

# UNION DENSITY AND POLITICAL STRIKES

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THIS article is concerned with how the strength of trade union movements affects the frequency of political strikes in advanced democracies. Cross-country differences in protest activity are commonly attributed to electoral systems, party systems, state-society relations, and other elements of national political opportunity structures. The empirical analyses presented here confirm that political opportunity structures matter. But so does the underlying strength of union movements. Concentrating on a particularly important category of protests, this article argues that there is a curvilinear, inverted U-shaped relationship between union density—net union membership as a proportion of all wage and salary earners in employment—and the likelihood of political strikes.

The argument is based on three theoretical claims. The first claim, which explains why political strikes are rare in countries with weak union movements, is that effective protests require a basic level of organizational capacity. The second claim, which explains why political strikes are rare in countries with strong union movements, is that governments that face a high risk of defeat have powerful incentives to adjust their policies to avoid open confrontations with the unions. The third claim, which explains why political strikes are more common in countries with moderately strong union movements, is that it is difficult for governments and unions to reach viable compromises when the strength of the unions is not secure.

The first of these claims is based on the literature on social movements. The second is based on theories of organizational power re-

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sources. The third is based on models of noninstitutionalized political conflicts. The article's main theoretical contribution consists in the way it combines these ideas into a comprehensive analysis of how the underlying strength of trade union movements shapes the strategic interaction of unions and governments. In the empirical sections, I find, as hypothesized, a curvilinear relationship between union density and political strike activity: the likelihood of political strikes is the highest where approximately 35–40 percent of all wage and salary earners in employment are trade union members.

The main results are based on an analysis of political strikes in sixteen West European countries between 1980 and 2008—a period when political strikes became increasingly common in Europe, although significant cross-country differences remained. But I also present additional analyses of a larger set of countries, observed over a longer period of time and using a different indicator of political strikes. To my knowledge, the only previous comparative study of political strikes in Western Europe in the 1980s, 1990s, and 2000s is a recent article by John Kelly, Kerstin Hamann, and Alison Johnston. However, their rich analysis is concerned primarily with the effect of proximate political variables such as the party composition of the government, the type of government, and the negotiation of “social pacts,” not with the effects of the underlying strength of trade union movements.<sup>1</sup>

These results have important implications for comparative politics and comparative political economy, for as the strong popular reactions to fiscal austerity during the European debt crisis of the early 2010s have shown, political conflicts over economic and social policy are increasingly resolved in the streets, not in legislatures or government offices. It is becoming more and more important for political scientists in general and political economists in particular to understand the logic of noninstitutionalized conflicts between governments and interest groups.

The curvilinear relationship between union density and political strikes is stable across a range of model specifications. So are the effects of key aspects of national political opportunity structures, especially the disproportionality of the electoral system. But other variables that might have been expected to influence strike behavior are consistently shown to be insignificant. One such variable is corporatism: the in-

<sup>1</sup> Kelly, Hamann, and Johnston 2013 include a measure of union density as a control variable in their statistical analyses but do not test for a nonlinear relationship (in my models, union density also appears to be unrelated to political strike activity when the quadratic term is omitted). Their analysis of social pacts draws on Hamann and Kelly 2007; and Hamann and Kelly 2011.

stitutionalized involvement of interest organizations in political decision making. This suggests that the underlying strength of trade union movements matters more to the politics of protest in contemporary democracies than the semiformal institutions that structure the relationship between governments and unions.

### POLITICAL CONFLICTS BETWEEN GOVERNMENTS AND UNIONS

The strike is a form of protest that is “generally known and understood” in the contemporary world.<sup>2</sup> Unlike ordinary economic strikes, which are directed against (private or public) employers, political strikes, as defined here, are directed against the policies or policy initiatives of the incumbent government. The analysis presented in this article therefore treats political strikes as a potential outcome of political conflicts between governments and unions over public policy. It is also based on the assumption that most of the time, governments and trade unions behave strategically, balancing two motivations: on the one hand, they care about policy (governments wish to adopt their preferred policies and unions wish to push government policies closer to their own preferred outcomes); on the other hand, they wish to avoid the economic and political costs that are associated with strikes.<sup>3</sup>

### WHERE UNIONS ARE WEAK

The main question for this article is whether the strength of a country’s trade union movement influences political strike activity.

The first and perhaps least controversial part of my argument concerns countries with weak trade union movements, where I expect the likelihood of political strikes to be low. Where unions are so weak that they have no real chance of forcing the government to abandon or modify the policies or policy initiatives that they object to, they have no incentive to organize political strikes, even if they disagree strongly with the government’s policies or policy proposals.

<sup>2</sup> Tarrow 1998, 98–100.

<sup>3</sup> These assumptions would not necessarily be appropriate in other contexts. The assumption that the main purpose of political strikes is to influence policy is reasonable here, since most trade unions in contemporary advanced democracies have well-defined identities and policy aims. Other civil society organizations may have other motivations. As Tarrow 1998, 162, notes, success, for some social movements, “may consist more in establishing a collective identity than in achieving policy success,” and historically, as Shorter and Tilly 1974, 68, observed, trade unions have also organized strikes for other reasons than “to achieve the stated grievances.” The assumption that trade unions and governments take the costs of strikes into consideration is also reasonable here since all strikes—political or economic—are associated with tangible economic and organizational costs (Murillo 2001, 11; Golden 1997, 16). Other forms of protests are less costly, so, again, the arguments developed here may not apply.

The claim that effective political protests require a basic level of organizational strength is supported by a vast sociological literature on how social movement organizations and interest groups acquire the capacity for mobilization and protest. As Guillermo Trejo has recently noted, it is one of the principal lessons of the literature on social movements and contentious politics that the capacity for protest depends on the existence of “mobilizing structures that provide the organizational infrastructure for collective action.”<sup>4</sup>

At first—before the strength of the union movement reaches a point where the other mechanisms that I discuss below begin to reduce the likelihood of protests—I therefore expect increasing union density (as a proxy for the underlying strength of the trade union movement) to result in increasing political strike activity.

#### WHERE UNIONS ARE STRONG

The second part of my argument concerns countries with strong trade union movements, where I also expect the likelihood of political strikes to be low, but for very different reasons: unlike weak unions, which do not strike because they are unable to, strong unions do not strike because they do not need to.

An open confrontation with a strong union movement would be politically costly for any government (particularly if it should lose). Hence, governments in countries with strong union movements are aware of the latent threat the unions pose and therefore have powerful incentives to seek compromises on controversial policy issues in order to avert strikes or other protests. Similarly, unions have strong reasons not to strike if they are able to win concessions from governments through the mere threat of strikes.<sup>5</sup> The most likely outcome of political disagreements between governments and unions in countries with strong union movements is therefore that they reach compromises, open or tacit, on the principal policy issues that divide them. This is not to imply that unions always have their way, but only to suggest that governments will modify their policies and policy proposals where this is necessary to avoid protests.

The literature on social movements, which I relied on above, is chiefly concerned with how social movement organizations acquire the capacity for protest in the first place, not with how strong organizations use their power. The second part of my argument therefore relies

<sup>4</sup> Trejo 2009, 324. For a classic longitudinal study of such capacity building, see McAdam 1999 [1982].

<sup>5</sup> Murillo 2001, 11; Murillo 2000, 145.

on two other literatures: on the one hand, the comparative and theoretical literature on class politics and organizational power resources; on the other hand, the empirical literature on corporatist arrangements in countries with strong union movements, such as those in the Nordic region.<sup>6</sup> As these literatures have demonstrated, governments in countries with powerful unions have had strong reasons to provide the main trade union confederations with some measure of political power and influence at the decision-making stage rather than having to endure the constant threat of strikes and protests. Walter Korpi and Michael Shalev have argued, for example, that where the working class is politically strong, it tends to shift its "conflict strategy" from the economic to the political realm, resorting to strikes less often. This argument concerned ordinary economic strikes, not political strikes, but the basic point should apply to the problem examined here.<sup>7</sup>

Compromises between governments and unions can take different forms depending on the political circumstances. The studies from the 1970s and 1980s cited above emphasized the historical linkage between trade unions and social democratic parties. As the empirical sections of this article will show, however, political strikes are rare at high levels of union density regardless of the ideological composition of the government, suggesting that all governments have reason to seek some form of accommodation with the trade unions if the trade union movement is very strong.

As unions grow stronger, I therefore expect political strike activity to gradually decrease.

#### WHERE UNIONS ARE MODERATELY STRONG

The third part of my argument concerns countries with union movements that are neither very weak nor very strong. In these circumstances, I expect the likelihood of political strikes to be higher, for the following three reasons.

First, this hypothesis follows directly from the arguments that I made earlier about weak and strong unions. If the likelihood of political strikes at first increases with the growing strength of the union movement (as unions build the capacity for protest) but later decreases with the continued growing strength of the union movement (as governments begin to seek political compromises), it seems likely that

<sup>6</sup> On the application of power resource theory to the interaction of governments and unions, see Hibbs 1978; Korpi and Shalev 1979; and Cameron 1984. On corporatism as a solution to endemic class conflict in the Nordic countries, see, for example, Rothstein 1991.

<sup>7</sup> Korpi and Shalev 1979, 170, 177.

there will be some intermediate range of union strength where the second mechanism has not yet begun to counteract the first and where the likelihood of political strikes is therefore at its peak.

The second reason is that both unions and governments have incomplete information about the mobilization capacity of the trade union movement. They may therefore occasionally over- or underestimate its real strength. Where the trade union movement is either very weak or very strong, such information failures do not increase the probability of political strikes, for it is unlikely that very weak unions would think themselves sufficiently strong to defeat the government, and it is similarly unlikely that governments would ignore the threat of political strikes if the trade union movement is in fact very strong. Where the real strength of the union movement lies somewhere between these extremes, however, information failures and mistakes can potentially have important consequences: unions may decide to organize political strikes even if they are in fact too weak to prevail, and governments may decide to ignore the objections of the unions even if it would in fact be more prudent to compromise.

The idea that strikes are a result of information failures has a long history in economics, going back at least to the work of John Hicks.<sup>8</sup> In political science, it has recurred more recently in the work on economic strikes by George Tsebelis and Peter Lange, who observe that economic strikes are more frequent in countries where trade unions have intermediate levels of bargaining power; they explain this fact using a formal model with incomplete information.<sup>9</sup>

The third reason is that in countries with moderately strong union movements, governments cannot easily commit to future policy. Assuming that the union movement's chances of prevailing in a confrontation with the government are not constant but vary somewhat over time—either exogenously (due to the state of the economy or the behavior of third parties) or endogenously (due to the response of the rank and file to agreements between union leaders and the government)—moderately strong unions have to take into consideration that even if they pose a threat to the government today, they may not do so tomorrow. In that case the government will have an incentive to revert back to its preferred policy (no concessions) rather than sticking to any agreements it may have entered into initially.<sup>10</sup> In these circumstances,

<sup>8</sup> Hicks 1963 [1932].

<sup>9</sup> Tsebelis and Lange 1995.

<sup>10</sup> This mechanism is similar to the distinction between a “high-threat” and a “low-threat” state of the world in Acemoglu's and Robinson's models of revolution and democratization (2006, chap. 5).

the unions may rationally prefer an immediate confrontation to uncertain promises about future policy. In countries with strong union movements, by contrast, the unions typically have reason to believe that if they are strong enough to threaten the government today, they will also be strong enough to do so tomorrow. This gives both governments and unions more options than in countries with moderately strong unions.

It is likely that Korpi and Shalev had a similar mechanism in mind when they noted that the transformation that they observed in some European political economies—where strong unions shifted their “conflict strategy” from the economic to the political realm—is possible only where the power of the working class is “secure,” since otherwise “union movements cannot be expected to seriously countenance the restraint which a ‘peaceful’ strategy demands.”<sup>11</sup>

For a good example of how governments and unions interact in countries with strong union movements, consider the major reform of the Danish unemployment insurance system in the mid-1990s, which is an important part of the Danish “flexicurity” model. In the early 1990s, the Danish government wished to introduce stricter conditionality requirements and duration limits in the unemployment benefit system in order to reduce “structural” unemployment. However, the government saw no prospect of implementing such reforms against the will of the trade unions, so the eventual reform was preceded by drawn-out tripartite negotiations, resulting in a policy package that was subsequently adopted and implemented in 1993–94. In return for supporting the unemployment insurance reform, the unions demanded, and got, large investments in Swedish-style active labor-market policies, which explains why a few years later, Denmark spent more on active labor-market programs, as a percentage of GDP, than any other country in the world.<sup>12</sup>

This type of political compromise is difficult to achieve in a country with weaker unions. The compensation that the Danish unions received was not an immediate redistributive transfer but a promise of investments in active labor-market programs that were supposed to be implemented over a period of many years. Since the Danish unions had good reason to expect that they would remain strong enough in the future to hold the government to its promises, the government could credibly commit to future policy. The bargaining situation is more complicated in countries with moderately strong union movements. In

<sup>11</sup> Korpi and Shalev 1979, 180.

<sup>12</sup> Lindvall 2010a, 153–54.

Belgium, for example, whose union movement is weaker than Denmark's, the government also sought to negotiate with the trade unions about a proposed reform to the unemployment insurance system in 2004. However, the government was unable to reach a compromise with the unions regarding new forms of support for the unemployed, and the reform initiative met with widespread protests.<sup>13</sup>

The idea that political bargaining often fails in situations where political agents have some measure of informal political power but cannot be confident about their own future strength recurs in many recent studies of war, civil war, revolution, and democratization.<sup>14</sup> For example, my claim that moderately strong unions may prefer to initiate political strikes immediately rather than entering into political agreements that they cannot be sure of enforcing is inspired by rationalist models of war, in which armed conflict sometimes occurs because one state believes that its power will decline. Thus, assuming that its enemy cannot commit to future foreign policy choices, a state may prefer war today (when it is relatively strong) to the peace it would have to accept tomorrow (when it expects to be weaker).<sup>15</sup>

#### ALTERNATIVE EXPLANATIONS

The theoretical arguments presented here suggest that there should be a curvilinear relationship between union density, as a proxy for strength, and the frequency, or likelihood, of political strikes. As I explain in more detail in the next section, I also expect the level of political strike activity in a society to depend on other factors, including the political context (the electoral system, the ideological orientation of the incumbent government), the economic context (the rates of growth and unemployment), and other characteristics of the trade union movement (centralization, ideological heterogeneity). I will show, however, that the curvilinear relationship between union density and political strike activity remains substantively and statistically significant when all these variables are taken into account (although the magnitude of the effect of union density varies in interesting ways across institutional contexts).

Before moving on to empirical matters, I would like to discuss in brief how the argument presented here relates to earlier studies that have found nonlinear relationships among variables related to the

<sup>13</sup> Faniel 2005.

<sup>14</sup> See, for example, Fearon 1995; Powell 2004; and Acemoglu and Robinson 2006.

<sup>15</sup> Fearon 1995, 406. The idea that bargaining over domestic policy reforms may be complicated by commitment problems associated with the credibility of redistributive promises has also been discussed by Jain and Mukand 2003; and Lindvall 2010b.

power of trade unions, political opportunity structures, and political protests: Peter Eisinger's work on American cities from the early 1970s, which found a curvilinear relationship between the form of government and the frequency of protests (protests were rare in closed systems and open systems but relatively frequent in the intermediate cases); Lars Calmfors's and John Driffill's identification of a curvilinear relationship between wage bargaining centralization and real wages; and Victoria Murillo's work on conflicts between governments and unions in Latin American countries, which shows that the resolution of these conflicts was shaped by the interaction of two variables—the centralization of the union movement and the level of political competition within the unions.<sup>16</sup>

Although it is related to these earlier studies, the logic of my argument is different: Eisinger's work is not concerned with the strength of organizations but instead examines political institutions; Calmfors and Driffill's argument is not about strength but about encompassment; and Murillo conceptualizes strength in terms of organizational unity, not in terms of union density or some other proxy for overall mobilization capacity. More importantly, the curvilinear relationship between union density and political strike activity that I identify in this article is not sensitive to the inclusion of control variables that correspond to the factors that are discussed in these earlier studies: the political opportunity structure, the centralization of wage bargaining, and the presence of ideological competition within the trade union movement.

#### STUDYING POLITICAL STRIKES AND TRADE UNION STRENGTH

The purpose of the empirical analyses, to which I will now turn, is to estimate the effect of trade union strength on the likelihood of political strikes, treating union density as a proxy for the strength of the trade union movement.

Because the empirical analyses rely on pooled time-series data, it is possible to examine not only cross-country differences but also variation over time. This is an important consideration since the frequency of political strikes in the advanced democracies has varied considerably over the time period under consideration here, as has union density (the next section provides a detailed description of how these two variables have varied over time in different countries).<sup>17</sup>

<sup>16</sup> See Eisinger 1973; Calmfors and Driffill 1988; and Murillo 2001.

<sup>17</sup> On changes in union density over time, see, for example, Western 1997; Ebbinghaus and Visser 2000; and Scruggs and Lange 2002.

## POLITICAL STRIKES

The variable *Political Strikes* takes the value 1 if any political strikes were directed against the economic, social, or labor-market policies of the current national government in a given country-year, and the value 0 otherwise.<sup>18</sup> This indicator is based on my own coding of country reports published in the “News” section of the monthly publication *European Industrial Relations Review*.<sup>19</sup> The data set comprises annual observations of sixteen European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom) between 1980 and 2008, for a total of 464 observations. According to my reckoning, there were political strikes in 40 of these 464 country-years (that is, in 8.6 percent of all observations): 10 in Greece and Italy; 5 in Spain, 4 in France and Portugal, 3 in Belgium; 2 in Norway, 1 each in Austria and the Netherlands, and none in Denmark, Finland, Germany, Ireland, Sweden, Switzerland, and the United Kingdom.

By “political” strikes, I refer to strikes that were directed against the policies or policy initiatives of the current government, excluding public sector strikes that only involved the national government in its capacity of employer. In “economic, social, or labor-market policies,” I include fiscal policy, labor-market policy, employment law, pensions and other social insurances, but not, for example, education. The data set includes only strikes that were organized by one or more national unions or union confederations. These data are likely to have high validity and reliability, given that all recorded events were organized by trade unions and concerned policy areas of obvious interest to trade unions and given that political strikes are unusual and dramatic events.<sup>20</sup>

<sup>18</sup> It would in principle have been possible to measure the number of events each year. However, it is difficult in many cases to determine whether a series of political strikes should count as a single event that unfolds over time or as a sequence of separate events, suggesting that it is more prudent to simplify the analysis by relying on binary indicators of political strike activity. Moreover, this study covers a large number of countries that are observed over a long time period; it therefore requires relatively simple indicators. More fine-grained analyses are best left to detailed studies of a small number of countries and shorter time periods; for an example of such a research design, see Ekiert and Kubik 1998, 553–54.

<sup>19</sup> For the years 2007 and 2008, I rely, instead, on reports to the European Industrial Relations Observatory (2011), since the EIRR was discontinued in 2006. I also collected data from the EIRO for the years 2005 and 2006 in order to make sure that there was a high level of agreement between the two sources, and I found no political strikes in the EIRO reports that were not covered in the EIRR reports (or the other way around).

<sup>20</sup> The definitions and coding conventions that I have relied on are similar to those adopted in the recent article on “general” strikes by Kelly, Hamann, and Johnston 2013, but my data set is narrower

## UNION STRENGTH

In the context of the argument of this article, the “strength” of the trade union movement can be defined as its capacity to cause economic disruption and social unrest or otherwise embarrass the government.<sup>21</sup> This capacity is a function of several different factors, including the number of individuals that the unions are able to mobilize, the means of economic and social disruption that are available to them, and how sympathetic other political agents—including the general public—are to the political goals the unions are pursuing.

The empirical part of the paper is concerned exclusively with the first of these dimensions, using *Union Density*—net union membership as a proportion of all wage and salary earners in employment—as a proxy for the mobilization capacity of trade unions. (Full details on data sources, definitions, and descriptive statistics for this and all other explanatory variables can be found in Appendix 1). Although it is not ideal, union density is a reasonable proxy for the mobilization capacity of the trade unions in most advanced democracies, and it is difficult to conceive of a better alternative for the purposes of statistical analysis. It is important to be aware, however, that in some countries, other factors appear to matter greatly to the strength of the unions. For example, in France, a country with a lengthy history of political protest, trade unions have long occupied strategic positions within the public sector and have access to mobilization networks that reach far beyond their own ranks, which means that they are more powerful than the country’s low union density rate suggests.<sup>22</sup> Note, however, that France is an outlier in the analyses presented here (having a low union density rate but relatively many strikes), which suggests that the empirical results that I report would be *stronger* if a better proxy could be found.

## CONTROL VARIABLES

The empirical analyses take into account that governments and unions interact in different political, organizational, and economic environments.

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in scope since it is limited to strikes directed against the incumbent national government’s economic and social policies. In order to assess the reliability of the data from the *European Industrial Relations Review* (EIRR), I have cross-checked the data for 1991–2006 against all corresponding country reports in the *Political Data Yearbook* (PDY), which is published annually by the *European Journal of Political Research*. The comparison suggests that the EIRR reports have missed few relevant events: whereas the PDY omitted nineteen events that were reported in the EIRR, the EIRR omitted only three events that were reported in the PDY. Including these three events in the analysis makes no substantive difference to the results.

<sup>21</sup> Ellman and Wantchekon 2000, 502.

<sup>22</sup> Lindvall 2011. On France’s history of political protests, see Tilly 1986; and Filleule 1997.

One of the most widely accepted explanations for the variation in political protest activity across countries and over time is that political opportunity structures in general and political institutions in particular shape the interaction of pressure groups and political authorities.<sup>23</sup> I include several control variables to account for the role of political opportunity structures. First, I include a measure of *Electoral Disproportionality*, expecting strikes to be more frequent in majoritarian political systems, since such systems provide trade unions with few alternative channels of political influence.<sup>24</sup> Second, I control for *Left Party Cabinet Shares*, since the main trade union confederations are allied with left or center-left parties in most advanced democracies, suggesting that the ideological distance between the government and the unions should be smaller where left parties are in government. Finally, I control for *Corporatist Policymaking*, which is a dummy variable that identifies countries (and periods) where the main labor-market organizations were routinely involved in political decision making through a tripartite council dedicated to social and economic policy.<sup>25</sup> I expect corporatism to have a negative effect on the likelihood of political strikes. This variable has been lagged one year in all analyses in order to address a potential problem of reverse causality (tripartite institutions may presumably break down as a result of political strikes and other protests).<sup>26</sup>

I also control for two structural characteristics of national union movements. The variable *Union Centralization* is included in all models in order to test whether the centralization of the trade union movement and the power of peak-level organizations influence the likelihood of political strikes. The case study literature on countries such as France suggests that the fragmentation of the trade union movement is an important factor in the politics of protest.<sup>27</sup> However, the expected direction of the effect is not clear. On the one hand, centralization may increase the capacity of unions to organize political strikes in the first place. On the other hand, centralized trade unions may be better able

<sup>23</sup> This idea goes back to the work of authors such as Eisinger 1973 and McAdam 1999 [1982] and has been developed by Kriesi et al. 1995 and Tarrow 1998, among others.

<sup>24</sup> Nam 2007 shows that the openness of the political system is negatively related to protest activity, and Vernby 2007 shows that the frequency of economic strikes is higher in majoritarian political systems. See also Scartascini and Tommasi 2012.

<sup>25</sup> I have also tried two dummies rather than one—one for countries with a tripartite council (the “formal” dimension of corporatist policy-making) and one for the routine involvement of interest organizations (the “informal” dimension of corporatist policy-making). The effects of these dummy variables are all insignificant. On corporatism as a mode of policy-making, see especially Molina and Rhodes 2002; and Baccaro 2003.

<sup>26</sup> In all cases where the independent variables are lagged one year, the substantive results are almost identical if the lagged values are replaced by present values.

<sup>27</sup> Culpepper 2002, 781–83.

to conduct political negotiations with the government, decreasing the risk of strikes. The measure of union centralization has been lagged one year in all analyses in order to address a potential problem of reverse causality (the possibility that a conflict between the unions and the government may result in organizational changes within the union movement). Second, the dummy variable *Communist Union Confederation* is included to control for ideological heterogeneity and radicalism within the trade union movement. This variable simply identifies the four countries that have major communist trade union confederations: France, Italy, Portugal, and Spain.

Finally, I control for the main features of the macroeconomic environment by including measures of *Unemployment* and real *GDP Growth* per capita. The literature offers several ideas about the likely effects of these variables. On the one hand, the literature on economic strikes suggests that strike activity should be lower when unemployment is high and growth is low.<sup>28</sup> On the other hand, existing research on recent political strikes in Europe suggests that theories of economic strikes may not apply, and research on political protests more generally suggests that high unemployment and low growth should be associated with numerous economic and social problems that are felt keenly by trade unions and their members, increasing the likelihood of protests.<sup>29</sup> The measure of GDP growth has been lagged one year in order to address a potential problem of reverse causality (prolonged political strikes could plausibly reduce output).

## EMPIRICAL ANALYSIS

Before I proceed to the detailed statistical analysis of the relationship between union density and political strikes, I present a descriptive overview of the development of union density and political strike activity in the sixteen West European countries that are included in the main models.

### DESCRIPTIVE EVIDENCE

As Appendix 2 shows, there is a great deal of variation in the two main variables of interest, both between countries and within countries. The total number of strike-years per country varies between zero and ten,

<sup>28</sup> Ashenfelter and Johnson 1969, 47; Franzosi 1989, 349–51, 357.

<sup>29</sup> On the limited explanatory power of theories of economic strikes in the context of political strikes, see Kelly, Hamann, and Johnston 2013. On the relationship between unemployment, growth, and protests in general, see Nam 2007, 110.

and strikes have become more common over time: there are political strikes in six observations from the 1980s, in sixteen observations from the 1990s, and in eighteen observations from the period 2000–2008. Average union density varies between 0.11 (France) and 0.81 (Sweden). Average union density across countries declined from 0.49 to 0.35 between 1980 and 2008. The fact that both of the main variables vary so much over time suggests that it is meaningful to rely on panel data, as I do, and not just on cross-sectional data.

The evidence in Appendix 2 suggests that there is, as expected, an inverted U-shaped relationship between union density and political strike activity, although the precise shape of this relationship will become clearer later on, when confounding factors are taken into account. In the three countries that had an average level of union density of more than 0.7 between 1980 and 2008—Denmark, Finland, and Sweden—there were no political strikes in this period. Among the eight countries that had an average level of union density of 0.3–0.7—Austria, Belgium, Greece, Ireland, Italy, Norway, Portugal, and the United Kingdom—only two countries did not experience political strikes (Ireland and the United Kingdom). Of the other six countries in this group, two stand out for having had a particularly high level of political strike activity: Greece (mean union density of 0.32) and Italy (mean union density of 0.39). Political strikes were less frequent in the five countries that had an average level of union density of less than 0.3 (France, Germany, the Netherlands, Spain, and Switzerland): France and Spain both had a fairly high level of political strike activity, but in the Netherlands there was only one strike, and in Germany and Switzerland, there were none.<sup>30</sup>

Appendix 2 also suggests that differences in political strike activity are not explained by cross-country differences alone. The relationship between union density trends and the timing of strikes within individual countries also appears to be consistent with the theory presented here. Specifically, most of the political strikes in Austria, Italy, and

<sup>30</sup> The fact that southern European countries such as France and Spain have high political strike activity in spite of their low union density rates may seem inconsistent with the argument that I develop in this article. It is important to note, however, that strikes have been even more common in two southern European countries with higher average union density (Greece and Italy). Moreover, France and Spain have other attributes that contribute to their high levels of political strike activity. First of all, they have significant communist trade union confederations, and communist unions are associated with a higher likelihood of strikes in the models presented here. Second, the level of electoral disproportionality is very high in both France, with its semimajoritarian electoral system (average disproportionality was 0.41 in 1980–2008), and Spain, which has an electoral system with majoritarian effects (average disproportionality was 0.24 in 1980–2008, to be compared with the proportional systems north of the Alps, which are in the range of 0.05 to 0.12).

Portugal—which are all countries where union density was higher than 0.5 percent in the beginning of the period—occurred once union density had declined to somewhere in the range between 0.3 and 0.4.

### ESTIMATION

Due to the binary nature of the dependent variable, I estimate a series of logit models. Since the analysis is based on pooled time-series data, it is important to consider the possibility that the observations in the data set could be temporally related; in other words, each country's prior history of political strikes could affect the likelihood of present strikes.<sup>31</sup> In order to deal with this problem, I follow two recommendations by Nathaniel Beck, Jonathan Katz, and Richard Tucker: (1) including a variable that counts the number of prior observed events (in this case, previous years when political strikes occurred, and (2) including a set of dummies that measure the duration since the most recent event (in this case, the most recent political strike) or since the beginning of the time period under observation, or, alternatively, including a set of natural cubic splines that incorporate the same information without using up as many degrees of freedom.<sup>32</sup> As I note below, the inclusion of a variable that counts the number of prior observed events clearly increases the explanatory power of the model, but the inclusion of controls for duration dependence does not. When I calculate the substantive effects of union density on the likelihood of political strike activity, I therefore rely on the relatively simpler model that includes recommendation 1 but not recommendation 2.<sup>33</sup>

### STATISTICAL ANALYSIS

Table 1 presents the main statistical results. Models 1 and 2 do not control for the influence of previous political strike activity in each country. The difference between these models is that model 1 does not include a squared union density term, but model 2 does. Model 3 includes all the variables that were included in model 2, adding a variable that counts the number of previous political strikes in each country. Models 4 and 5 include all the variables in model 3, adding additional variables in order to implement the two methods of controlling for time dependence that I discussed above: model 4 includes a set of dummy variables

<sup>31</sup> Beck, Katz, and Tucker 1998, 1260–61.

<sup>32</sup> Beck, Katz, and Tucker 1998, 1267–72. These variables were generated with the help of the Stata program *btses*, which was written by Richard Tucker. The results are also robust to an alternative method of controlling for time dependence proposed by Carter and Signorino 2010.

<sup>33</sup> Beck, Katz, and Tucker 1998, 1269, point out that controls for duration dependence should be included only if it can be demonstrated that they are in fact required.

TABLE 1  
POLITICAL STRIKES IN WESTERN EUROPE, 1980–2008

	1	2	3	4	5
Union Density (0–1)	-1.94 (2.36)	21.48*** (7.96)	19.85*** (6.24)	23.26*** (6.75)	20.86*** (6.71)
Union Density <sup>2</sup> (0–1)		-30.98** (12.08)	-26.35*** (8.41)	-30.86*** (9.64)	-27.96*** (9.44)
Electoral Disproportionality	0.40 (2.27)	4.65 (2.95)	6.29** (2.78)	7.32** (2.89)	6.63** (2.78)
Left Party Cabinet Shares (0–1)	-1.26* (0.70)	-1.06* (0.60)	-1.16* (0.65)	-1.00* (0.59)	-1.13* (0.68)
Corporatist Policymaking $\tau_{t-1}$ (0, 1)	-0.07 (0.92)	-0.08 (0.76)	0.07 (0.53)	0.04 (0.55)	0.00 (0.59)
Union Centralization $\tau_{t-1}$ (0–1)	0.19 (1.72)	1.34 (1.69)	1.52 (1.69)	2.41 (1.76)	1.86 (1.63)
Communist Union Confederation (0, 1)	0.90 (1.42)	1.08 (1.11)	0.70 (0.71)	0.78 (0.71)	0.64 (0.77)
Unemployment (0–1)	8.24* (4.22)	12.90*** (4.03)	12.24*** (3.07)	14.53*** (4.04)	12.58*** (3.49)
GDP Growth $\tau_{t-1}$ (Percent)	0.07 (0.11)	0.04 (0.10)	0.05 (0.09)	0.09 (0.11)	0.04 (0.10)
Number of Previous Strikes			0.35*** (0.07)	0.35*** (0.07)	0.36*** (0.08)
Spline 1					-0.01 (0.01)
Spline 2					0.00 (0.00)
Spline 3					-0.00 (0.00)
Duration Dummies	no	no	no	yes	no
N	464	464	464	351 <sup>a</sup>	464
Akaike's Information Criterion	257	245	229	214	234
Schwarz's Bayesian Information Criterion	294	286	274	272	292

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ ; logistic regression coefficients, robust standard errors clustered on countries in parentheses

<sup>a</sup> 113 observations dropped since the duration dummies perfectly predict one of the outcomes.

that measure the duration since the beginning of the time period or the most recent political strike; model 5 includes three natural cubic splines (knotted at one, four, and seven years) that summarize the same information.

Model 1 includes union density and the main political, organizational, and economic control variables discussed in the previous section,

but it does not include a squared union density term and therefore assumes that there is a monotonic relationship between union density and the likelihood of political strikes. Here, union density does not appear to be related to strike activity at all. However, when the squared union density term is included (model 2), the coefficient for union density becomes positive and the coefficient for union density squared becomes negative, with relatively little uncertainty around either of the two estimates. In models 3–5, which use different methods of controlling for past political strike activity in each country, the coefficient for union density remains positive, the coefficient for union density squared remains negative, and the standard errors remain comparatively small.

These results strongly suggest that there is, as hypothesized, a curvilinear relationship between union density and the likelihood of political strikes. It is important to remember, however, that the coefficients in this type of model cannot meaningfully be interpreted as marginal effects, since the model contains a quadratic term (union density squared) and since the marginal effects in logit models are functions of the other explanatory variables. I will have more to say about substantive effects in the next section, where I calculate the predicted probability of political strikes for different values of union density. The discussion of substantive effects is based on model 3, since it is not clear that the explanatory power of the model increases when the controls for duration dependence are included in the two last models.

Concerning the political control variables, the more fully specified models 3–5 strongly suggest that political strikes are less frequent in countries with more proportional electoral systems. The fact that the estimated effect of electoral disproportionality becomes stronger when the squared union density term is included—accounting for the curvilinear relationship between union density and strike activity—provides additional support for the argument made in this article, for the relationship between political institutions and protest behavior is well documented in the literature and it would have been surprising if it had not been apparent in the data examined here.

The results also suggest that left-wing government is associated with a lower likelihood of political strikes, which is exactly as expected. However, the third political control variable—corporatist policy-making—appears to have no impact whatsoever on political strike activity. Moreover, neither the centralization of the trade union movement, nor the presence of communist trade union confederations, nor economic growth appears to have a statistically significant effect on the likeli-

hood of political strikes. But there is strong evidence that high unemployment is positively associated with increased political strike activity, as is a prior history of political strikes.

#### THE EFFECTS OF UNION DENSITY

On the basis of the results in Table 1, it is possible to calculate the marginal effects of union density on political strike activity. Consider Figure 1, which is based on model 3 and which describes the predicted probability of political strikes as a function of union density (across the in-sample range of that variable, which is 0.08–0.87), holding the values of the control variables constant at the values that are actually observed in the data set.<sup>34</sup> The curvilinear relationship between union density and political strike activity emerges clearly. The estimated likelihood of a political strike is low when union density is less than 10 percent or more than 70 percent of all wage and salary earners in employment, but the average predicted probability of a political strike in a given year in this particular sample is just under 15 percent when union density is around 35–40 percent.

In order to test whether the differences between countries with weak, moderately strong, and strong trade unions are statistically significant, I have calculated the increase in the likelihood of a political strike when union density goes from the mean value for France (0.11) to the mean value for Italy (0.39) and the decrease in the likelihood of a political strike when union density goes from the mean value for Italy (0.39) to the mean value for Denmark (0.76), holding all other variables constant as above. I have then tested whether the differences between these predicted probabilities are different from zero. As the hypothesis tests reported in the first row of Table 2 show (the point estimates in this row correspond to the predicted probabilities in Figure 1), there is a high likelihood—more than 99 percent—that both the increase in the predicted probability of a political strike when union density goes from 0.11 to 0.39 and the decrease in the predicted probability of a political strike when union density goes from 0.39 to 0.76 are greater than zero.

The marginal effect of a particular explanatory variable in this type of model depends on the values of the other explanatory variables. This means that although the estimated relationship between union density

<sup>34</sup> The calculation of predicted probabilities was made using Stata's *margins* command, holding the values of the control variables constant at the values that are actually observed in the data set and then calculating the average of the resulting predicted probabilities.

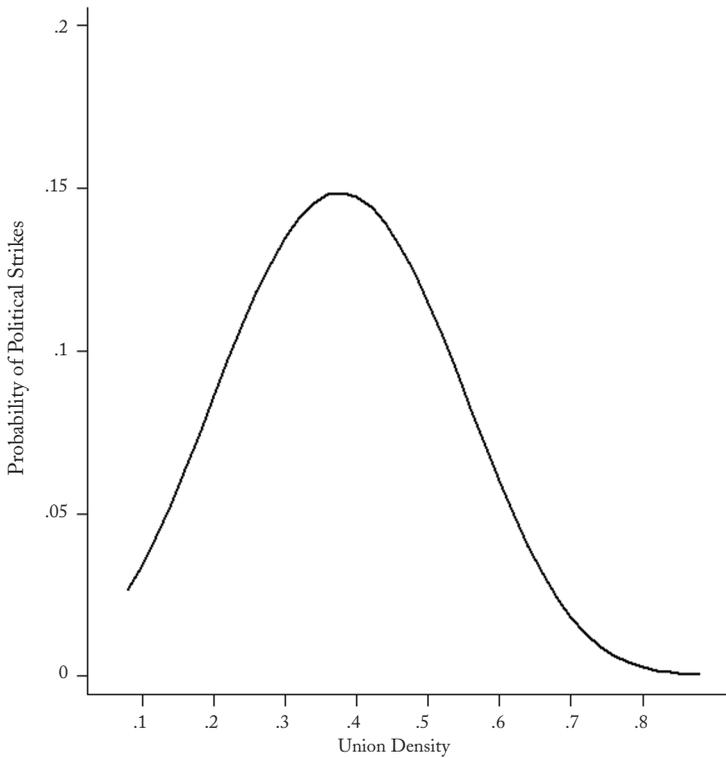


FIGURE 1

THE PREDICTED PROBABILITY OF POLITICAL STRIKES AS A FUNCTION OF UNION DENSITY<sup>a</sup>

<sup>a</sup>The predicted probabilities are based on Table 1, model 3, holding the values of the control variables at the values that are actually observed in the data set and then calculating the average of the resulting predicted probabilities.

and the likelihood of a political strike is always curvilinear (peaking when the value of union density is just below 0.4), the precise difference between countries with moderately strong unions, on the one hand, and countries with weak or strong unions, on the other hand, depends on the values of other variables (as do the confidence intervals around these estimates). By examining how the predicted probabilities change when the values of other variables also vary along with union density, it is possible to learn more about when and how union density matters the most to the interaction of governments and unions.

TABLE 2  
PREDICTED PROBABILITIES OF POLITICAL STRIKES<sup>a</sup>

	<i>Union Density</i>			<i>p-values</i>	
	<i>Low</i> (0.11)	<i>Medium</i> (0.39)	<i>High</i> (0.76)	<i>Low</i> → <i>Medium</i>	<i>Medium</i> → <i>High</i>
Baseline	0.04	0.15	0.01	0.00	0.00
Disproportionality					
Low (0.04)	0.01	0.08	0.00	0.00	0.00
High (0.30)	0.06	0.24	0.01	0.03	0.00
Left Government					
No Ministers	0.06	0.20	0.01	0.00	0.00
All Ministers	0.02	0.09	0.00	0.02	0.00
Previous Strikes					
None	0.02	0.10	0.00	0.01	0.00
One	0.03	0.13	0.00	0.00	0.00
Two	0.04	0.16	0.01	0.00	0.00
Unemployment					
Low (3.2)	0.02	0.09	0.00	0.00	0.00
High (12.2)	0.05	0.19	0.01	0.00	0.00
Communist Unions					
No	0.03	0.12	0.00	0.02	0.02
Yes	0.05	0.19	0.01	0.01	0.00

<sup>a</sup>The predicted probabilities are based on model 3 in Table 1, holding the values of the control variables at the values that are actually observed in the data set and then calculating the average of the resulting predicted probabilities. The first three columns describe the predicted probabilities for low, medium, and high union density (corresponding to the mean union density for France, Italy, and Denmark: 0.11, 0.39, and 0.76). The last two columns show the *p*-values for the two following hypothesis tests: (1) an increase in union density from 0.11 to 0.39 is associated with an increased likelihood of political strikes; (2) an increase in union density from 0.39 to 0.76 is associated with a reduced likelihood of political strikes. The variables disproportionality, left government, and unemployment are held at the 10th and 90th percentiles.

As I have already noted, the first row in Table 2 presents baseline predicted probabilities—that is, the average predicted probability of a political strike in this sample as a function of union density. The rest of the table demonstrates that although the differences between weak, moderately strong, and strong union movements, as defined above, remain statistically significant when the other explanatory variables take different values, the precise shape of the relationship between union density and the likelihood of political strikes depends on the level of these other variables. The estimated relationship is flatter where electoral disproportionality is low, where the left is in power, where unemployment is low, where there is no communist union confederation,

and where there have been few political strikes in the past. Where electoral disproportionality is high, the left is not in power, unemployment is high, there is a communist union confederation, or there have been several political strikes in the past, the likelihood of political strikes increases markedly for countries with low and medium levels of union density but not very much for countries with high union density.

#### ROBUSTNESS CHECKS

In order to check whether the main empirical results are stable across model specifications, I have performed further analyses where I have added new control variables to model 3 in Table 1: wage bargaining coverage, the openness of the economy, and dummies for varieties of capitalism (coordinated and liberal market economies). The main results are not sensitive to the inclusion of these additional control variables: the estimated effects of union density remain more or less identical in all models, as do the estimated effects of electoral disproportionality and left government.<sup>35</sup>

In addition to these extra control variables, it would have been desirable to control for the government's policy ambitions, in order to ensure that the high level of political strike activity in countries with intermediate levels of union density is not merely a result of a higher frequency of controversial reform initiatives by governments in these countries. However, it is difficult to think of a good way to measure the underlying policy ambitions of governments (especially when taking into consideration that governments are likely to adapt their legislative agendas to the anticipated reactions of the unions). In any event, the fact that governments in the Nordic states, with their strong union movements, adopted several structural reforms of old-age pensions and unemployment insurance in the period studied here suggests that the inverted U-shaped relationship that I have identified would be robust to the inclusion of such a variable.

I have also reestimated the main model (model 3 in Table 1) sixteen times, leaving out one country at a time, in order to test whether the results of the statistical analysis are strongly influenced by any particular country-level observations. Again, the results are robust: the coefficients and standard errors for union density and union density squared vary slightly across these reduced samples, but the *p*-values associated with these two coefficient estimates never increase to more than 0.03.

<sup>35</sup> Note that the liberal market economies—Ireland and the United Kingdom—drop out of the analysis when the varieties of capitalism dummies are included, since there were no political strikes in either of these countries between 1980 and 2008.

Since political strikes are relatively rare events, I have reestimated model 3 in Table 1 using a logit estimator for rare events data.<sup>36</sup> The results are virtually identical. The robust standard errors are slightly larger than the noncorrected estimates, but the coefficients for both union density and union density squared remain significant at the 99 percent threshold.

Finally, I have estimated a series of identically specified models using an indicator of political (or “general”) strikes provided by the Banks Cross-National Time-Series Data Archive. The data set used in these analyses includes annual observations of twenty-one countries (the countries in the main data set plus Australia, Canada, Japan, New Zealand, and the United States) over a period of twenty-nine to forty-six years (1961–2006). The estimated effect of union density is very similar to the main results reported in Table 1, in spite of the fact that the country sample is larger, the time period is longer, and the operationalization of the dependent variable is different. This increases my confidence in the main results and, by implication, in the arguments that inform the analysis. As in Table 1, union density appears to have no effect when the quadratic union density term is omitted; but when the squared union density term is included in model 2, the coefficient for union density becomes positive and the coefficient for union density squared becomes negative, suggesting that the relationship between union density and the likelihood of political strikes is indeed curvilinear.<sup>37</sup>

## CONCLUSIONS

This article has proposed a theoretical framework for the analysis of political conflicts between governments and trade unions, and it has estimated the effect of union density on the likelihood of political strikes in advanced democracies. My main argument is that political strikes are most frequent in countries with intermediate levels of union density, since trade unions in these countries are strong enough to organize effective protests but not strong enough to ensure that governments will

<sup>36</sup> Tomz, King, and Zeng 1999; King and Zeng 1999; King and Zeng 2001.

<sup>37</sup> The protest indicators in Banks 2009 have been criticized since they rely on a narrow selection of newspaper reports (Nam 2006; Robertson and Teitelbaum 2010). For this and other reasons, the measure of political strikes in Western Europe that I used in the main analyses is likely to be much more precise. But it remains meaningful to check whether the main results can be reproduced with alternative data. I have also reestimated model 3 in Table 1 using the Banks indicator but only including data for countries and years that are also included in my own data set. The results are substantively similar but statistically less robust (the  $p$ -values for union density and union density squared are just over 0.13 and 0.11).

routinely avert the threat of political strikes by means of preemptive political compromises.

The empirical analyses that I have presented show that there is, as expected, a curvilinear relationship between union density and political strike activity. The strength of the trade union movement is only one of several factors that influence the interaction between governments and unions. But it is an important factor.

One of the main features of the theoretical argument of this article is that it combines insights from sociology and comparative politics (especially the literature on social movements and the literatures on class politics and power resources, which helped to explain the behavior of unions in countries with low and high union density) with insights from the field of international relations (especially rationalist models of war and civil war, which helped to explain why political conflicts between governments and unions cannot always be resolved peacefully in countries with intermediate levels of union density).

The ideas and results that I have presented have several important implications for theories of comparative politics and comparative political economy. Perhaps most significantly, they raise questions about the role of political institutions. On the one hand, the evidence that I have introduced is consistent with the well-known argument that basic political institutions, such as the electoral system, matter for the political behavior of trade unions and other interest groups (the disproportionality of the electoral system was shown to have powerful positive effects on political strike activity). On the other hand, corporatist policy-making—the institutionalized involvement of trade unions in political decision making—turned out to have no discernible effect on the likelihood of political strikes, which suggests that such “intermediate” or “semiformal” institutions may be unable to withstand the political pressures that this article identifies. Further analyses of the manner in which the strength of unions and other interest organizations shape political outcomes in different institutional environments would be a natural way to extend the argument presented here.

#### APPENDIX 1 EXPLANATORY VARIABLES

The dependent variables are discussed in detail in the text. This appendix provides more information about the explanatory variables that are included in all or some of the statistical analyses.

## COMMUNIST UNION CONFEDERATION

Definition: this dummy variable takes the value 1 for France, Italy, Portugal, and Spain. Accordingly, 25 percent of all observations were placed in this category.

## CORPORATIST POLICY-MAKING

Definition: a dummy variable that takes the value 1 if there is a tripartite council that deals with matters of social and economic policy and unions and employer organizations are routinely involved in prelegislation procedures and/or political decision making in these policy areas. This variable is lagged one year. Source: based on the variables "Tripartite Council" and "Routine Involvement" in the Visser 2011 data set. 28 percent of all observations were coded as corporatist.

## ECONOMIC OPENNESS

Definition: exports plus imports as a proportion of GDP. Source: Heston, Summers, and Aten 2009. This variable has a mean of 0.64, a standard deviation of 0.30, a min. of 0.19, and a max. of 1.64.

## ELECTORAL DISPROPORTIONALITY

Definition: the difference between the effective number of legislative parties and the effective number of electoral parties, divided by the effective number of electoral parties. Source: Armingeon et al. 2010. This variable has a mean of 0.15, a standard deviation of 0.11, a min. of -0.04, and a max. of 0.58.

## GDP GROWTH

Definition: yearly percentage change in real GDP per capita. Source: Heston, Summers, and Aten 2009. This variable has a mean of 2.1, a standard deviation of 2.1, a min. of -7.4, and a max. of 9.8.

## LEFT PARTY CABINET SHARES

Definition: proportion of cabinet seats held by left-wing parties. Source: Armingeon et al. 2010. Original sources: Schmidt and Beyer 1992; and the Political Data Yearbook. This variable has a mean of 0.41, a standard deviation of 0.38, a min. of 0, and a max. of 1.

## UNEMPLOYMENT

Definition: the (standardized) unemployment rate as a proportion of the civilian labor force. Source: compiled by Armingeon et al. 2010 from OECD sources. This variable has a mean of 0.08, a standard deviation of 0.04, a min. of 0.0, and a max. of 0.24.

## UNION CENTRALIZATION

Definition: a measure of the centralization and coordination of union wage bargaining that takes both union authority and union concentration into account. The measure is based on, but not identical to, the index of centralization that was developed by Iversen 1999. This variable is lagged one year. Source: Visser 2011. For a few countries, this variable is available for only some years; values for the years in between have been linearly interpolated. This variable has a mean of 0.42, a standard deviation of 0.18, a mn. of 0.08, and a max. of 0.98.

## UNION DENSITY

Definition: net union membership as a proportion of all wage and salary earners in employment. Source: Visser 2011. This variable has a mean of 0.42, a standard deviation of 0.21, a min. of 0.08, and a max. of 0.87.

## VARIETIES OF CAPITALISM

Definition: the dummy variable Coordinated Market Economy takes the value 1 for Austria, Belgium, Denmark, Finland, Germany, Japan, the Netherlands, Norway, Sweden, and Switzerland, whereas the dummy variable Liberal Market Economy takes the value 1 for Australia, Canada, Ireland, New Zealand, the United Kingdom, and the United States. 56 percent of all observations are coded as coordinated market economies. 13 percent of all observations are coded as liberal market economies. Source: Hall and Soskice 2001.

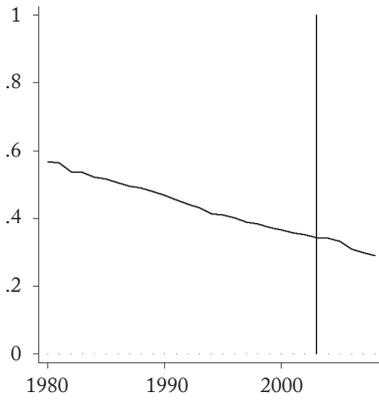
## WAGE BARGAINING COVERAGE

Definition: employees who are covered by wage bargaining agreements as a proportion of all wage and salary earners in employment with the right to bargaining. Source: Visser 2011. For a few countries, this variable is available only for some years; values for the years in between have been linearly interpolated. This variable has a mean of 0.77, a standard deviation of 0.16, a min. of 0.33, and a max. of 0.99.

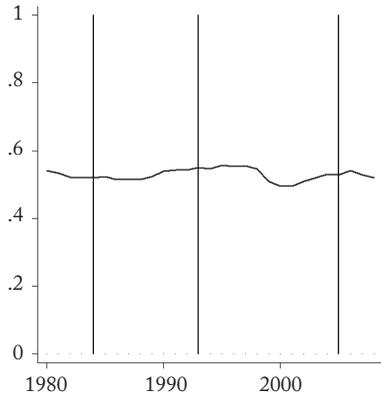
## APPENDIX 2

### UNION DENSITY AND POLITICAL STRIKES, 1980–2008<sup>a</sup>

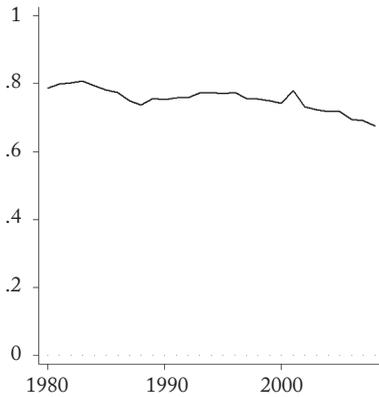
<sup>a</sup>The horizontal lines represent union density. The vertical lines represent years when political strikes occurred. The union density data are taken from Visser 2011. The political strike data are based on my own coding of reports in the *European Industrial Relations Review* (various years) and, for 2007–8, from the *European Industrial Relations Observatory* 2011



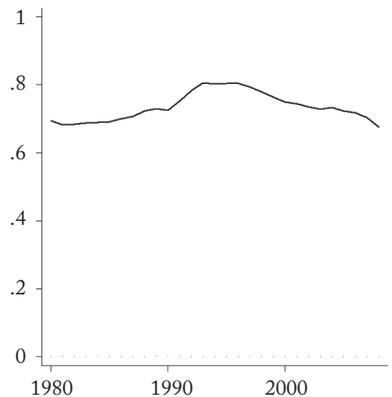
(a) Austria



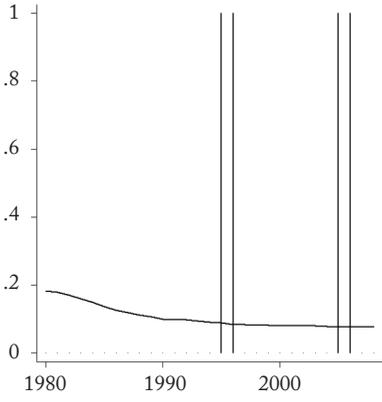
(b) Belgium



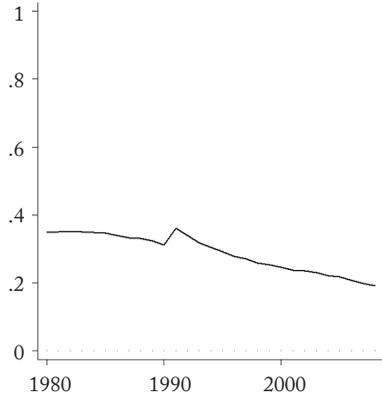
(c) Denmark



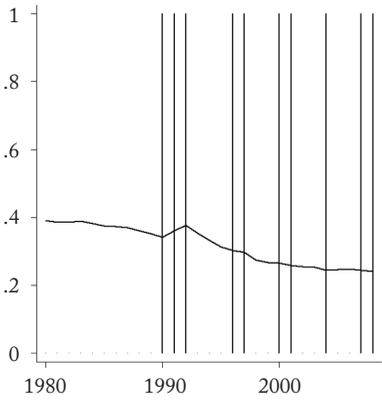
(d) Finland



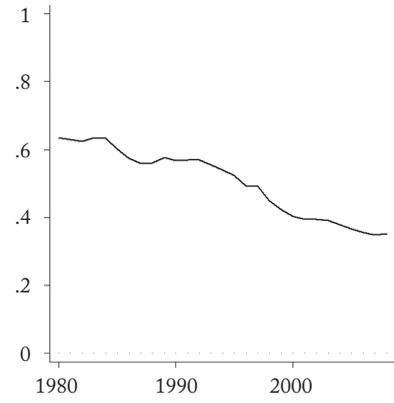
(e) France



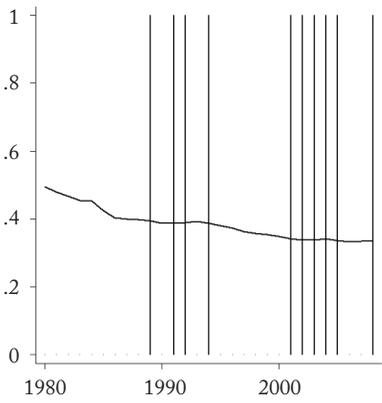
(f) Germany



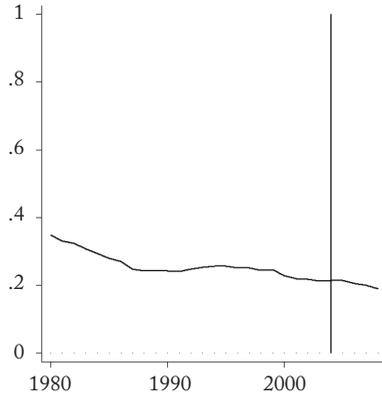
(g) Greece



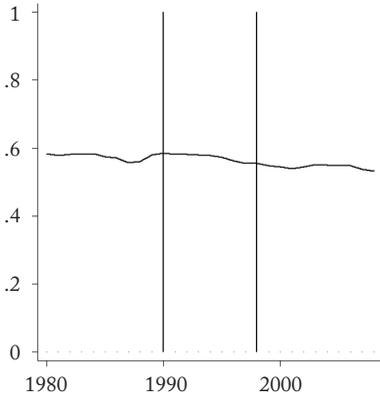
(h) Ireland



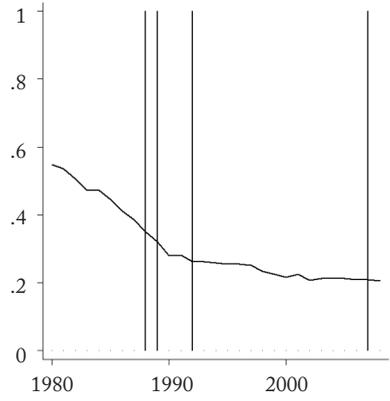
(i) Italy



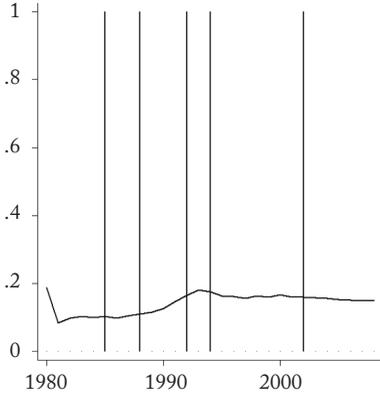
(j) The Netherlands



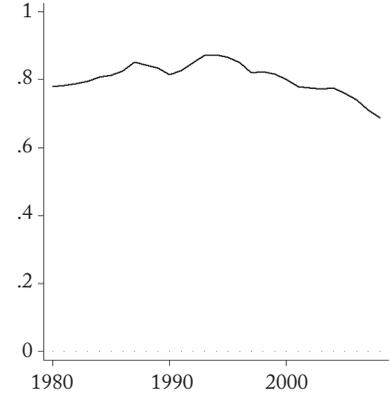
(k) Norway



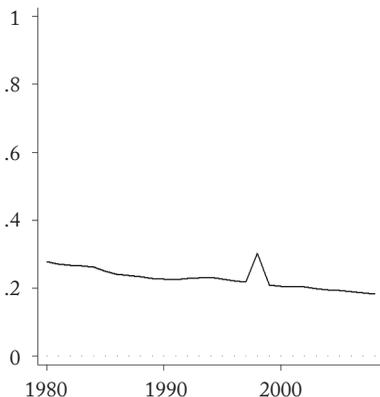
(l) Portugal



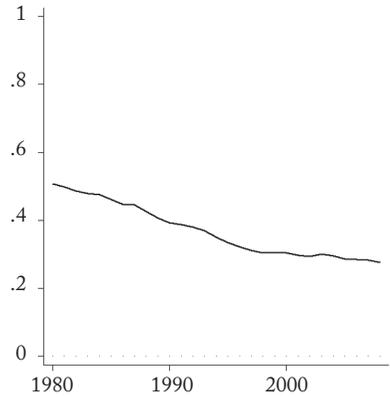
(m) Spain



(n) Sweden



(o) Switzerland



(p) United Kingdom

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