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# Coalition Government, Legislative Institutions, and Public Policy in Parliamentary Democracies

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**Abstract:** *Most democracies are governed by coalitions, comprising multiple political parties with conflicting policy positions. The prevalence of these governments poses a significant question: Which parties' electoral commitments are ultimately reflected in government policy? Recent theories have challenged our understanding of multiparty government, arguing that the relative influence of coalition parties depends crucially on institutional context. Specifically, where institutions allow credible enforcement of bargains, policy should reflect a compromise among all governing parties; where such institutions are absent, the preferences of parties controlling the relevant ministries should prevail. Critically, empirical work has thus far failed to provide direct evidence for this conditional relationship. Analyzing changes in social protection policies in 15 parliamentary democracies, we provide the first systematic evidence that the strength of legislative institutions significantly shapes the relative policy influence of coalition parties. Our findings have implications for our understanding of coalition government, policymaking, and electoral responsiveness.*

**Replication Materials:** The data and materials required to verify the computational reproducibility of the results, procedures and analyses in this article are available on the *American Journal of Political Science* Dataverse within the Harvard Dataverse Network, at: https://doi.org/10.7910/DVN/YU84D7.

In 2010, for the first time since World War II, a coalition government assumed power in the United Kingdom. Upon taking office, the Conservatives and Liberal Democrats issued a coalition agreement that sketched policy compromises across 31 issues. And yet, by the next general election in 2015, the prevailing perception was that the Liberal Democrats had not been able to exercise much influence, and that the government's policies—despite the coalition agreement—had largely been reflective of Conservative priorities.[1] At least in part, these perceptions contributed to the Liberal Democrats' disastrous electoral performance in that election. In contrast, between 1998 and 2005, Germany was ruled by a coalition of Social Democrats and Greens. Like the Liberal Democrats and Conservatives in the U.K., these parties disagreed on key issues (particularly energy and the environment). The partners arrived at compromises, which were made public in a coalition agreement. Unlike in the U.K., however, the coalition's subsequent policy choices largely reflected their agreement. The policy record of the government clearly bore the imprint of both partners.[2]

The contrasting experiences of these governments pose an obvious question. Most democratic governments around the world are coalitions, comprising multiple

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[1]See https://www.theguardian.com/politics/2015/apr/15/how-much-of-the-liberal-democrats-2010-election-manifesto-was-implemented for a *Guardian* article that assesses the record of the Liberal Democrats under the coalition. The coalition agreement is available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78977/coalition_programme_for_government.pdf.

[2]For an assessment of the record of the Red-Green coalition by a major German newspaper, see https://www.faz.net/aktuell/politik/regierungsbilanz-sieben-jahre-rot-gruen-1260372.html. The coalition agreement is available at https://www.spd.de/fileadmin/Dokumente/Beschluesse/Bundesparteitag/koalitionsvertrag_bundesparteitag_bonn_1998.pdf.

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parties that have conflicting positions on at least some issues. Given such conflicts, whose commitments are ultimately reflected in what these governments do? This question is of clear significance. For party elites involved in coalition negotiations, expectations regarding the policies likely to result from alternative governments should shape their preferences over which cabinet to choose. For voters, knowing which parties they should hold responsible for policy outcomes, or understanding the implications of a particular vote choice, requires understanding the relative influence of coalition parties in policymaking.

The existing literature offers two competing perspectives on this puzzle that correspond, roughly speaking, to the experiences of the coalitions discussed above. One, forcefully expressed in Laver and Shepsle's (1996) seminal "portfolio allocation" model, stresses the dominant role of cabinet ministers. It leads to the expectation that policy in any area primarily reflects the commitments of the party that occupies the relevant ministry. Given that the Liberal Democrats controlled only a small number of portfolios (and not the most prominent ones), this perspective suggests that the coalition's policy should be dominated by the Conservatives. In contrast, other scholars have argued that coalitions adopt policies that represent a compromise among their members (e.g., Becher 2010; Goodhart 2013; Powell 2000). Larger parties may have more influence on this compromise, but policy will reflect the positions of all parties in government. Clearly, the experience of the Red–Green coalition more closely resembles this account.

Recent developments in the coalition literature complicate these answers—and potentially reconcile the contrasting experiences of our two coalitions. While the two perspectives just outlined are "institutions-free," the key contribution of these advances is to argue that the relative influence of parties' commitments is *conditional* on the institutional framework within which policy is made (Martin and Vanberg 2005, 2011; Thies 2001). Institutional context is critical because effective implementation of compromise agreements requires that parties have the ability to monitor and—if necessary—to challenge the actions of cabinet ministers, who play a central role in drafting and implementing legislative proposals. Where such institutions are present, one would expect compromise agreements to prevail. Where such institutional resources are not available, it is difficult to control the discretion ministers enjoy. As a result, the partisan preferences of ministerial parties are likely to be reflected in policy within their jurisdiction. In short, institutional context is central to multiparty governance.

Although these developments are reshaping the coalition literature, critical gaps remain. Most seriously, scholars have produced only *indirect* evidence in support of the theoretical conjectures. For example, several studies focus on the appointment of junior ministers and parliamentary committee chairs (Carroll and Cox 2012; Lipsmeyer and Pierce 2011; Thies 2001). Appointment patterns to these offices suggest that parties view them as checks on "hostile" ministers. But there is no direct evidence that they are effective in this task. Other work has studied legislative review of ministerial proposals. For example, in an earlier study (Martin and Vanberg 2011), we demonstrate that when legislative "policing" institutions are strong, ministerial bills are more heavily scrutinized and amended when they concern issues that divide the coalition (see also Pedrazzani and Zucchini 2013). However, greater legislative *activity* does not necessarily imply that coalition partners effectively constrain ministerial drift. As Goodhart (2013, 207) points out, "The existence of monitoring and control mechanisms . . . does not itself prove the case against ministerial discretion . . . . [These] mechanisms may act to control policy deviations, but imperfectly, so that ministerial discretion co-exists with active attempts to contain it."

In other words, a critical shortcoming in the coalition politics literature is that recent theoretical advances, which have recast our understanding of the policymaking process, have not yet been matched with empirical contributions that provide *direct* evidence that institutional context conditions the policies that multiparty governments adopt. This shortcoming can largely be attributed to the fact that direct evidence requires detailed measures of policy outcomes that can be reliably tied to the competing preferences of parties—a significant challenge that has instead steered scholars toward more indirect approaches.

In this study, we seek to narrow this gap. To do so, we take advantage of an important new data set on welfare state entitlements (Scruggs, Jahn, and Kuitto 2014) that allows us to examine changes in two areas of social protection—unemployment benefits programs, and short-term disability and sickness benefits programs—in 15 parliamentary democracies over a period of roughly 40 years. These data provide a detailed picture of policy outcomes in two highly salient policy areas. Focusing on a particularly important set of institutions in parliamentary democracies—namely, legislative committee systems—we provide systematic evidence that differences in legislative institutions lead to considerable differences in the relative impact of ministerial and cabinet parties on policy outcomes. Our results demonstrate that in legislative environments that privilege ministerial proposals, and make it difficult for coalition partners to monitor and enforce compromise agreements, policy choices are driven by the commitments of parties that control relevant ministries. In contrast, in legislative environments that "level the playing field" by reducing the informational advantage of ministers and providing effective opportunities for challenging and amending ministerial proposals, policies reflect a compromise position among all coalition partners. As we discuss in the conclusion, these findings have significant implications for our understanding of coalition governance, electoral responsiveness, and democratic representation.

## Institutional Context and Policy Responsiveness

Cabinets occupy a key policy position in parliamentary systems since major legislative initiatives can only move forward with their approval. At the same time, given the scope and complexity of public policy, formulating effective legislative proposals requires technical expertise and information, and no cabinet minister is in a position to master the required knowledge in all areas of governmental activity. As a result, policymaking involves a significant amount of delegation to ministers who have primary responsibility for drafting policy proposals within their jurisdiction (working, of course, through the ministerial bureaucracy they oversee). Such delegation, in turn, implies that ministers enjoy—at least potentially—considerable discretion to shape policy within their jurisdiction (Laver and Shepsle 1996).

Under single-party government, this privileged position of ministers may be (relatively) unproblematic, at least in the absence of significant intraparty heterogeneity.[3] But for multiparty governments, it creates challenges. A central feature that distinguishes coalitions from single-party governments is that parties in a coalition must govern *jointly*, but they are held to account *separately* at election time. This creates tensions. Each party faces incentives to play to its target audiences by steering policy in directions favored by its supporters (or at least to be *perceived* to be doing so, an important aspect to which we return below). The privileged position of cabinet ministers implies that parties have the opportunity to do so. Cabinet ministers can use their position to pull policy within their jurisdiction toward positions preferred by their party.

Laver and Shepsle's (1996) model is built around this logic. The lynchpin for their argument is the assumption that in negotiating a coalition, party leaders should expect that each party will take advantage of ministerial discretion to pursue the party's preferred policy in those jurisdictions under its control. This implies that incentive-compatible coalition policies are located at the intersections of the dimension-by-dimension ideal points of parties. To illustrate, consider a two-dimensional policy space and two parties, $A$ and $B$. Parties have convex preferences, as depicted in Figure 1. Suppose the parties are contemplating a coalition in which $B$ receives the portfolio for Dimension 1, and $A$ receives the portfolio for Dimension 2. Which policy outcome should the parties expect from this portfolio allocation?

Because preferences are inseparable, the policy preferred by each party in a dimension depends on the policy choice in the other dimension; these "induced ideal points" are indicated by the solid lines through each party's ideal point.[4] Where these two lines intersect (the point labeled $1_B2_A$), each minister implements the policy she most prefers in her jurisdiction, given the policy adopted by the other minister. Put differently, the aggregate policy outcome $1_B2_A$ is incentive-compatible. However, the policy that results from ministerial autonomy is inefficient. In Figure 1, policies in the overlap area of the indifference curves through $1_B2_A$, such as policy $X$, are preferred by *both* parties to ministerial autonomy.

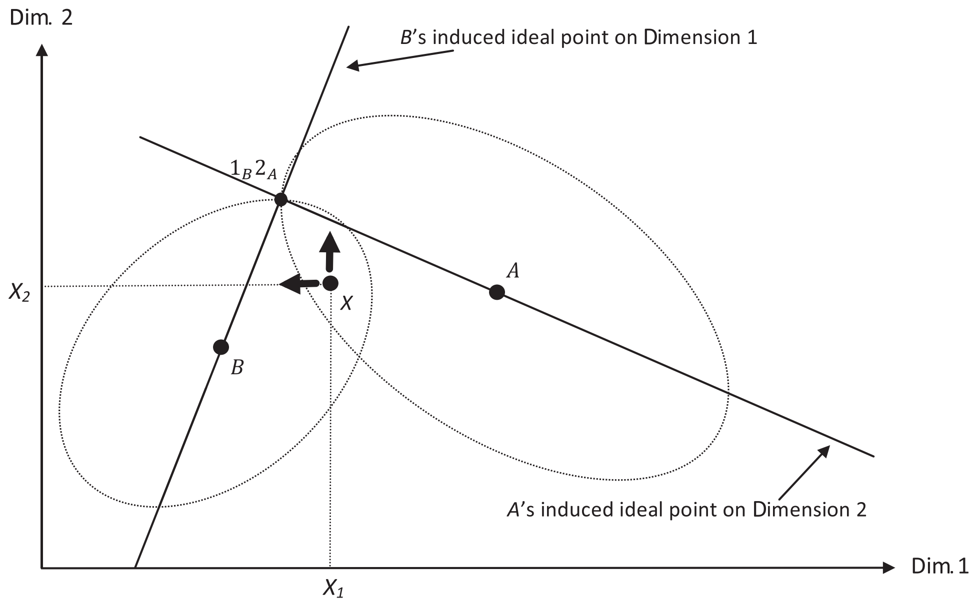
Although parties *prefer* a compromise like $X$ to ministerial autonomy, implementing it poses a challenge. Unlike $1_B2_A$, a compromise at $X$ is not (directly) incentive-compatible. To achieve $X$, Minister A must pursue policy $x_2$, and Minister B must pursue policy $x_1$. But doing so is not in their immediate interests. As indicated by the arrows in the two figures, both ministers would benefit by pursuing a different policy. Moreover, the privileged position of ministers provides them with the opportunity to do precisely this. Of course, this is Laver and Shepsle's point—implementing compromise agreements constitutes a credible commitment problem.

One function of institutions is to resolve problems of credible commitment (North 1993). This insight has recently been brought to bear on coalition governance by several scholars who have assumed that, in certain cases, parties may have such institutions available. Because compromise policies are typically preferable to the results of ministerial autonomy, parties have incentives to make the enforcement of compromises possible. To do this, parties must be in position to scrutinize ministerial proposals, to develop alternatives, and to push for these in the policy

[3]The coalition literature has typically treated parties as unitary actors, both as a theoretical simplification and because of the scarcity of data on intraparty preferences. We adopt this approach here, primarily because the data we rely on are only available at the party level.

[4]In their original formulation, Laver and Shepsle (1996) rely on Euclidean preferences. We reformulate their argument with more general convex preferences to highlight that the ministerial autonomy argument, and qualifications of it, do not depend on a restrictive assumption about preferences.

**FIGURE 1 Government Policy under Ministerial Autonomy**




process. Where policymaking institutions enable them to engage in these actions, coalitions may not be condemned to tolerating ministerial autonomy, but can instead implement genuine compromises.

In an important study, Thies (2001) points to the role played by junior ministers (JMs) in this regard. JMs, who are political appointees directly below a cabinet minister, are in a position to gather information on proposals being developed in a department. As a result, appointing "shadow" JMs in ministries controlled by their partners may allow parties to "keep tabs" on hostile ministers. The appointment patterns of JMs provide clear support for this argument (Lipsmeyer and Pierce 2011; Thies 2001). Similarly, other scholars have highlighted the role of cabinet committees and inner cabinets that allow scrutiny and debate of draft bills (Andeweg and Timmermans 2008; Müller and Strøm 2000).

These institutions represent significant opportunities to rein in ministers. But they face two limitations. One is a resource constraint. Intra-cabinet working groups cannot be used as an oversight tool for most legislation. Given the demands on ministers, such groups are limited to particularly salient initiatives. Similarly, small parties cannot appoint junior ministers to all partner ministries because they are only entitled to a limited number of such posts. Moreover, junior ministers have access to information, but they may not be in a position to formulate alternative policies or to force ministers to change draft initiatives.

A second constraint is political. These institutions operate *prior to* the public "unveiling" of a bill. This is significant because the introduction of a legislative proposal provides a unique opportunity for position taking by ministers (and their parties), often achieved in press releases, news conferences, and interviews. Even if parties expect a legislative proposal to be amended, they can point to the bill as introduced as an indication of the party's "true" intentions. This implies that parties are not indifferent as to *when* in the policy process ministerial drift is corrected. All things being equal, parties prefer such changes to occur *after* a bill has been introduced, and credit-claiming points have been scored (Martin and Vanberg 2005, 2011).

These constraints do not apply to the legislative process. All major policy initiatives must be presented to parliament, where ministerial proposals can be amended. Moreover, legislative consideration of a bill commences after its introduction—implying that ministers have had an opportunity to engage in position taking. This suggests that parliaments may play a central role in enforcing coalition compromises. But the parliamentary arena can only be effective for this purpose if its internal organization allows parties to reduce the informational advantage of ministers, to develop alternatives to ministerial proposals, and to push for these to be implemented. Scholars have identified a number of institutions that matter in this context (Harfst and Schnapp 2003; Martin and Vanberg 2011; Mattson and Strøm 1995). One set of features relates to the ability to scrutinize legislation:

(1) *Number of legislative committees*: The larger the number of committees, the greater the

opportunities for specialization and development of policy expertise.

(2) *Correspondence of committees to cabinet ministries*: Committees that are organized along the jurisdictional lines of ministries enhance the ability to develop relevant policy expertise.

(3) *Size of legislative committees*: Large committees are less effective because they tend to become unwieldy and encourage free riding.

(4) *Binding plenary debate before committee stage*: Binding plenary debate before committee deliberations curtails opportunities for scrutiny and change.

(5) *Right to compel witnesses and documents*: Committees with rights to compel testimony and documents (including from senior civil servants and ministers) have greater ability to scrutinize legislation and develop alternatives.

(6) *Urgency procedure*: If ministers have the right to curtail legislative debate and shorten the legislative timetable, effective scrutiny is more difficult.

Two additional features relate to the ability to push effectively for changes to ministerial bills:

(7) *Rewrite authority*: Committees that can rewrite draft bills (i.e., their version of a bill becomes the floor agenda) are in a more powerful position to push for change than committees that can only sponsor amendments.

(8) *Guillotine procedure*: If ministers have the right to reject amendments or force an up-or-down vote on a bill, the ability to challenge ministerial proposals is reduced.

We are now in a position to outline the key implication of this argument. Coalition governments must confront the tensions introduced by the need to delegate policymaking authority to ministers. Pursuing coalition compromises—which parties have strong incentives to do—requires an ability to rein in ministerial drift. Legislative environments that feature "strong" internal institutions (i.e., those that make scrutiny and change easier to accomplish) allow coalition partners to do so. As a result, policy will not be driven exclusively by the preferences of ministerial parties, but will reflect a compromise among the positions of all coalition members. In contrast, in "weak" legislative environments, it is difficult to enforce compromise agreements. As a consequence, policy will reflect the position of the party controlling the relevant ministry. This argument therefore implies the following:

**Conjecture.** *As divisions increase between the preferences of the party of the minister and the preferences of the government as a whole, policy changes will be more sensitive to the preferences of the minister's party when legislative institutions are weak, but more sensitive to the preferences of the government as a whole when legislative institutions are strong.*

In short, institutional context—and in particular, the nature of legislative policing institutions—are critical for coalition policymaking. As a result, policy outcomes depend on the interplay of partisan preferences and institutional structure.

## Party Commitments, Legislative Policing, and Social Protection Policies

As we argued earlier, rigorous empirical evaluation of the argument that coalition policymaking is conditioned by institutional context has been hampered by the difficulty of obtaining reliable data on policy outcomes. As a consequence, scholars have relied on indirect, circumstantial evidence that focuses on legislative activity or appointment patterns of junior ministers or committee chairs. We seek to overcome this limitation and provide *direct* evidence that legislative institutions condition policymaking under multiparty governments. We do so by examining a new data set—the Comparative Welfare Entitlements Dataset 2 (CWED2)—that documents changes in social insurance schemes in several European democracies (Scruggs, Jahn, and Kuitto 2014). In particular, we examine changes in two types of social protection programs: those dealing with *unemployment insurance benefits* and those dealing with *short-term disability and sickness insurance benefits*. Reforms to these programs have long been politically contentious in advanced industrial democracies, and increasingly so in the era of welfare state retrenchment (Korpi and Palme 2003). They are also of broad economic significance: They have implications for the national budget, for the level of spending in the economy, for the profitability of firms, and for the quality of life for vulnerable groups in the population. As a result, we suspect that the policymaking process surrounding these programs provides a useful testing ground for our argument.[5]

[5]Naturally, it would be desirable to expand this analysis to other policy areas. Currently, the only other policy area for which similarly detailed data are available is pensions (Scruggs, Jahn, and Kuitto 2014). However, reform efforts in this policy area—perhaps due to the sheer size of the aging population in developed countries—tend to be very slow-moving, typically spanning several successive governments. For example, it is not unusual for pensions reform to take approximately 20 years to phase in completely (Kalisch and Aman

Our analysis encompasses the following 15 countries and time periods: Austria (1973–2006), Belgium (1977–2007), Denmark (1974–2010), Finland (1973–2007), France (1977–2010), Germany (1973–2010), Great Britain (1973–2010), Greece (1983–2004), Ireland (1973–2010), Italy (1973–2008), the Netherlands (1977–2006), Norway (1973–2005), Portugal (1983–2010), Spain (1985–2010), and Sweden (1973–2010). Together, the number of country-years (the units of analysis) in our sample is 498 for unemployment insurance and 496 for sickness insurance.[6]

The CWED2 contains annual data on five characteristics associated with each type of insurance: (1) the average benefit replacement rate, (2) the maximum number of weeks of benefit duration, (3) the number of weeks of employment needed to qualify for benefits, (4) the number of days an unemployed/sick person has to wait until benefits start, and (5) the share of the labor force covered by benefits. For each insurance scheme, these components are aggregated into an index—an *Unemployment Generosity Index* and a *Sickness Generosity Index*—both of which we present in Figure 2.[7] As the figure shows, there is substantial variation in both of the generosity indices across countries and over time. Although the indices tend to move together, they often do not—their correlation in our sample is moderate, slightly less than 0.60. Moreover, the figure shows that, within countries, there are clear differences in the average level of generosity across the two programs, with sickness benefits typically being more generous than unemployment benefits.[8]

To evaluate our expectations, we need to assess (1) whether this variation primarily reflects the policy positions of parties that have ministerial responsibility for these programs or a compromise among the positions of all parties in government, and (2) whether the relative influence of ministers and their partners depends on the strength of legislative policing institutions.[9] To measure party policy positions, we make use of the Manifestos Project (MARPOR) data. While some caveats apply (see, e.g., Lowe, Benoit, Mikhaylov, and Laver 2011), these data are the most comprehensive available in terms of countries, elections, and parties covered. Because they are coded from parties' election manifestos, the data are also dynamic, reflecting shifts in party positions over time.

The raw manifestos data consist of the coding of manifesto (quasi-)sentences into 56 categories. Using these data to construct estimates of party positions on a given policy dimension requires making choices about which categories to focus on, and how to aggregate them into a substantively meaningful scale. Because our two policy programs deal not only with issues of social protection but also (considering their impact on the profitability and global competitiveness of firms) with economic and industrial policy more generally, parties' positions in these areas are likely to reflect concerns about the protection of vulnerable groups as well as concerns about regulation of the labor market and economic growth. Indeed, changes in these programs are often embedded in broader economic reforms. Consider, for example, the Agenda 2010 project implemented by the Social Democratic/Green government in Germany in 2003, which focused on labor market reforms to reduce unemployment (including, among other things, reducing the duration of unemployment benefits and shifting the costs of sick pay insurance from employers to employees after a certain length of illness). In introducing this reform package, Chancellor Gerhard Schroeder explicitly invoked *both* economic and social welfare considerations: "Our Agenda 2010 contains sweeping structural reforms. By the end of this decade, these reforms will return Germany to a leadership position in economic prosperity and employment. In this way, these reforms will ensure intergenerational fairness and strengthen the foundations of our communities" (Speech before the Bundestag, March 14, 2003). Because unemployment and sickness benefits schemes implicate both social and economic concerns, we construct our *Labor Insurance Benefits* preference scale, defined a priori, using a set of 10 manifestos categories relating specifically to

1998), which obviously makes it difficult to trace changes back to any single government. In contrast, changes to unemployment and sickness benefits tend to be more immediate, rather than gradually phased in over several years, and thus are easier to attribute to the government that initiated them.

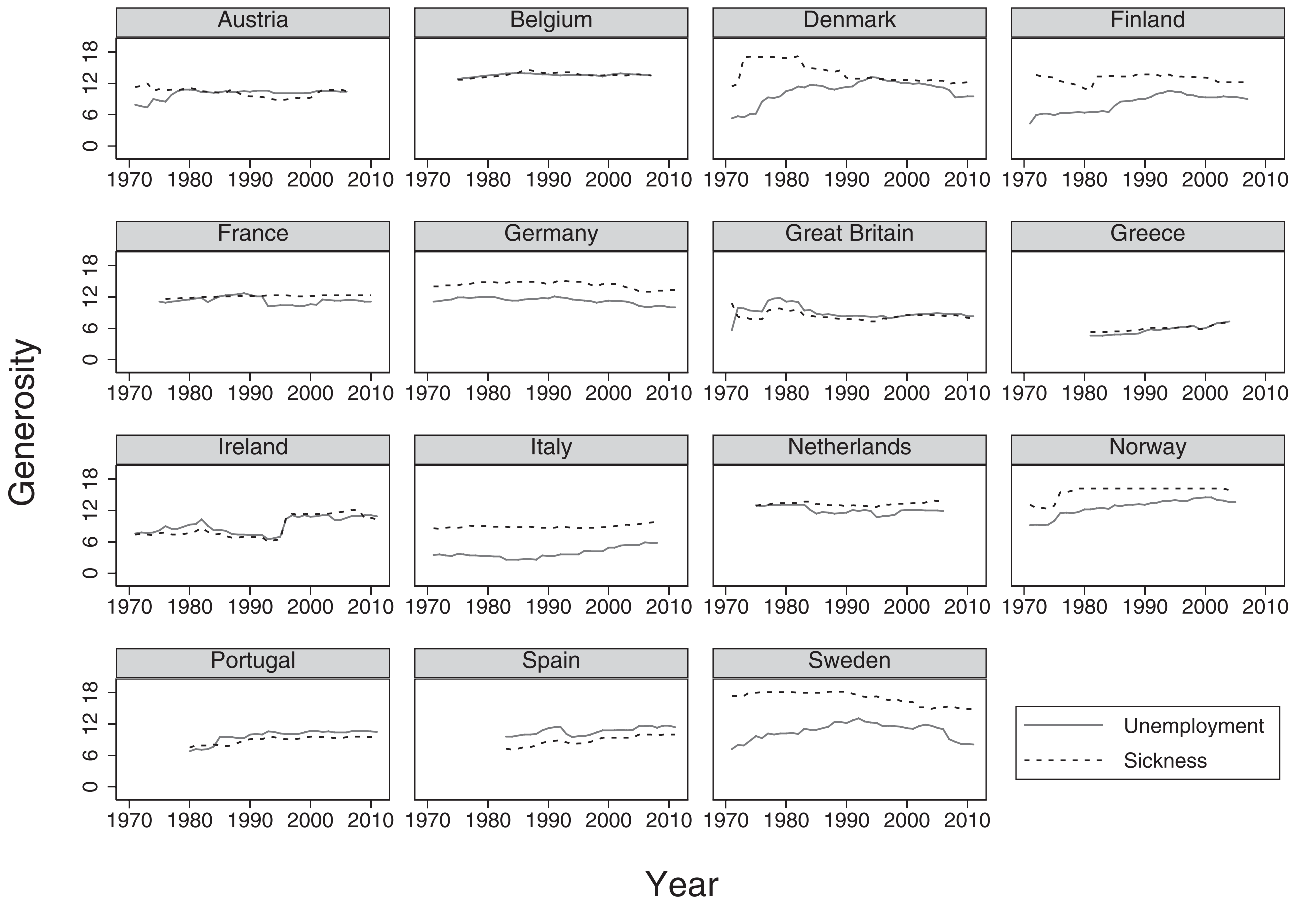
[6]Our sample was chosen on the basis of data availability. The data set we use on legislative policing institutions covers only these countries plus Luxembourg (a country for which we do not have CWED2 data). The beginning date of each time period is determined by the start date of the CWED2; the end date is determined by the last election covered by the 2011 release of party manifestos by the Manifestos Project. There are two country-years for which we have information on unemployment benefits but not sickness benefits: Finland (1971) and France (1975).

[7]Each index for a given country-year is calculated as follows: Coverage $*$ {2 $*$ $z$[Average benefit replacement rate] + $z$[$ln$(Benefit duration weeks)] − $z$[$ln$(Benefit qualification weeks)] − $z$[Waiting days] + 12.5}, where $z$ is the $z$-score of the associated component normalized on its cross-national, cross-temporal mean and standard deviation. The start dates shown in the figure precede the start date for the analysis because our models include lags.

[8]Because the indices are each standardized in terms of their respective components (see note 7), they can be directly compared.

[9]We identified the ministries responsible for the two social protection programs based on information we gathered from a variety of sources, including historical descriptions provided by the ministries themselves, parliamentary documents detailing their competences, and the bills they introduced in the legislature. See Appendix A in the supporting information (SI) for a list of these ministries.

**FIGURE 2 Social Insurance Generosity, by Country and Year**




party statements on the welfare state, social protection, and economic regulation.[10] Parties that pledge, on net, to lower regulations on business and cut back welfare state benefits receive positive values, whereas parties that pledge, on net, to increase market regulation and expand welfare state benefits receive negative values.

For each government in our sample, we assign to the minister responsible for unemployment (sickness) policy the position of his or her party on our economic scale. Our first independent variable of interest, *Conservatism of the Minister*, is measured as the position of the relevant minister aggregated over a country-year.[11] We also require an estimate of the position of the government as a whole on our scale. As in earlier work, we calculate the government compromise position as the *seat-weighted average position* of all parties in government (Martin and Vanberg 2014). Again, the key conjecture we want to evaluate is that, as divisions increase between the preferences of the party of the minister and the preferences of the government as a whole, the institutional setting within which policy is made becomes critical. Testing this conjecture requires a measure that (1) separates the position of the minister from the position of the government as a whole and (2) identifies situations of conflict between the relevant minister and the other coalition partners. In other

[10]Specifically, to capture "rightist" party positions (i.e., opposition to greater benefits for the unemployed or sick/disabled), we use manifesto categories 401, 402, 414, 505, and 702; to capture "leftist" party positions (i.e., support for greater benefits), we use categories 403, 412, 503, 504, and 701. We first performed confirmatory factor analyses, shown in S1 Appendix B, to ensure that the five items on the right load together and that the five items on the left load together. We then used the factor scores derived from that analysis to create relative weights for each category, since the factor loadings indicate that some categories are more important than others in explaining variance in either opposition to benefits (on the right) or support of benefits (on the left). We constructed our scale by using the log-odds ratio method recommended by Lowe et al. (2011), as also detailed in S1 Appendix B.

[11]Aggregation is necessary because the CWED2 generosity indices are coded on a calendar-year basis, but there may be more than one minister (and government) in office in a given year, and the data do not allow us to observe when over the course of the year changes to benefits were made. We weight the minister's position by the proportion of the year in which the minister served, and then sum the weighted measures across all ministers serving that year.

words, we require a measure of the *divergence* between the minister and the government compromise position. This independent variable, which we call *Relative Government Conservatism*, is calculated as the position of the compromise *minus* the position of the relevant minister. A positive value for this variable indicates that the government is to the right of the minister, whereas a negative value indicates that the government is to the left of the minister.

In line with our argument, we interact this variable (which is also aggregated over a country-year) with a measure of the *Policing Strength* of the legislature. In the previous section, we described eight institutional features of legislatures that serve to strengthen, or weaken, the ability of coalition partners to effectively scrutinize and amend ministerial initiatives. In previous work, we developed an index of policing strength derived from a factor analysis of those institutions (Martin and Vanberg 2011). One shortcoming of this measure, for our present purposes, is that it is *static* (as it is based on averaged values of the eight institutional features over a period of several years). Accordingly, we now extend our data by gathering information on these (changing) features across time for the 15 legislatures in our study. This has allowed us to create a *dynamic* measure of legislative policing strength, which we display in Figure 3.[12]

We arrange the countries in the figure in descending order of their average legislative policing strength, and for presentational purposes, we divide them into three groups: *strong*, *moderate*, and *weak* policing.[13] Notably, our ranking corresponds closely to the ranking shown in our earlier work; for example, the same set of countries are in the top five and in the bottom four, albeit with slight movements between countries at the top. But we can also clearly see that policing strength has not been entirely static in most countries over time. The majority of changes have been due to modifications in the number of legislative committees, the size of those committees, and the degree to which they correspond to government ministries; other features of policing strength have been rather stable.[14] Moreover, most changes have been gradual (usually trending toward greater policing strength), but there have been a few notable exceptions: the Netherlands in the mid-1990s, when new standing orders were adopted that drastically reduced the number of committees (bringing policing strength down to a moderate level); Belgium in the late 1970s, when big cuts were also made to the number of committees; and Ireland in the mid-1990s, when a new system of permanent committees was finally put into place after several years of reform efforts.

## Analysis and Findings

We focus on two dependent variables in our analysis: yearly change in a country's level of generosity in unemployment benefits and yearly change in its level of generosity in short-term disability and sickness benefits. Given the longitudinal structure of our data, we use time-series cross-section (TSCS) methods, which allow for estimation of the short-term and long-term effects of the covariates (all of which are measured *prior* to the beginning-of-year CWED2 measures of generosity). Thus, we can assess how our key theoretical variables—the economic conservatism of the minister and the conservatism of the government relative to the minister (conditional on the strength of legislative policing institutions)—translate to immediate changes in the two social insurance schemes and to changes in subsequent years.

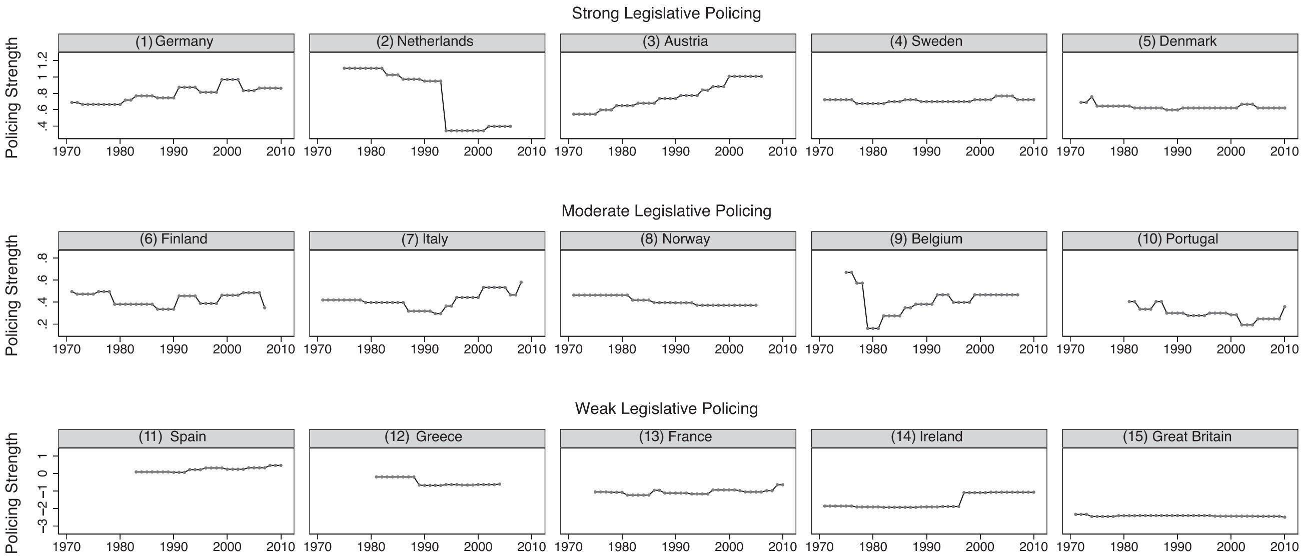
To isolate the effects of these variables, we consider three macroeconomic indicators per model that are potential confounders, in that they may impact both the provision of benefits and the economic positions taken by government parties. Specifically, in both models, we control for two "supply side" factors relating to the capacity of governments to expand benefits: growth in GDP per capita and growth in the budget deficit. With regard to "demand side" factors, in our unemployment insurance model, we control for the (log) rate of unemployment. And in our sickness insurance model, we control for the share of total yearly expenditure on health care that is financed by the government, as several studies have shown that greater out-of-pocket spending by individuals on health care decreases their use of preventive services (see, e.g., Rezayatmand, Pavlova, and Groot 2013), which leads to increases in illness-related employee absenteeism and thus the need for paid sick leave. As with our theoretical variables, we account for the short-term and long-term effects of these variables.

[12] In SI Appendix C, we present the results of a new factor analysis of the eight institutional variables (based on information from our set of country-years) that we use to construct the dynamic policing index. We code all variables in terms of their values at the *beginning* of the legislative term. If one term ends in the same year that another term begins, we use a time-weighted average value (rounded for integer variables).

[13] Note that the policing strength scale differs across the three subsets of graphs. In the analysis below, we use the individual country-year scores, not the country-level averages.

[14] The major exception is France, which passed a constitutional amendment in 2008 (going into effect in 2009) that gave parliamentary committees rewrite authority (in addition to increasing the number of permanent committees from six to eight, and decreasing their size).

**FIGURE 3 Policing Strength of 15 European Parliaments over Time**




*Note*: Country rankings are based on the *average* policing strength score over the set of sample years. The average scores are as follows: (*Strong*) Germany (0.79), Netherlands (0.76), Austria (0.76), Sweden (0.71), Denmark (0.63); (*Moderate*) Finland (0.43), Italy (0.42), Norway (0.41), Belgium (0.41), Portugal (0.30); (*Weak*) Spain (0.23), Greece (–0.50), France (–1.05), Ireland (–1.61), Great Britain (–2.42). Note that the policing strength scale differs across the three subsets of graphs.

We also include lags of the dependent variable in our models—specifically, a 1-year lag of the *level* of unemployment (sickness) generosity and a 1-year lag of the *change* in generosity.[15] As with the macroeconomic indicators, our rationale is that we wish to purge any sources of possible spurious association between our key theoretical variables and policy change. We suspect that the electoral stances taken by government parties on benefits depend in part on the generosity of the current system. Moreover, the previous level of unemployment (sickness) generosity and the previous change in generosity are likely to have a direct impact on the current extent of changes. Governments inherit existing schemes that set public expectations for what benefits will be in the future. Even if governments would like to make sudden, dramatic changes, doing so would potentially create uncertainty about future policy shifts, which could have disruptive effects on the spending patterns and planning abilities of households and firms. Thus, given the incentives of governments to reduce uncertainty, we expect to see considerable inertia in these areas.[16]

Another issue we must consider concerns the possibility of unobserved heterogeneity at the country level in the provision of benefits. As Figure 2 makes clear, differences exist in the average level of generosity across countries, which may be due to factors (e.g., a country's history or "culture") that cannot easily be incorporated into an empirical model. If these unobserved factors also affect the economic positions taken by political parties, we must be concerned about the possibility of a spurious relationship between our theoretical variables and policy change.

The standard approach to dealing with unit-specific heterogeneity in TSCS data is to allow for country-specific intercepts (i.e., unit fixed effects). This is equivalent to "de-meaning" the dependent variable and all covariates. Although this approach eliminates the possibility of omitted variable bias arising from time-invariant factors, it introduces an additional methodological complication when a lagged dependent variable is included in the model. Namely, the (implicit) de-meaning of covariates induces a correlation between the lagged dependent variable and the contemporaneous value of the error term, potentially producing biased and inconsistent parameter estimates (Nickell 1981). Fortunately, scholars have

[15]Including the latter variable, when the former is included, is equivalent to including a 2-year lag of the level of generosity. Following Hendry's (1995) advice for choosing an appropriate lag structure, we first estimated a model with multiple lags and then "tested down" (via $t$-tests) to determine how many lags to include.

[16]Some scholars have cautioned against the inclusion of lagged dependent variables, which may lead to biased coefficient estimates in the presence of residual autocorrelation. In our specification, however, the level of residual autocorrelation is insignificant, largely eliminating this problem (Keele and Kelly 2006).

proposed several instrumental variable estimators to effectively purge this correlation from the model. We use the system estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998), which has proven to be very successful in both minimizing bias and maximizing efficiency (for an excellent overview of this class of models, see Wawro 2002).

In Table 1, we present the results of our dynamic panel estimation for both dependent variables.[17] The estimates allow us to evaluate both the *short-term* and *long-term* effects of the covariates. We begin by considering the estimated short-term effects.[18] The coefficient estimates for the theoretical variables must be interpreted with caution since multiple interactions are present in the model. In particular, recall that the coalition compromise position on economic policy is expressed *relative to* the position of the minister, and this relative conservatism variable is itself interacted with the policing strength index. Thus, the negative coefficient estimate for the variable, Δ *Conservatism of the Minister*, reflects the expected decrease in unemployment (sickness) insurance generosity from one year to the next when the minister moves by one unit in a conservative direction over that year *and* when the change in the relative conservatism of the government in that year is equal to zero. This might happen, for example, in successive years of single-party government (assuming such a government is ideologically homogeneous) or in successive years of coalition government in which all government parties share the same policy position. Similarly, the negative coefficient estimate for Δ *Relative Conservatism of Government* reflects the expected annual decrease in unemployment (sickness) insurance generosity when the government as a whole moves one unit further to the right of the minister in that year *and* when this occurs in legislatures for which the policing strength index is equal to zero (which does not occur in our sample of country-years).

Because these interactions are difficult to interpret directly, we provide visual illustrations of the substantive effects of our key variables. We begin with the short-term effect of the relative conservatism of the government. We explore this effect by considering a hypothetical scenario in which the position of the relevant minister is held *fixed* from one year to the next, but the relative conservatism of the government increases by a standard deviation (about 0.60 points on our economic scale). Such a scenario might occur, for example, if the party of the minister leaves one government coalition and enters a new one with more conservative partners. We examine the impact of such a hypothetical change, for both of our social insurance programs, under two different sets of legislative institutions: those present in Germany, where legislative policing institutions are *strong*, and those present in France, where these institutions are *weak*.[19]

After calculating these predicted conditional effects for each policy area, along with their standard errors, we generated a distribution of 1,000 predicted conditional effects, for each set of policing institutions, on unemployment and sickness generosity.[20] We display these distributions in Figure 4. The curves in the figure correspond to kernel density estimates of the frequency of the corresponding predicted values on the x-axis. The solid part of each curve covers the range of predicted values from the 5th to 95th percentiles of the distribution (i.e., this part of the curve corresponds to a 95% confidence interval); the dotted part of each curve covers values falling outside this interval. Finally, the median value of each distribution is indicated by a dashed vertical line.

Note first that, for both policy areas, whether (and to what extent) a shift in the position of the government as a whole makes a difference to policy outcomes depends significantly on the strength of legislative policing institutions. Beginning with unemployment policy, we see that, under the weak institutions characteristic of France, an increase in relative government conservatism has no statistically discernible impact on change in benefit generosity (i.e., the confidence interval of the distribution of

[17] Post-estimation, we tested for second-order autocorrelation in the errors, since the moment conditions in the dynamic panel estimator are only valid if serial correlation is not present. Fortunately, using the Arellano-Bond test, we were not able to reject the null of no AR(2) correlation in either model ($p > .30$, $p > .80$, respectively). We also conducted a Sargan test to assess the validity of the overidentifying restrictions in the models, where the null hypothesis is that all instruments are uncorrelated with the contemporaneous error term. We were not able to reject the null ($p > .50$, $p > .60$, respectively), leading us to conclude that the instruments satisfy the moment conditions of the generalized method of moments (GMM) estimator.

[18] Coefficient estimates from TSCS models can be presented in two equivalent forms: the autoregressive distributed lag (ARDL) form (resulting from a regression of the *level* of the dependent variable on level-form covariates and their lags) or the error correction model (ECM) form (resulting from a regression of the *first difference* of the dependent variable on first-differenced covariates and their level-form lags). We prefer the ECM form because the information needed to calculate long-run effects, which we discuss in more detail below, is readily accessible from the table of coefficients (De Boef and Keele 2008). Thus, in Table 1, we perform a Bårdsen transformation of the ARDL estimates from the dynamic panel model to produce ECM estimates. Due to space limitations, the country-specific intercepts are not shown.

[19] In this example, we use the average policing strength score for each country, shown in the note beneath Figure 3.

[20] Specifically, each set of simulated effects was drawn from a normal distribution, with the mean set to the appropriate calculated conditional effect and the standard deviation set to the standard error of this effect.

**TABLE 1 Effect of Minister and Government Policy Preferences on Change in Social Protection Program Generosity, Conditional on Legislative Policing Institutions**

| Explanatory Variables | Unemployment Insurance | Sickness Insurance |
|---|---|---|
| Δ Conservatism of the Minister | −0.081*** | −0.053** |
| | (0.028) | (0.026) |
| Δ Relative Conservatism of Government | −0.097* | −0.046 |
| | (0.056) | (0.048) |
| Δ Relative Conservatism of Government × Policing Strength | −0.097*** | −0.097*** |
| | (0.035) | (0.031) |
| Δ Policing Strength | 0.205 | 0.137 |
| | (0.281) | (0.261) |
| Δ GDP per Capita Growth | 0.079* | 0.091** |
| | (0.047) | (0.039) |
| Δ Deficit Growth | −0.021** | −0.008 |
| | (0.010) | (0.010) |
| Δ Log Unemployment Rate [Δ Public Health Share]† | −0.020 | 0.010 |
| | (0.146) | (0.010) |
| Conservatism of the Minister ($t-1$) | 0.009 | −0.037** |
| | (0.021) | (0.018) |
| Relative Conservatism of Government ($t-1$) | −0.027 | −0.036 |
| | (0.042) | (0.038) |
| Relative Conservatism of Government × Policing Strength ($t-1$) | −0.021 | 0.015 |
| | (0.030) | (0.026) |
| Policing Strength ($t-1$) | −0.011 | 0.027 |
| | (0.126) | (0.118) |
| GDP per Capita Growth ($t-1$) | 0.101* | 0.130*** |
| | (0.061) | (0.045) |
| Deficit Growth ($t-1$) | −0.029** | −0.016 |
| | (0.015) | (0.014) |
| Log Unemployment Rate ($t-1$) [Public Health Share ($t-1$)]† | −0.104** | 0.005 |
| | (0.047) | (0.005) |
| Unemployment (Sickness) Generosity ($t-1$) | −0.097*** | −0.103*** |
| | (0.018) | (0.019) |
| Δ Unemployment (Sickness) Generosity ($t-1$) | 0.093*** | 0.054* |
| | (0.031) | (0.030) |

*Note*: Bårdsen-transformed coefficient estimates from Arellano-Bover Blundell-Bond linear dynamic panel model with country fixed effects (GMM standard errors in parentheses) are shown. Estimates for the country-specific intercepts are not shown. N = 498 country-years (unemployment) and 496 country-years (sickness).

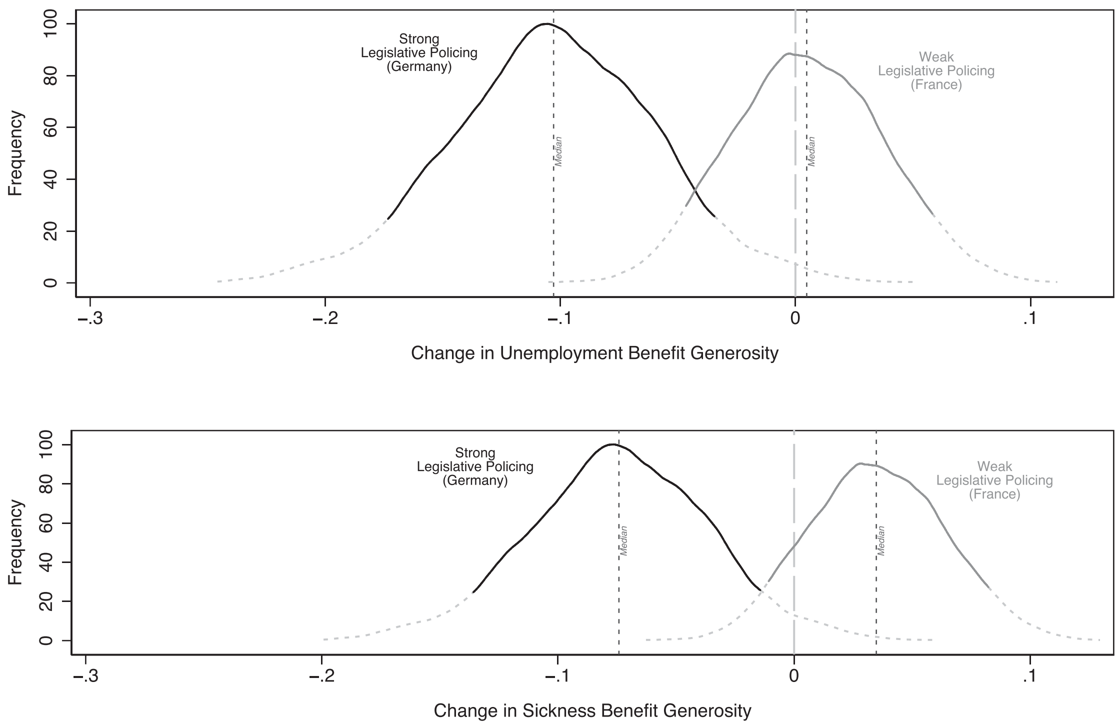
†Estimate is for the log unemployment rate variable in the unemployment insurance model and for the public health share variable in the sickness insurance model.

*p <. 10, **p < .05, ***p < .01.

predicted effects clearly encompasses zero). This is similarly the case for sickness benefits policy. Conversely, under the strong institutions characteristic of Germany, this hypothetical rightward shift in the economic preferences of the government is predicted to lead to a clear reduction in both unemployment and sickness protection.

To better grasp the substantive significance of this finding, we unpack how such a predicted change under strong institutions impacts the most important components of social insurance generosity. For brevity, we focus here on unemployment benefit generosity, specifically on the median predicted change in this index under strong institutions—a decrease of approximately 0.10 points. We calculate changes in the components of this index using the component values for Germany in 2005, the last year for which we have CWED2 data on the components for all countries in our sample. Such a decrease in the unemployment generosity index translates to one of the

**FIGURE 4 Effect of Increase in Relative Conservatism of Government on Unemployment and Sickness Insurance Generosity, Conditional on Legislative Policing Institutions**




*Note*: Kernel density estimates of the effect of a standard deviation increase in Relative Coalition Conservatism on benefit generosity (N = 1,000 simulated predictions per legislative policing regime) are displayed. The solid part of each curve encompasses the range of simulated predicted effects from the 5th to 95th percentiles of the distribution.

following changes in the index components (holding all other component values constant):

- a reduction of about 2.8 percentage points in the benefit replacement rate, or
- an increase of over 6 months in time spent on the job before an individual can qualify for unemployment benefits, or
- a reduction of 0.78 percentage points in the share of the labor force covered by unemployment insurance.

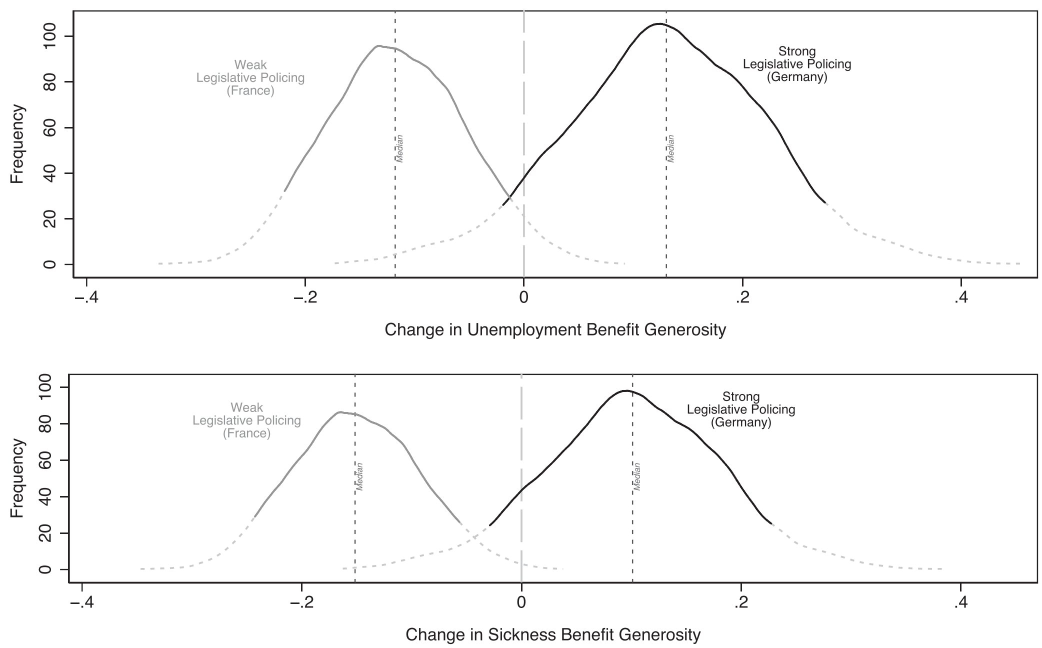
In short, we see that, in legislative environments where coalition partners can effectively scrutinize (and, if necessary, correct) the actions of a cabinet minister, changes in public policy will reflect shifts in their preferences even if the preferences of the minister remain virtually the same.

We now turn to investigating the short-term impact of the conservatism of the minister. We explore this effect by considering a new hypothetical scenario. In this case, we assume that there exists a two-party coalition in which, during the first year in office, the relevant ministry is controlled by the leftist party in the coalition, but that, at the beginning of the second year, a *reshuffle* occurs that transfers control of the ministry to the rightist party.[21] We further assume that the parties are of equal size, so that the coalition compromise is located exactly midway between them and is unaffected by the reshuffle. We have argued that ministers are more likely to "get their way" when legislative institutions are weak. We evaluate this claim by comparing the effect of the hypothetical reshuffle under the same set of institutions considered in Figure 4: the strong legislative institutions of Germany and the weak legislative institutions of France.

As shown in Figure 5, the differences across the two sets of legislative institutions are as stark as they were in the previous figure. In particular, under the weak policing institutions in France, unemployment and sickness benefits are predicted to become markedly less generous after the more conservative coalition partner takes over the

[21] In this example, we set the policy position of the leftist party at the 25th percentile value of the *Conservatism of the Minister* variable and the position of the rightist party at the 75th percentile value.

**FIGURE 5 Effect of Increase in Conservatism of the Minister on Unemployment and Sickness Insurance Generosity, Conditional on Legislative Policing Institutions**




*Note*: Kernel density estimates of the effect of an increase in Conservatism of Minister, from its 25th to 75th percentile values, on benefit generosity (N = 1,000 simulated predictions per legislative policing regime). The solid part of each curve encompasses the range of simulated predicted effects from the 5th to 95th percentiles of the distribution.

ministry. Under German institutions, however, the hypothetical reshuffle is expected to have no discernible impact on generosity for either social insurance program. Similar to what we did earlier, we can examine the substantive impact of the shift in the preferences of the minister by evaluating the median predicted change in terms of the individual components of the generosity index. In this case, we focus on the median prediction under French institutions for unemployment benefit generosity, which is a reduction of approximately 0.12 points. Based on the component values for France in 2005, this decrease translates to one of the following changes in the index components (holding all other component values constant):

- a reduction of more than 2.8 percentage points in the benefit replacement rate, or
- an increase of 4 months in time spent on the job before an individual can qualify for unemployment benefits, or
- a reduction of over 0.90 percentage points in the share of the labor force covered by unemployment insurance.

In short, these findings clearly indicate that when legislative institutions are weak and strengthen ministers at the expense of their coalition partners, policy outcomes are responsive to the preferences of parties that control the relevant ministry.

We can also assess how quickly changes in the covariates affect unemployment and sickness benefits. To assess long-term effects of our theoretical variables, we calculate the long-run multiplier (LRM) for the lagged *Conservatism of the Minister* and the lagged *Relative Conservatism of Government* variables (under all values of legislative policing strength). We find that, for both models, the LRM for each variable is statistically insignificant at the 5% level.[22] This implies that both unemployment policy and sickness policy are responsive to changes in the preferences of government actors in the short term, rather than spread out over several years. Moreover, the small negative coefficient on the error correction rate,

[22] However, in the sickness insurance model, the LRM for the lagged *Conservatism of the Minister* variable is significant at $p < .10$. The LRM for a covariate (expressed in ECM form) is computed by dividing the negative of its lagged coefficient by the coefficient on the lagged dependent variable. Because the LRM is a ratio, its variance is approximated as $(\frac{1}{b^2})Var(a) + (\frac{a^2}{b^4})Var(b) - 2(\frac{a}{b^3})Cov(a, b)$, where $a$ represents the coefficient on the lagged covariate and $b$ represents the coefficient on the lagged dependent variable.

*Unemployment (Sickness) Insurance Generosity* ($t-1$), implies that once policy is "shocked" by a change in government or ministerial party preferences, the rate of return to its long-run equilibrium is very slow.

These findings provide clear support for our central argument, but there is a final issue we need to consider. Specifically, it is possible that parties can use other institutions, particularly at the cabinet level, to rein in ministerial drift, and that the presence of these institutions may be correlated with the presence of legislative institutions. If that is the case, then we may be attributing an impact to legislative mechanisms that is due instead to mechanisms inside the executive. Exploring this possibility empirically is tricky: Many executive institutions highlighted by scholars as "conflict management" devices—such as cabinet committees and inner cabinets—are, at least in principle, available to *all* governments because they are informal and can be created, reshuffled, or disbanded at any time. Obviously, this provides no empirical leverage to analyze their effects. Moreover, scholars who study cabinet conflict management devices (see, e.g., Andeweg and Timmermans 2008) have recorded the presence of these mechanisms only post hoc—that is, these features have only been coded as "existing" if governments relied on them (publicly) to resolve conflicts. Even then, it is often not clear which cabinet ministers were members of which groups.

Fortunately, this is not true for the cabinet-level institution that has received the most attention from researchers—junior ministers (Lipsmeyer and Pierce 2011; Thies 2001). Unlike other executive institutions, the existence, and identity, of a junior minister (JM) is generally known at the beginning of a government's life (when cabinet-level positions are assigned). As we noted earlier, the appointment of a "shadow" JM by a coalition partner may allow it to "keep tabs" on a minister. To assess whether coalition partners are able to use the JM post in this way and, if so, whether this alters our findings regarding the importance of legislative policing institutions, we add two new covariates to the analysis: a dichotomous variable indicating whether a shadow JM is present in the relevant ministry and a positional variable measuring the conservatism of the shadow JM on our scale. If this cabinet-level institution matters, we should see a *decrease* in unemployment (sickness) generosity (holding constant the position of the minister) as the party possessing the shadow JM post is more economically conservative. However, our findings (see SI Appendix D) reveal no such effect: The policy position of the shadow JM has no discernible impact on change in unemployment or sickness benefits. This finding is consistent with our earlier theoretical discussion, which suggests that policing institutions at the executive level are less likely to be effective than those present inside the legislature.

## Conclusion

Motivated by a concern for the quality of representation in parliamentary democracies, scholars have increasingly devoted attention to understanding the policymaking process under coalition governments. What positions do these governments take? Which parties' priorities and preferences are reflected in policy choices? A prominent theme in this literature concerns the tensions resulting from the delegation problems multiparty governments confront. Parties that govern jointly must pursue common policies, but they often have different preferences over them. In addition, cabinets must delegate discretion in policy development and implementation to cabinet ministers, who have access to departmental resources that provide requisite policy expertise. Consequently, multiparty governments must deal with the fact that though the coalition as a whole may want to pursue a policy compromise, the need to delegate raises the risk that such compromises are undermined by "ministerial drift." Coalition governance thus constitutes a problem of credible commitment.

Over the past decade, scholars have advanced the argument that whether coalitions can resolve this commitment problem depends on institutional context (Martin and Vanberg 2005, 2011; Thies 2001). In the absence of institutions that allow coalition partners to scrutinize ministerial draft bills and to develop alternative policies, it is difficult to control ministerial discretion. As a result, policy will reflect the preferences of the party with control of the relevant ministry. But where policymaking institutions provide parties with the ability to "keep tabs" on their partners, compromise agreements are viable. In such contexts, the argument goes, coalition policy will reflect the influence of all government parties. A number of institutions could conceivably be employed for this purpose. But as we have argued, legislative institutions are particularly important for practical and political reasons.

This line of scholarship has reshaped our understanding of coalition governance, highlighting the importance of the institutional environment. Yet, there has also been a significant limitation. Empirical work has lagged behind theoretical developments, and scholars have thus far provided only circumstantial evidence for the key claim that coalition policymaking depends on institutional context. The key contribution of this study has been to overcome this limitation. We provide direct evidence that coalition policies are shaped significantly by the nature of legislative policing institutions.

Our findings have significant implications. Most obviously, they imply that *whose* preferences are reflected in policy under coalition government depends critically on broader institutional features. In systems that enable ministers to dominate the legislative process, policy tends to reflect the positions of ministerial parties. In contrast, when legislative institutions enable effective scrutiny and amendment of ministers' proposals, policy tends to reflect a compromise among coalition partners. Put differently, the *same government*—in terms of its party composition and portfolio allocation—will make *different policy choices* in different institutional settings, and these policy choices will be favored by different sets of citizens.

These findings bear on other aspects of coalition governance and parliamentary politics. Consider the implications for the importance of portfolio allocation. How ministries are distributed among parties is of intrinsic interest to politicians and receives considerable media and scholarly attention. Yet, our results highlight that whether portfolio allocations are significant for policy outputs—and thus for the quality of representation that citizens presumably care about—varies across institutional settings. In some circumstances, control of a ministry by one party rather than another is likely to have important implications for policy. In other settings, it may not make a substantial difference: Policy will be jointly determined by coalition partners, regardless of who controls the relevant ministry.

The fact that policy outcomes are conditioned by institutional context also has ramifications for the coalitions that are likely to emerge from government formation attempts. Expectations about the policies a government will pursue determine, in part, how attractive alternative coalitions are for party leaders. Our contribution suggests that because institutional context shapes the ability of coalitions to reliably enforce compromise agreements, and thus policy outcomes, it should also play a role in coalition formation. For example, in systems with strong legislative institutions, party elites should pay close attention to negotiating a mutually acceptable agreement since this compromise is likely to be realized in government policy. Coalitions that include "preference outliers" are not necessarily problematic because party leaders know that ministers can be effectively controlled. From a policy perspective, the distribution of portfolios across parties becomes secondary. In contrast, in systems with weak legislative institutions, party leaders must approach policy negotiations with a more skeptical attitude, given the greater influence of cabinet ministers. Compromise agreements are more difficult to sustain, and coalitions containing preference outliers are more likely to pose difficulties. How portfolios are allocated across parties therefore becomes a primary issue. Thus, we expect that in systems with strong legislatures, parties will be more willing to allocate important ministries to relative preference outliers, whereas parties in weak systems will prefer to award these ministries primarily to partners with centrally located preferences.

Finally, our results speak not only to the behavior of party elites or coalition policymaking. They also have implications for citizens. In deciding how to cast their votes, citizens must attribute responsibility to individual coalition parties. Our evidence suggests that in doing so, voters should be sensitive to the institutional details of their polity. In systems with weak legislative institutions, *direct* responsibility for policy largely rests with the party controlling relevant portfolios; in strong systems, ministerial parties are effectively constrained by their coalition partners. In such systems, voters have less reason to concern themselves with the precise details of portfolio allocation, whereas such minutiae are far more relevant for attributing blame or forecasting policy in weak systems.

Of course, while these results represent a clear step forward, considerable scope for future work remains. Given the available data, our analysis has focused on two policy areas—unemployment insurance and short-term disability and sickness insurance—that provide an appropriate testing ground for our argument. These policies are salient, touch on a number of contemporary political concerns, and are amenable to reforms by single governments (rather than by successive governments over several years). Moreover, there are strong theoretical reasons to believe that our findings translate to other policy domains. The results demonstrate that in at least two central policy areas, parties in coalition take advantage of strong legislative institutions to constrain the influence of cabinet ministers. But the institutions that allow them to do so are general, and not specific to the policy domain we have examined. Given the strong incentives of parties to enforce coalition compromise agreements, it would therefore be surprising if parties chose not to take advantage of the same opportunities in other policy areas. Nevertheless, it is obviously desirable to expand this approach to other areas in future work. Similarly, we have examined only one set of institutions, but coalition governments may rely on other mechanisms to rein in ministerial drift. Expanding the institutional scope of the analysis thus represents another clear avenue for progress.

## References


Andeweg, Rudy B., and Arco Timmermans. 2008. "Conflict Management in Coalition Government." In *Cabinets and Coalition Bargaining: The Democratic Life Cycle in Western Europe*, ed. Kaare Strøm, Wolfgang C. Müller, and Torbjörn Bergman. Oxford: Oxford University Press, 269–300.

Arellano, Manuel, and Olympia Bover. 1995. "Another Look at the Instrumental Variable Estimation of Error-Components Models." *Journal of Econometrics* 68(1): 29–51.

Becher, Michael. 2010. "Constraining Ministerial Power: The Impact of Veto Players on Labor Market Reforms in Industrial Democracies, 1973–2000." *Comparative Political Studies* 43(1): 33–60.

Blundell, Richard, and Stephen Bond. 1998. "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models." *Journal of Econometrics* 87(1): 115–43.

Carroll, Royce, and Gary W. Cox. 2012. "Shadowing Ministers: Monitoring Partners in Coalition Governments." *Comparative Political Studies* 45(2): 220–36.

De Boef, Suzanna, and Luke Keele. 2008. "Taking Time Seriously." *American Journal of Political Science* 52(1): 184–200.

Goodhart, Lucy. 2013. "Who Decides? Coalition Governance and Ministerial Discretion." *Quarterly Journal of Political Science* 8(3): 205–37.

Harfst, Philipp, and Kai-Uwe Schnapp. 2003. "Instrumente Parlamentarischer Kontrolle der Exekutive in Westlichen Demokratien." https://www.ssoar.info/ssoar/handle/document/11154.

Hendry, David F. 1995. *Dynamic Econometrics*. Oxford: Oxford University Press.

Kalisch, David W., and Tetsuya Aman. 1998. "Retirement Income Systems: The Reform Process across OECD Countries." Ageing Working Papers 3.4, Social Policy Division, OECD. http://www.oecd.org/pensions/public-pensions/2429570.pdf.

Keele, Luke, and Nathan J. Kelly. 2006. "Dynamic Models for Dynamic Theories: The Ins and Outs of Lagged Dependent Variables." *Political Analysis* 14(2): 186–205.

Korpi, Walter, and Joakim Palme. 2003. "New Politics and Class Politics in the Context of Austerity and Globalization: Welfare State Regress in 18 Countries, 1975–1995." *American Political Science Review* 97(3): 425–46.

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

Lipsmeyer, Christine, and Heather Nicole Pierce. 2011. "The Eyes That Bind: Junior Ministers as Oversight Mechanisms in Coalition Governments." *Journal of Politics* 73(4): 1152–64.

Lowe, Will, Kenneth Benoit, Slava Mikhaylov, and Michael Laver. 2011. "Scaling Policy Preferences from Coded Political Texts." *Legislative Studies Quarterly* 36(1): 123–55.

Martin, Lanny W., and Georg Vanberg. 2005. "Coalition Policymaking and Legislative Review." *American Political Science Review* 99(1): 93–106.

Martin, Lanny W., and Georg Vanberg. 2011. *Parliaments and Coalitions: The Role of Legislative Institutions in Multiparty Governance*. Oxford: Oxford University Press.

Martin, Lanny W., and Georg Vanberg. 2014. "Parties and Policymaking in Multiparty Governments: The Legislative Median, Ministerial Autonomy, and the Coalition Compromise." *American Journal of Political Science* 58(4): 979–96.

Mattson, Ingvar, and Kaare Strøm. 1995. "Parliamentary Committees." In *Parliaments and Majority Rule in Western Europe*, ed. Herbert Döring. New York: St. Martin's Press, 249–307.

Müller, Wolfgang C., and Kaare Strøm, eds,. 2000. *Coalition Governments in Western Europe*. Oxford: Oxford University Press.

Nickell, Stephen. 1981. "Biases in Dynamic Models with Fixed Effects." *Econometrica* 49(6): 1417–26.

North, Douglass C. 1993. "Institutions and Credible Commitment." *Journal of Institutional and Theoretical Economics* 149(1): 11–23.

Pedrazzani, Andrea, and Francesco Zucchini. 2013. "Horses and Hippos: Why Italian Government Bills Change in the Legislative Arena, 1987–2006." *European Journal of Political Research* 52(5): 687–714.

Powell, G. Bingham, Jr. 2000. *Elections as Instruments of Democracy: Majoritarian and Proportional Visions*. New Haven, CT: Yale University Press.

Rezayatmand, Reza, Milena Pavlova, and Wim Groot. 2013. "The Impact of Out-of-Pocket Payments on Prevention and Health-Related Lifestyle: A Systematic Literature Review." *European Journal of Public Health* 23(1): 74–79.

Scruggs, Lyle, Detlef Jahn, and Kati Kuitto. 2014. "Comparative Welfare Entitlements Data Set 2, Version 2014-03." http://cwed2.org/.

Thies, Michael F. 2001. "Keeping Tabs on Partners: The Logic of Delegation in Coalition Governments." *American Journal of Political Science* 45(3): 580–98.

Wawro, Gregory. 2002. "Estimating Dynamic Panel Data Models in Political Science." *Political Analysis* 10(1): 25–47.


## Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

**Appendix A:** Ministries Primarily Responsible for Unemployment and Sickness Insurance Programs
**Appendix B:** Construction and Validity of the Labor Insurance Benefits Scale
**Appendix C:** Factor Analysis of Components of the Legislative Policing Strength Index
**Appendix D:** Effects of Cabinet-Level Institutions