn. 14). Whether the difference is causal (Franklin 2002, 158-60) or indirect (Powell 1982, 120-22) or coincidental (EJPR article on Swiss case) is presently arguable. There is, nevertheless, a relationship, and the operative logic of the relationship is that higher versus lower turnout moves the median voter leftward.

There should be doubts about how far the turnout effect can carry explanations of cross-national differences. The (at least functional) compulsory voting rules in Australia and Italy, and at one time in the Netherlands, produce high turnouts, but Australia's median voters are typically on the right and Italy's and (pre-

1970) Netherlands' are typically more centrist than several other nations. On the other hand, the Swiss and U.S. turnout rates are notoriously low and both nations typically have median voters standing center-right. In all, the cross-national differences present a mixed picture. But, then, maybe the turnout effect on median voter positions is principally within-nations, across time. It is interesting to speculate about whether declining turnout in many countries has been a causal force operating to retard or retrench, depending on the country, growth in public economies and their welfare states after 1975 (e.g., Anderson and Baramendi 2005), a development that has attracted much attention among welfare state scholars (e.g., Pierson, ed., 2001). That, too, can be doubted. There are cases that correspond to the turnout and median voter hypothesis—e.g., the British median voter moved to the right, comparing the period 1950-65 to 1980-95, and turnout there declined from the earlier to later period. However, the pattern does not hold generally—turnout rates in 15 of 20 parliamentary democracies are not statistically significantly related to median voter Left-Right position; three countries have associations consistent with the hypothesis (UK, Italy, and Norway); but two cases run in the opposite direction (Switzerland and Belgium).

There might be something to the PR/SMD-turnout-policy connection, but there are evidentiary reasons for doubt.

Citizens and Voters, Private and Expressed Preferences. McDonald and Budge locate median voters by overlaying party vote percentages on party Left-Right positions as scored by the CMP (using a slight adaptation of a calculation developed in Kim and Fording 1998). Objections could be raised on two counts. The CMP scoring of party positions has been criticized (e.g., recently, see Benoit and Laver 2006b, but see McDonald, Mendes, and Kim 2006; Budge and Pennings 2006). While there is some relationship between the CMP derived measure and mass surveys (Adams, Clark, Ezrow, and Glasgow 2004; also, personal communication from Jim Adams), the relationship can not be characterized as tight, leaving one to doubt either the CMP or the survey placements. Second, the CMP-based placements could be said to implicitly assume electors are deterministic policy voters along the Left-Right dimension, when the issue at hand is not how voters expressed themselves but what

they truly preferred, with the caveat that the expression of what is truly preferred depends on the system type in which they express themselves.

Powell's own analyses of citizen preferences, using cross-national mass survey evidence on Left-Right self-placement along with responses to issue-specific questions about the desirability of income equality, public/private ownership, and government/personal responsibility show only small differences in the placements and attitudes of citizens in SMD and PR systems, a very small difference on Left-Right placement and somewhat larger on the issue-specific attitudes (Powell 2002, 17, Table 1).

As noted, the Powell evidence raises two questions: (1) Do the CMP-based placements have it wrong? and (2) Is there a different between citizens' private preferences, revealed in surveys, and their public expressions through votes cast at election time? An open debate on the measurement question would do much to move this and related issues ahead (see McDonald and Budge 191-193, 197-202), but it takes us too far afield for present purposes. As for the differences between citizens' private and voters' expressed preferences, Iversen has a theoretical point to make that is right on point with respect to PR and SMD system differences (Iversen 2005).

Iversen sees a fundamental problem in electorally directing the provisions of social protection inasmuch as the benefits to the median voter are received at some future time, when the current median voter is no longer the median voter—e.g., after leaving his or her current employment and income situations due to retirement or displacement. How, then, does today's median voter commit future voters and governments to abide by the today's demand for the availability of social protection at some future date when the current median voter can use it? Iversen constructs a theoretical model showing that under SMDs the problem cannot be solved while under PR it can. In SMDs, each major party needs the median voter, in Iversen's model, but the incentive to win his or her vote is much reduced under PR. In addition, highly organized parties under PR limit the ability of party leaders to stray from long-term goals for the purpose of gaining transient vote support; whereas, parties in SMD systems opt for strong leaders today with little commitment to long-run goals. The final element is the incentive of middle-class voters, whose ranks are assumed to contain the median voter, to play it safe in SMD system and vote for the

major party on the Right, because, if there is any incentive of a party in government to deviate from the median voter, a middle class voter prefers to side with the rich and protect against the single-party Left government promoting redistribution from better-off to worse-off citizens up to, including, and beyond what the median voter prefers.

Iversen's empirical analysis finds support for both a disciplined party effect and an electoral system effect. Of particular interest here, PR promotes disciplined parties and, relative to SMD systems, the election of left-leaning parliaments and governments. This is, at the very least, a provocative and interesting line of thought. If we accept the McDonald-Budge evidence, voters in SMD systems have, since 1950, been more likely than those in PR systems to express party preferences for a party or parties with right-leaning tendencies. Explaining why voters behave in this way has to be considered an important question. But, as we see immediately below, there are other possibilities.

Societal Forces in Democratic Politics

Most of what has been said thus far relies on economic and political models to think about why policies differ between systems. There is also a long tradition of political-sociological thinking that deserves consideration. Before concluding, therefore, I refer to three, if only briefly: (a) a British heritage, (2) organized interest groups as entities outside political parties, and (3) the presence of not just any sort of political Center but of a Christian political Center.

British Heritage. Having a British tradition, as in having been a one-time British colony, is strongly predictive of whether a nation has used an SMD system during much of its democratic history (Persson and Tabellini 2003, 103). Since a British heritage cannot be an intermediate step between electoral system type and policy—it precedes both—it is possible that the association between policy differences and system types is spurious. That is, the reason policy differences relate to system types is because a British tradition is the preceding causal force giving rise to both.

One cannot help but notice, in Table 1, the two nations that do not fit particularly well in the group of countries with which they share a system type are Ireland and France. Ireland, with its British past looks more like the SMD nations in

many respects of policy. France, with it owns heritage, looks more like PR systems in many policy respects. Transposing these nations between system types makes some of the connections between policy and system type stronger, which is an oblique way of saying some policy indicators are more strongly correlated with British heritage than a twofold distinction in electoral system. Persson and Tabellini go to lengths to take the selection problem into account, through creative and useful statistical procedures, but even those leave room to wonder (Persson and Tabellini 2003, 113-54; see also Persson, Roland, and Tabellini 2005). This will make New Zealand an interesting case to watch.

Interest Groups. Pluralist interest group activity is associated with SMD systems. Democratic corporatist interest group activity patterns tend to be found in countries using PR (see the corporatist/pluralist scoring in Siaroff 1999, 198). Pluralist activity is characterized as many small groups competing to pressure government for particularistic policies, in contrast to corporatist activity characterized by nationwide, sector-specific, peak organizations regularly consulting with one another and with government over policy orchestration (Schmitter 1982). While it is possible to think these interest group patterns are causally linked to electoral systems (Wilensky 2002, 84, 119-21), many close observers think a causal link is doubtful (Crepaz and Lijphart 1991; 1995; Keman and Pennings 1995; see also Lijphart 1999, 171-84). Instead, the thinking goes, the two reflect deeply embedded cultural and societal differences. "[A]n effective corporatist system involves far more than mere institutions. It rests on a history and culture of collective accommodation that cannot simply be invented as the need arises" (Gallagher, Laver, and Mair 2001, 404). If the corporatist versus pluralist interest group pattern is the cause of policies, then the electoral system and policy relationship is spurious. That is, electoral systems and interest group patterns grow in the soil of more or less consensual versus adversarial cultures, but the causal path to policy is through interest group activity patterns.

Christian Democratic Center. A good deal of emphasis has been put on the role of social democratic parties in creating generous welfare states, with good reason, but, as Esping-Andersen (1990) and Kees van Kersbergen (1995) have pointed out, a labor-social democratic alliance is but the most obvious way the working- and lower-

middle-classes have a distinctive say in politics and policy. Standing alone, their votes are often not enough (Przeworski and Sprague 1986). The expansion of the political economy and its welfare state component sometimes needs also to give the middle class a stake in social protection (Esping-Andersen 1990, 29-32; this is also Iversen's point). The middle-class stake can be provided either through broad-based labor organizations connected to social democratic parties or through Christian democratic parties with multi-class appeal (van Kersbergen 1995; Esping-Andersen 1990, see esp. 29-33; Wilensky 2002, 211-51). Are PR systems in place because of the presence of Christian (and, to some extent, agrarian interests) when the systems were adopted? Are the relatively generous welfare policies in France, when compared to other SMD countries, due to Christian political forces there? These are serious questions and deserve continued serious analysis.

Conclusion

The relationship between electoral systems, on the one hand, and government policy choices and consequences, on the other, is real and robust—but also quite curious from the standpoint of democratic theory. Curiosity, whether or not it kills cats, is the lifeblood of scholarly endeavors. We should therefore be able to use what we know and what we still need to know about the relationship as motivation to learn much about representative democracies.

Writ large, there are two theoretical structures that undergird each of two approaches to understanding the relationship. One emphasizes preferences; the other emphasizes incentives. Preferences and incentives are intertwined, at least by the fact that in the face of the same preference the presence of one incentive versus another can lead one to express the preference differently. This can make the task especially challenging, from an epistemological standpoint, because one observes only the expressed preferences. If the expressed preferences of principals—viz., parliaments and voters—are the same in all nations and if their agents—governments—make different choices consistent with the theoretically derived incentives, then there is good, strong evidence that incentives from the institutional arrangements are driving the process. But, since the evidence before us indicates that the expressed preferences of voters and, due to that, parliaments differ cross-nationally—more left-leaning in

PR systems compared to SMD systems—a policy choice in line with the preferences could well be what otherwise would happen in the absence of a preference difference. How will we know?

Thus, along with a curiosity-inspired motivation to get on with the task of understanding representative democracy through intense scrutiny of the policy-electoral system relationship, we need to carry along with us an epistemologically-inspired humility not to believe as truth, any time soon, that preferences are all we need to understand, as behavioralist are accused of having done (Riker 1980), or that institutional arrangements are all we need to understand, as new-institutionalists are said to be doing (Przeworski 2004).

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Table 1: Selected Policy Outputs and Outcomes in PR and SMD Countries

PR Nation	Soc Sec Transfer	Decommod-ification	Soc $$ GDP%	Total $ GDP%	Wage Inequality	Per Cap Income	CO_2 as / GDP
Austria	19.2	31.1	26.0	50.6	~~~	8311	.38
Belgium	16.0	32.4	27.2	49.3	1.64	8949	.51
Denmark	16.9	38.1	29.2	56.3	1.58	9982	.34
Finland	16.8	29.2	24.8	50.7	1.68	8661	.57
Germany	19.2	27.7	27.4	46.8	1.70	9729	.45
Ireland	9.2	23.3	13.8	34.2	~~~	5807	.37
Italy	17.3	24.1	24.4	48.5	1.63	7777	.41
Japan	10.9	27.1	16.9	38.2	~~~	7918	.25
Luxembourg	15.7	~~~	20.8	45.9	~~~	~~~	.47
Netherlands	12.3	32.4	21.8	48.6	1.64	9269	.49
Norway	15.0	38.3	23.9	46.4	1.50	9863	.20
Portugal	14.9	~~~	21.1	48.4	~~~	~~~	.55
Spain	11.7	~~~	19.6	38.6	~~~	~~~	.52
Sweden	18.0	39.1	28.9	57.3	1.58	9982	.21
Switzerland[a]	11.3	29.8	26.4	35.5	1.68	12377	.18
PR Mean	*15.0*	*31.1*	*23.5*	*46.4*	*1.62*	*9052*	*.39*
PR std dev	*3.2*	*5.3*	*4.4*	*6.9*	*.06*	*1598*	*.13*
SMD Nation							
Australia	9.2	13.0	18.0	36.2	1.70	10909	.81
Canada	10.4	22.0	17.8	41.1	1.82	11670	.72
France	17.7	27.5	28.5	53.4	1.94	9485	.29
New Zealand	10.5	17.1	18.5	37.0	~~~	~~~	.56
United Kingdom	13.4	23.4	21.8	43.9	1.78	9282	.35
United States	12.0	13.8	14.8	36.5	2.07	13651	.55
SMD Mean	*12.2*	*19.5*	*19.9*	*41.4*	*1.86*	*10999*	*.55*
SMD std dev	*3.1*	*5.8*	*4.8*	*6.6*	*.15*	*1784*	*.20*
PR-SMD Difference	*+2.8***	*+11.6****	*+3.6**	*+5.5**	*-.24****	*-1947***	*-.16***

 p < .10; p < .05; p < .01 (one-tail tests)

Soc Sec Transfer: Social security transfers as % of GDP, 2004 (National Accounts of OECD Countries, 2005)
Decommidification: Esping Andersen's 1980 decommodification score (Esping-Andersen, 1990, 52)
Soc $$ GDP%:   Total public social expenditure as % of GDP, 2001(OECD Social Expenditure Database, 2004)
Total$ GDP%:   Total government expenditure as % of GDP, 2004 (National Accounts of OECD Countries, 2005)
Wage Ineuqality: Ratio of earnings of worker in 90th percentile to median wage earnings (average, see Iversen and Soskice, 2006)
Per Cap Income: Real per capita income, 1950-96 average, constant 1985 USD (Iversen and Soskice, 2006)
CO_2 %GDP: Kilograms of CO_2 per 2000 USD (Fuel Combustion, IEA/OECD, 2005)

[a] Swiss data on wage inequality and per capita income come from an earlier version of Iversen and Soskice's work (Iversen and Soskice, 2005).

Table 2: Slope Estimates Using 20-year Moving Average Left-Right Positions of Median Parties in Parliament to Predict Total Spending by Central Governments, Controlling for Revenue Centralization: Successive Cross Sections of 16 Nations,[a] 1972-95

Year	Slope	t-value
1972	-.17**	-2.25
1973	-.14	-1.60
1974	-.10	-0.90
1975	-.04	-0.34
1976	-.08	-0.72
1977	-.15	-1.46
1978	-.20**	-1.85
1979	-.23**	-1.91
1980	-.23**	-1.82
1981	-.27**	-1.90
1982		-1.73
1983	-.30**	-1.87
1984	-.28*	-1.74
1985	-.29*	-1.73
1986	-.34**	-2.37
1987	-.38***	-3.05
1988	-.42***	-3.63
1989	-.42***	-3.22
1990	-.37**	-2.59
1991	-.34**	-2.07
1992	-.32*	-1.67
1993	-.37*	-1.74
1994	-.31*	-1.60
1995	-.29*	-1.42

*p < .1   **p < .05   ***p < .01

Source: Budge, Klingemann, Bara, Volkens, and McDonald (2006)

[a] Sixteen nations: Australia, Austria, Belgium, Canada, Denmark, France, Germany, Ireland, Italy Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and United States.

Missing values on central government spending: Italy 1972 and 1995, New Zealand 1989, and Switzerland 1985-90.

Table 3: Distortion, Bias, and Responsiveness between Left-Right Position of Governments, Weighted by Party Size, and Left-Right Position of Parliamentary Medians, Fifteen Democracies using PR 1950s to 1995

Country	Distortion[a]	Bias[b]	Responsiveness[c]				
	Mean (std dev)	Mean (std dev)	Intercept (s_a)	Slope (s_b)	R^2	s_e	N
Austria	12.2 (7.6)	-2.8 (14.4)	-3.3 (3.1)	.59** (.20)	.35	13.3	18
Belgium	5.4 (4.6)	-1.3 (7.1)	-2.0 (1.4)	.80** (.17)	.40	7.1	27
Denmark	17.1 (14.7)	3.2 (22.6)	-1.7 (5.3)	.29 (.46)	.02	22.0	27
Finland	11.9 (12.4)	4.1 (16.9)	3.2 (4.3)	.94** (.23)	.36	17.1	32
Germany	6.9 (8.0)	1.3 (10.6)	1.4 (2.4)	1.00** (.15)	.71	10.9	21
Iceland	8.3 (6.8)	2.7 (10.6)	1.7 (2.7)	.83** (.19)	.54	10.6	18
Ireland	3.0 (6.2)	1.7 (8.7)	2.3 (1.8)	.78** (.10)	.77	7.9	19
Italy	1.6 (2.4)	-0.1 (2.9)	.4 (0.6)	1.10** (.07)	.87	3.0	42
Luxembourg	6.2 (3.8)	-3.0 (6.8)	-2.0 (3.2)	1.09** (.22)	.67	7.0	14
Netherlands	8.2 (5.3)	-0.3 (10.0)	-2.6 (2.9)	.65** (.16)	.44	9.4	14
Norway	6.2 (9.7)	3.8 (11.4)	3.0 (9.3)	.97** (.35)	.29	11.7	21
Portugal	1.0 (1.6)	0.5 (1.9)	.6 (0.7)	1.02** (.07)	.97	1.9	10
Spain	0.0 (0.0)	0.0 (0.0)	.0 (~~)	1.00** (~~)	1.00	0.0	7
Sweden	6.6 (9.7)	-0.7 (11.8)	3.0 (4.3)	1.19** (.17)	.72	11.7	21
Switzerland	4.5 (4.3)	0.4 (6.2)	1.2 (1.0)	.81** (.09)	.63	6.0	45
PR Overall	7.0 (9.0)	0.8 (11.4)	.1 (0.7)	.88** (.04)	.55	11.3	336

*p < .05; ** p < .01; two-tail critical values for intercepts and one-tail critical values for slopes.

Source: McDonald, Mendes, and Budge (2004, 22)

[a] Distortion is the absolute value of the difference between the weighted mean Left-Right position of governments (with weights proportional to the number of seats held by each party in government) and the Left-Right position of parliamentary medians. N is the number of governments; caretaker and nonpartisan governments are excluded. A totally congruent system would have a score of zero.

[b] Bias is the average difference between the weighted mean Left-Right position of governments (with weights as above) and the Left-Right position of parliamentary medians. N = the number of governments; caretaker and nonpartisan governments are excluded. A mean of zero indicates accurate (i.e., unbiased) long-term representativeness.

[c] Responsiveness is evaluated by the linear relationship between the weighted mean left-right position of governments (Y) and the Left-Right position of parliamentary medians (X). Left positions are negative, center equals zero; Right positions are positive.

Table 4: Electoral Biases in Parliamentary Representation of a Median Voter's Left-Right Position, by Country and Electoral System Type, from the Early 1950s through 1995

| System	Country	N Elections	Electoral Bias[a]		
			Overall MV to Parl	Electoral System	Party System
PR	Austria	13	1.1	-1.2	2.3
			2.4	0.8	2.3
	Belgium	15	1.1	-0.2	1.3*
			0.8	0.5	0.6
	Denmark	19	-2.9*	0.8	-3.7**
			1.3	0.6	0.8
	Finland	13	1.6	-0.5	2.1
			1.9	2.0	1.0
	Germany	12	1.1	-0.5	1.6
			2.4	0.5	2.3
	Iceland	13	2.5	4.5	-2.0
			3.5	3.2	1.3
	Ireland	14	-2.1	5.9	-7.9*
			4.1	3.5	3.3
	Italy	11	1.4	0.3	0.8
			0.9	0.3	0.8
	Luxembourg	10	3.2*	1.1	2.1
			1.1	1.2	1.1
	Netherlands	13	2.2	0.0	2.2
			1.1	~~	1.1
	Norway	11	-1.4	-0.5	-0.9
			1.4	0.8	1.3
	Portugal	8	1.6	0.4	1.2
			1.4	0.8	1.5
	Spain	6	0.1	3.0	-2.9*
			1.7	2.1	0.9
	Sweden	15	-2.9	-0.6	-2.3
			1.7	3.0	2.2
	Switzerland	12	0.2	0.0	0.2
			0.8	~~	0.8
PR Summary		185	0.3	0.8	-0.5
			0.5	0.4	0.5
SMD	Australia	18	5.6	3.3	2.3
			4.5	4.4	4.4
	Canada	14	3.4	4.2	-0.8
			2.3	3.3	1.8
	France	10	9.4	6.7	2.7
			5.6	5.6	3.4
	New Zealand	15	2.5	0.5	2.1
			3.7	1.0	3.7
	United Kingdom	13	9.0	11.8	-2.8
			4.9	7.2	2.6
SMD Summary		70	5.7**	4.9*	0.7
			1.9	2.0	1.6

*p < .05; ** p < .01; two-tail test. The ~~ symbol indicates that the standard error is undefined because the correspondence at that step was exact at each election.

Source: McDonald and Budge (2005, 126)

[a] Cell entries under **Bias** are means and their standard errors over the period from the early 1950s through 1995. All calculations are weighted by the time between elections.. Weights are proportional to number of *Elections* for tests of statistical significance. Biases are defined as follows.

- **Electoral, MV to Parl** difference between median voter and median party in parliamentary Left-Right positions.
- **Electoral System** difference between the Left-Right position of party closest to the median voter and Left-Right position of median party in parliament.
- **Party System** difference between median voter Left-Right position and the Left-Right position of the party closest to the median voter.

Figure 1: Twenty-year Moving Averages of Left-Right Positions of Median Parties in Parliaments of Five Nations, 1972-95
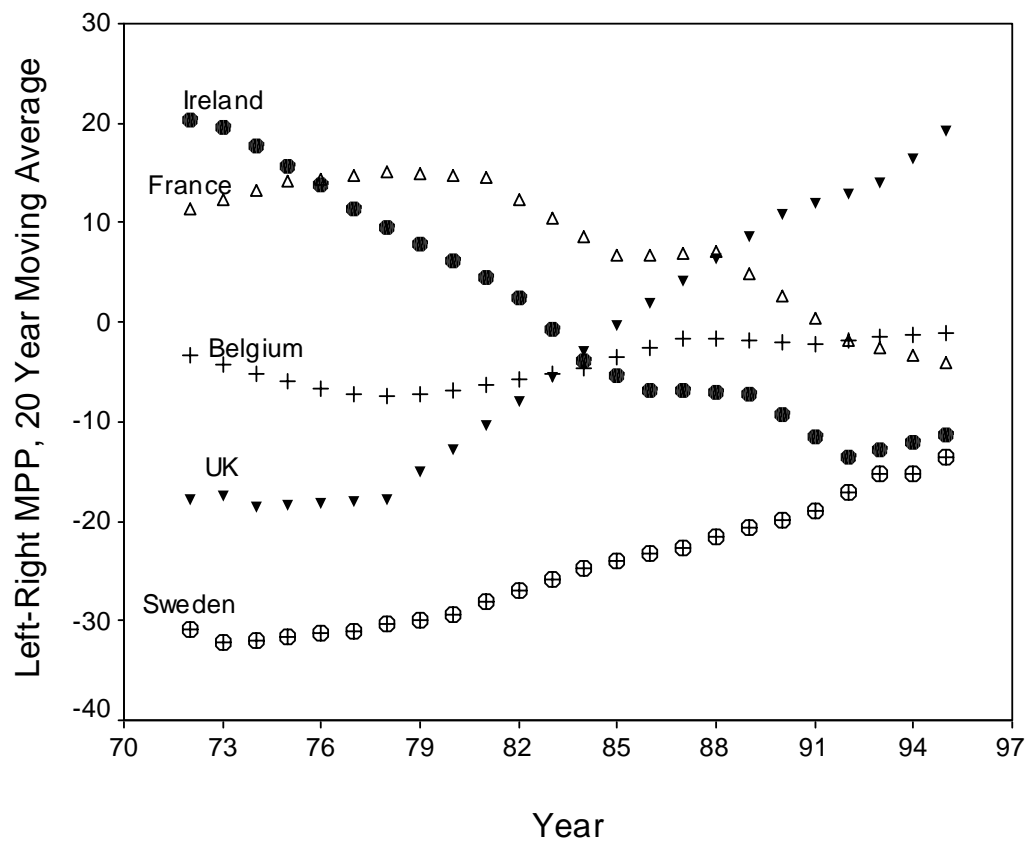
Source: Budge, Klingemann, Bara, Volkens, and McDonald (2006, Figure 5.2)