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Institutional, Economic, or Solidaristic? Assessing Explanations for Unionization Across Affluent Democracies

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Institutional, Economic, or Solidaristic?

Assessing Explanations for Unionization Across Affluent Democracies

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This study assesses three explanations for cross-national differences in unionization: Western's (1997) institutional model, economic explanations based on the business cycle or globalization, and Hechter's (2004) solidaristic theory. This study features a multilevel analysis of employed workers with the late 1990s World Values surveys of 18 affluent democracies. The analyses generally support the institutional model. Left parties and ghent systems remain influential, though ghent is less robust. Neo-corporatism and wage coordination are insignificant whereas workplace access is the more salient indicator of centralization. Beyond Western's model, right cabinet significantly weakens unionization. Refuting economic explanations, inflation, unemployment, and economic growth, as well as international trade and investment, do not influence unionization. Consistent with Hechter's claims, the welfare state reduces unionization but, contradicting his claims, immigration does not undermine unions. Ultimately, this study supports a revised institutional model that supplements Western's model with right cabinet and the welfare state.

Keywords: class; comparative sociology; globalization; institutions; labor unions; politics

One of the fundamental differences across advanced capitalist democracies is the level of unionization in the workforce. For decades, social scientists have highlighted the variation across highly unionized countries such as Sweden, moderately unionized countries such as Germany, and weakly unionized countries such as the United States. This cross-national variation has become even more profound since unionization has plummeted

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in many countries since the 1980s, while unionization has actually grown in a few highly unionized countries. Given the powerful links between unionization and earnings, work conditions, and social equality (Cornfield, 1991; Freeman & Medoff, 1984; Leicht, Wallace, & Grant, 1993; Wallace, Leicht, & Raffalovich, 1999), understanding cross-national patterns in unionization remains a crucial sociological concern.

The past 10 to 15 years have been a productive period for sociological and political explanations of unionization. Whereas economic theories emphasizing the business cycle once commanded disproportionate attention, recent research on cross-national variation in unionization concentrates on institutions. One might even go so far as to say that such institutional explanations represent the conventional wisdom among social scientists. The current study builds on this productive institutional enterprise, using Western's (1997) model as a starting point. Although Western emphasized the role of corporatism, ghent systems, and leftist parties, I revise the institutional model by scrutinizing the effect of corporatism and by considering the role of right political parties. Moreover, I compare the institutional explanation with two other prominent explanations: economic and solidaristic. I examine older economic explanations emphasizing the business cycle and new economic explanations emphasizing globalization. Following Hechter's (2004) solidaristic theory of the decline of class politics, I test his claims that the extensiveness of the welfare state and immigration should undermine unionization.

The current study analyzes the most recent wave of World Values Surveys linked with country-level political and economic data to scrutinize institutional, economic, and solidaristic explanations of unionization. I estimate a series of multilevel hierarchical generalized linear models of the likelihood that an individual worker is unionized. Overall, the current study empirically assesses potential sources of unionization across 18 affluent democracies (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand,

Norway, Sweden, Switzerland, United Kingdom, and United States) in the late 1990s.

Theoretical Background

Institutional Explanations

In a series of publications, Western (1997) developed an institutional model of unionization in affluent democracies. This model—featuring leftist parties in government, collective bargaining centralization, and ghent unemployment insurance—successfully explains cross-national and historical variation in unionization. These institutions insulate workers from the market forces that lead to competition among workers. Western demonstrated that this model explained unionization from World War II into the 1980s, across individual workers nested in countries in the 1980s, and even the pattern of decline in the 1980s. Other institutional accounts have a great deal in common with Western's model (Ebbinghaus & Visser, 1999; Moene & Wallerstein, 1999; Rothstein, 1992). Reflecting the popularity of institutional explanations of economic phenomena (Polanyi, 1957), recent research has been broadly supportive of this explanation (Wallerstein & Western, 2000).

The elements of Western's (1997) institutional model work collaboratively and separately to cultivate unionization. Leftist parties encourage state intervention in forming a union-friendly environment, cooperate with unions in advancing the concerns of the working class, and reciprocally form a coalition for electoral and workplace success (Korpi, 1983; Sassoon, 1996). Ghent systems protect the rights of unions, provide a substantial incentive for workers to join unions to gain unemployment insurance, and connect workers with the unions during spells of unemployment. Labor market centralization reduces the incentives for employers to oppose unionization, facilitates and coordinates labor organizing by redistributing the costs of mobilization across highly and weakly unionized industries, and enhances the influence of labor organizations in managing economic policy.

The particular part of Western's (1994; ch. 8 in 1997) analysis that I revisit is his multilevel analysis of surveys of individual union membership across affluent democracies. Hence, I do not intend to reexamine the entire empirical case for the institutional model. To my knowledge, very few studies have used such a multilevel approach. Very recently, Oskarsson (2005) pooled surveys across countries into an analysis of union membership; however, he did not use multilevel techniques, and so his results might not

be fully comparable. Beyond the paucity of similar multilevel analyses in the literature, there are three reasons why Western's (1994) model should be revisited.

First, some remain skeptical that any one model—institutional or otherwise—can account for the tremendous cross-national and historical variation in unionization across affluent democracies. Golden, Wallerstein, and Lange (1999) remarked: "General explanations seem to explain too much" (p. 224). It would be valuable to replicate Western's model (1994, 1997) to see if further support exists. Relatedly, the evidence for one of the elements of his model was always less clear in his multilevel analysis. Despite documenting the role of centralization in a pooled time series of affluent democracies since World War II, the centralization coefficient was not statistically significant in his multilevel analysis. Oskarsson (2005) argued that previous institutional models were flawed and that analyses need to focus on the interaction of workplace access and centralized bargaining systems (Ebbinghaus & Visser, 1999; Visser, 2002). Thus, further analyses might clarify the role of labor market centralization.[1]

Second, the evidence for Western's model (1994, 1997) is from before the cross-national decline in unionization. Previous multilevel analyses of union membership are confined to earlier data before the decline. All of the surveys in Western (1994) were from the 1980s, whereas four of Oskarsson's (2005) surveys were from the 1980s and the rest were from 1993.[2] Although this research has contributed greatly, it is questionable as to whether the institutional model is useful after the recent decline of unionization experienced by many affluent democracies (Golden et al., 1999). Do the same forces that account for increases in unionization also account for decreases? Although some of the decline reflects the weakening of the institutional bases of unionization—including electoral failures of leftist parties and the decentralization of collective bargaining—analysts often look outside institutional explanations to account for the decline (Western, 1995). Wallerstein and Western (2000) even acknowledged that such institutional models "fail to account for the dramatic declines in union strength that some (but not all) countries have experienced since 1980" (p. 355). Therefore, research is needed that scrutinizes whether the institutional model can explain union membership after the decline and whether the institutional model is still supported after considering other plausible sources of deunionization (e.g., globalization).

Third, one of the major limitations of prevailing institutional accounts is that they exclusively concentrate on institutions that are beneficial to unionization. Empirically, at least, they focus solely on leftist institutions and neglect rightist institutions. Perhaps the Right has been neglected because

of the misconception that left parties are simply the obverse of right parties. However, most countries also have a tradition of centrist parties, which create at least a three-tiered party system. Hence, one can and should model the Left and Right in the same model. Potentially, including right cabinet could alter our interpretation of the effect of left cabinet.

An emerging theme in the union literature is that right parties—iconically exemplified by Thatcher and Reagan—have been aggressive actors in combating unions (Clawson & Clawson, 1999; Sassoon, 1996). Howell (1995) showed that Thatcher's labor law reforms contributed to the decline of unions in the United Kingdom. When right parties control government, administrators often do not protect the legal rights to collectively bargain and organize unions (Cooke & Gautsch, 1982; Voss & Fantasia, 2004). Right party governments typically revise and abolish regulations that protect workers (Freeman & Medoff, 1984; King & Wood, 1999). In the context of right party control of government, it is more difficult for workers to form unions, recruit union members, and win unionization elections (Brady & Wallace, 2000; Farber & Western, 2002).

Despite the suggestive evidence of the influence of right parties, the power of right parties is usually only alluded to as historical background for quantitative analyses. Western (1997) wrote, "The unparalleled political offensives of Thatcher and Reagan in the 1980s crippled the labor movements of Britain and the United States" (p. 195).[3] However, few studies incorporate right party power as an actual explanatory variable. Often, right parties are merely treated as the residue of left party departure from office. Most analysts simply signal that the Left had lost an election and unions subsequently declined. For example, Western (1997) demonstrated that union decline was more likely after the Left had suffered an electoral defeat. Brady and Wallace (2000) showed that the partisan composition of state governments influences union organizing and union density.[4] Yet most analysts stop short of actually modeling the presence of right parties as something distinct from the inverse of left parties. Although recent research suggests that right parties have been crucial to shaping the politics, economies, and inequalities of affluent democracies (Brady & Leicht, 2006), there is a need for systematic analyses of the how right parties have shaped organized labor in affluent democracies.

Economic Explanations

In some regards, the empirical support for institutional explanations provided a triumph over economic explanations. Prior to the recent wave of institutional studies, business cycle explanations were probably the

dominant perspective (Bain & Elsheikh, 1976; Fiorito & Greer, 1982; Hirsch & Addison, 1986). Poor economic performance undermines workers' individual and collective power and heightens employer resistance to unionization. Most important, unemployment reduces and inflation increases unionization (Wallerstein & Western, 2000). Although less studied, economic growth may also contribute to unionization.

Probably because of a justifiable desire for parsimony, Western (1994) did not include country-level measures of economic performance in his multilevel analysis—though he did in other analyses (1997). It may be worthwhile to incorporate the business cycle into a multilevel model of unionization. Even more than the 1980s, the 1990s featured a sharp contrast between the high rates of unemployment in much of Western Europe, higher rates of economic growth and low unemployment in the United States, and low growth in Japan (Kitschelt, Lange, Marks, & Stephens, 1999). Divergent economic performance across affluent democracies might have influenced the likelihood of workers being unionized in this most recent period.

Beyond economic performance, globalization has received a great deal of attention as a new economic development affecting unionization. For the purposes of the current study, *economic globalization* refers to international economic exchange and the flow of goods, services, and capital across international boundaries.[5] At least as early as Bluestone and Harrison (1982), scholars highlighted the globalizing of production to avoid and weaken unions—what they later called *globalization gambit* and *zapping labor* (Harrison & Bluestone, 1988). Important, economic globalization has grown dramatically since the 1980s in affluent democracies (Brady, Beckfield, & Seeleib-Kaiser, 2005). Many suggest that trade and international investment weaken the position of organized labor (Baldwin, 2003; Wood, 1994). Employers often globalize production to avoid higher labor costs, rigid work arrangements, and unions. As Western (1997) remarked, "The unity of nation-class organizations rooted in national institutions was outflanked by an emergent international institutional context" (p. 195). Perhaps equally important, managers and employers use the threat of globalization to extract concessions from and undermine organized labor (Wallace & Brady, 2001). In his history of West European social democracy, Sassoon (1996) even claimed that, "To a large extent, the contemporary crisis of socialism is a by-product of the globalization of capitalism" (p. 772).

Despite these claims, the actual empirical evidence linking globalization and deunionization has been quite mixed. Scruggs and Lange (2002) found that globalization has, at most, marginal effects on union density in affluent democracies. Even many radical economists are skeptical that globalization

is the source of weakened labor movements and unions (Gordon, 1994; Sutcliffe & Glyn, 1999). Yet some empirical evidence has drawn a connection between heightened globalization and deunionization (Baldwin, 2003; Lee, 2005). Brady and Wallace (2000) found that increased foreign direct investment has contributed to lessened union organizing and lower union density in the U.S. In a separate analysis from the aforementioned multilevel analysis, Western (1995, 1997) found that trade openness increased the likelihood that an affluent democracy would experience a union decline in the 1980s. In the face of this mixed evidence, it would be valuable to assess further if globalization influences the likelihood of union membership in affluent democracies. To my knowledge, no multilevel analysis of individual workers has examined globalization.

Solidaristic Theory

In a recent article, Hechter (2004) provided a provocative and original theory to account for the decline of class politics in advanced capitalist democracies. Hechter contended that class politics has been replaced by cultural politics focused on identity and status. Of course, many contend that class politics are in decline and note the ascendance of cultural-, identity-, and status-oriented politics, and Hechter was merely emblematic of this view (Clark & Lipset, 2001; Kingston, 2000; Pakulski & Waters, 1996; Sassoon, 1996). However, his explanation uniquely and innovatively emphasizes social and political institutions as the cause for this transformation. It is also significant because it offers a testable rational choice theory to account for this decline. Hechter specifically highlighted the decline of unions as particularly representative of the decline of class organization and consciousness. Certainly, few dispute that labor unions have experienced a substantial decline in many (if not most) affluent democracies in the last few decades (Ebbinghaus & Visser, 1999; Farber & Western, 2001; Lopez, 2005; Wallerstein & Western, 2000; Western, 1995, 1997).[6] Given this widespread recognition of organized labor's decline, Hechter provided a novel theory of deunionization that warrants empirical scrutiny and may enhance our understanding of the sources of the deunionization.

Two of Hechter's (2004) claims are most relevant to unionization. Hence, the current study is only a partial test of solidaristic theory. First, he proposed that extensive welfare states undermine unionization. Hechter explained that unions initially grew because of the uncertainties and insecurities of industrialization. Workers formed and joined unions because

unions (and other voluntary associations) offered insurance against unemployment and sickness. In the past few decades—though Hechter was unclear about the exact timing—welfare states have increasingly provided the insurance against uncertainty and loss for which unions previously held responsibility. Hechter explained:

> Many of the private goods that unions once provided to their members became available elsewhere. In consequence, membership in unions fell, as did class consciousness and—ultimately—class politics. By providing many of the same benefits that unions once exclusively purveyed, the welfare state prospered, which led to the erosion of key incentives for union membership. (pp. 426-427)

Hechter even offered testable claims: "Proposition 5. – Direct rule (as indicated by welfare effort) should increases status-group organizational capacity relative to that of class" (p. 432). Although he continues, "Since welfare effort has increased in all advanced industrial societies, union density . . . should decline everywhere" (p. 432) he clarifies that one must control for the fact that some countries maintain ghent unemployment insurance systems. After controlling for ghent systems—and related institutions—one should observe that welfare state generosity undermines unionization.[7]

Second, Hechter proposed that ethnic heterogeneity due to immigration should reduce union membership. When direct rule has been established and welfare states have matured, politics is increasingly based on identity and status. In turn, voluntary associations among cultural minorities are more likely to form and mobilize. Because he viewed class and status politics as competitive rather than complementary, Hechter (2004) explained: "As a result, conflicts between groups defined on the basis of culture overtake those between classes in these societies" (p. 430). Hechter claimed ethnic heterogeneity will promote insurance groups and voluntary associations based on status and identity. He proceeded to claim, "Proposition 2. – Status heterogeneity should decrease rates of unionization" and contended ethnic and linguistic diversity undermine unionization (p. 431). He even made the specific claim that, "The theory predicts that immigration should vary inversely with unionization" (p. 431). There is a growing literature on the effects of immigration and unionization. Most of this literature focuses on the potential for organizing immigrant workers in the United States (Briggs, 2001; Cornfield, 1989; Milkman, 2000; Ness, 2005). Yet, consistent with solidaristic theory, there is also evidence that immigration contextually undermines unionization (Lee, 2005). Accordingly, immigration and ethnic

heterogeneity should undermine the bases for class consciousness and organization and augment the bases for status and identity group politics and mobilization, and union membership will be negatively related to immigration as a result. It is important to note that Hechter clearly linked the first claim about direct rule to the second claim about ethnic heterogeneity. Both claims must be supported to substantiate solidaristic theory.

Method

To assess the sources of unionization, I estimate a multilevel model of individual workers nested in 18 affluent democracies (Western, 1994). Specifically, I estimate a hierarchical generalized linear logit model (HGLM) with HLM 6.0 (Raudenbush, Bryk, Cheong, & Congdon, 2004). HGLM logit models predict the likelihood that a worker is a union member based on a set of individual-level and country-level variables. The HGLM logit model can be expressed as two sets of equations (Raudenbush & Bryk, 2002). First, the log odds of union membership ($\log (p_{ij}/1 - p_{ij})$) for the ith individual in the jth country is represented by eta (η_{ij}) and is a function of country intercepts (β_{oj}) and a set of fixed individual-level characteristics (βX_{ij}):

$$\log (p_{ij}/1 - p_{ij}) = \eta_{ij} = \beta_{oj} + \beta X_{ij}$$

In this equation, the individual-level variables are differenced from their country means (group mean centered). Second, each country intercept (β_{oj}) is estimated as a function of a general intercept term (γ_{oj}), a set of country-level characteristics (γC_j) and an error term (ε_{oj}):

$$\beta_{oj} = \gamma_{oj} + \gamma C_j + \gamma_{oj}$$

In this equation, the country-level variables are uncentered.[8]

The individual-level data are drawn from the most recent wave of World Values Surveys (WVS) for 18 affluent democracies (Inglehart & Collaborators, 2005). The WVS is based on nationally representative surveys of randomly selected adults in many countries around the world. Like any survey, the WVS has limitations including questions of cross-national comparability and the absence of questions that might be useful. Despite these limitations, the WVS is uniquely valuable for the purposes of the current study.[9] First, unlike any other survey (e.g., International Social Survey Programme [ISSP]), data exist in the late or mid-1990s for each of the 18 affluent

democracies. This allows us to focus exclusively on a relatively coherent set of advanced capitalist democracies for which country-level data on labor market institutions, the welfare state, and political parties exist (Huber, Ragin, Stephens, Brady, & Beckfield, 2004). The WVS provides sufficient cross-national variation among comparable countries to allow for multilevel analyses. Second, the WVS contains sufficient demographic and occupational information to assemble a reasonable individual-level model—using the WVS without the complications of the attitude items. Third, and most important, respondents report if they belong to a labor union. Although others have analyzed earlier waves of the WVS for studying associational memberships generally (e.g., Schofer & Fourcade-Gourinchas, 2001), to my knowledge, this could be the first to examine unionization exclusively. Following Western (1994), the analyses are confined to WVS respondents that are employed and between ages 18 and 65 years. Although this reduces the samples somewhat, the analyses still include 13,763 respondents in 18 countries.

Appendix A displays the descriptive statistics, descriptions, and sources for the variables. In Appendix B, for each country, I display the year of the WVS, the original sample size, the sample size of employed workers, and the (unweighted) means for the union membership variable. Also, I display the values for some of the key country-level variables for the reader's comparison. The WVS probably underestimates unionization in Germany, Italy, and the United Kingdom (Ebbinghaus & Visser, 2000). This may be because of my reducing the WVS samples to employed workers, and the particular idiosyncrasies of each country's sampling. To check the robustness of the results, I replicated the analyses while dropping each of the 18 countries one at a time. The conclusions were consistent, so I proceed with all 18 countries.

The dependent variable, *union membership*, is whether the respondent belongs to a labor union (coded 1 = member and 0 = not a member). The individual-level independent variables include sex (coded 1 = female, 0 = male), age in years, and the WVS's standardized measure of education (coded 1 = lower level, 2 = middle level, 3 = upper level).[10] Next, I include a basic occupation and/or class schema with categories represented by a set of six dummies and a reference category for other workers. The first category is self-employed. Manager and/or professional is measured to include supervisors, administrators, legislators, and foremen. The third category is clerical. *Skilled worker* encompasses craft and related trades or skilled manual workers. *Manual worker* incorporates plant and machine operators, assemblers, unskilled and semi-skilled manual workers. Finally, *unskilled*

laborer is measured to include elementary agricultural, fishery, mining, construction, and manufacturing workers. Unfortunately, I must acknowledge two limitations of this occupation and/or class schema. First, because of the way the WVS is collected, the categories are not completely mutually exclusive.[11] As I show below, this limitation is not consequential to the conclusions. Second, the WVS does not include data on sector of employment. Public sector jobs and private sector industrial jobs tend to be more likely to be unionized than private sector services (Oskarsson, 2005; Western, 1994, 1997). Of course, these limitations qualify the analyses. In analyses available on request, I conducted sensitivity tests with several combinations and recodings of this schema, and the results were robust. I also reestimated the models with each class category omitted one at a time, and the conclusions were consistent. This schema is my best attempt to measure occupation and/or class within the WVS.

The individual-level data is linked to country-level data on institutional, economic, and solidaristic sources of unionization. Data for the country-level variables are proximately from Huber et al. (2004). The individual-level data act as a set of controls for the composition of the workforce and provide greater information than a conventional model exclusively at the macro-level. The country-level variables are most central to assessing the contending explanations for unionization discussed above. All country-level variables are lagged 1 year.

The models begin with Western's (1994) model. First, I include left cabinet from Huber et al. (2004). This measures the long-term control of government, tabulating left seats as a proportion of seats held by all government parties in each year and then summing these proportion for all years since 1946 (Huber & Stephens, 2001).[12] Second, I use a dummy for whether a country has a ghent unemployment insurance system. Ghent systems exist where unions have primary responsibility to provide or distribute unemployment benefits (Western, 1997, p. 54). Third, I include the natural log of labor force participation as a control.[13] Fourth, I then consider several indicators of centralized labor market institutions.[14] Neo-corporatism is an index based on 11 indicators measuring the presence of cooperative arrangements between firms, labor, and the state. Wage coordination is an index of bargaining centralization scored 1 to 5 with 5 being the most centralized. Next, workplace access is measured as the degree of well-established union presence on the shop floor. Last, I consider an interaction of wage coordination (rescaled 0-1) and workplace access (Oskarsson, 2005).

Next, I include a measure of right cabinet as a source of cross-national variation in unionization. Like the left cabinet variable, this gauges the

long-term control of government. This measure sums parties labeled as
"right" parties, "right, Christian" parties, and "right, Catholic" parties in
Huber et al. (2004).[15] It is not problematic to include left and right cabinet
in the same model, their bivariate correlation is only –.44.

As economic sources, I examine three measures of the business cycle.
Inflation is the annual rate of change in the consumer price index. Unemployment is measured as the standardized percentage of the labor force unemployed.
Economic growth is measured as the annual rate of change in real GDP in
purchasing power parity. Also as economic sources, I analyze two indicators
of international flows and economic globalization. Trade and investment
openness sums imports, exports, and inward and outward portfolio and direct
investment as a percentage of GDP (Brady et al., 2005; Brady & Denniston,
2006). Net trade and investment sums net trade (exports minus imports) and
net investment (inward minus outward) as a percentage of GDP. As I explain
below, I also considered each of the components of these summary measures
of economic globalization and the 5-year average of these variables instead
of the lagged values (see footnote 22). The results were consistent, so I solely
present the lagged summary measures. Globalization might be expected to
undermine unionization by triggering deindustrialization (Brady &
Denniston, 2006), so I also include a measure of manufacturing employment
decline. Deindustrialization is measured as the 20-year rate of change in manufacturing as a percentage of employment.[16]

To assess Hechter's (2004) solidaristic theory, I consider three measures
of the welfare state as measures of direct rule.[17] Social welfare expenditures
is the standard measure of spending on welfare cash and noncash transfers
and welfare services as a percentage of the GDP. Decommodification is
Allan and Scruggs' (2004) new index that replicates and extends Esping-
Andersen's (1990, ch. 2) original index, which is supposed to measure the
citizenship rights by which workers are guaranteed protection from being a
commodity in the labor market. This measure combines information on
coverage, qualifying periods for eligibility, and replacement rates for unemployment, sickness, and pension welfare programs. This variable is the
most sophisticated publicly available index of its kind and has only begun
to be empirically analyzed. Social security transfers include all state-
sponsored cash transfers for sickness, old age pensions, family allowances,
unemployment and workers' compensation, and other assistance. In addition, I examine two measures of immigration to assess Hechter's claims
about ethnic heterogeneity.[18] Percentage foreign born is the percentage of
the resident population that was born in another country. Net migration is
the difference between the domestic population in the previous and current

year that remains after accounting for births and deaths. Positive values indicate in-migration, whereas negative values represent out-migration.

Some readers may be concerned about potential collinearity among country-level variables. To be certain this was not a problem, I conducted two tests. First, I inspected the bivariate correlations among all country-level variables. Only a few variables that are modeled together had a correlation above even .6. Left cabinet correlates with social welfare expenditures (.70) and decommodification (.65), and labor force participation correlates with unemployment (.74). In analyses available on request and discussed below, I show that dropping one or the other variable does not alter my conclusions. Second, I estimated variance inflation factor (VIF) statistics. None of the variables in the models below had a VIF large enough to warrant concern. My strategy has been to keep the models as parsimonious as possible, in part by adding a few variables separately in a series of models. In my final models, I include six macro-level variables, which is probably the maximum possible with 18 countries.

Results

Table 1 shows two models where I include the individual-level variables, and no country-level variables. I present the odds ratios and *T*-scores for each variable. Based on the original WVS data, the first model treats class as not mutually exclusive. The second model uses a strategy where I subordinate each respondent to his or her lowest class location. Although there are some differences for the occupation and/or class schema results, the basic pattern of results is consistent across both strategies. In analyses with the second strategy available on request, the subsequent results were consistent. So, I proceed with the first strategy and allow the occupation and/or class variables to be not mutually exclusive.

Table 1 shows that women are about 10% to 12% less likely to be unionized than men.[19] For each year older, a worker is 2% more likely to be unionized. For each level of education, a worker is 18% to 20% more likely to be unionized. Compared to unclassified workers, the self-employed are 22% to 33% as likely to be unionized. In Model 1, managers and/or professionals are 19% more likely to be unionized than the unclassified. In the mutually exclusive schema, managers and/or professionals are not significantly different. Clerical workers are 26% to 50% more likely to be unionized. Skilled workers are 55% to 62% more likely, and manual workers are 16% to 40% more likely. In both models, unskilled workers are not significantly different from the unclassified. Given the robustness of the individual-level

Table 1

HGLM of Union Membership on Individual-Level Variables in 18 Affluent Democracies: Odds Ratios and *T*-Scores Displayed

	Class Not Mutually Exclusive	Class Mutually Exclusive
Country level		
Intercept	.296*** (−4.560)	.307*** (−4.513)
Individual level		
Sex	.883*** (−2.712)	.898** (−2.381)
Age	1.023*** (11.199)	1.020*** (10.126)
Education	1.182*** (4.927)	1.214*** (5.809)
Self-employed	.217*** (−14.024)	.328*** (−3.284)
Manager and/or professional	1.192** (2.286)	1.198 (1.112)
Clerical	1.257*** (2.855)	1.492** (2.424)
Skilled worker	1.548*** (5.242)	1.623*** (2.883)
Manual worker	1.162* (1.750)	1.396** (1.986)
Unskilled laborer	.877 (-.733)	1.119 (.480)

Note: HGLM = hierarchical generalized linear logit model. All country-level independent variables are lagged one year (N = 13,763 individuals in 18 countries).
*p < .10. **p < .05. ***p < .01.

variables, I do not show the individual-level results in the remaining tables. The models control for these individual-level variables, however, and the results are available on request.

Institutional

In Table 2, I present models that replicate Western's (1994) analysis. In every model, left cabinet has a very significant, positive effect. Across models, the likelihood of being unionized increases by about 4% to 6% for every year that a left party controls government. Workers in countries with a ghent system are between 2.2 and 3.5 times more likely to be unionized. This replicates the established finding that cross-national variation in unionization reflects the interest of workers to join unions where unions provide unemployment insurance. As Appendix B displays, the three ghent countries, Denmark, Finland, and Sweden, are three of the four highest union density countries. The control for labor force participation is not significant in the first two models but becomes significantly positive in the third model. As the reader observes, this variable's odds ratios are quite unstable. In analyses available on request, if one drops the United States,

Table 2
HGLM of Union Membership on Institutional Variables in 18 Affluent Democracies:
Odds Ratios and *T*-Scores Displayed

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Left cabinet	1.055*** (3.443)	1.047*** (3.270)	1.052*** (4.473)	1.045*** (3.397)	1.039*** (3.391)	1.044*** (4.084)
Ghent	3.499** (2.783)	3.366** (2.634)	2.166* (1.855)	2.801**(2.258)	2.085* (1.791)	1.690 (1.353)
Labor force participation (natural log)	20.695 (1.716)	21.247 (1.683)	18.328* (1.970)	24.088* (1.870)	243.119*** (3.189)	128.739*** (3.038)
Neo-corporatism	.646 (−.847)					
Wage coordination		1.051 (.517)				
Workplace access			2.330** (2.572)			1.838* (1.946)
Wage coordination × workplace access						
Right cabinet					.969** (−2.748)	.976* (−2.133)
Intercept	.000* (−2.026)	.000* (−2.003)	.000** (−2.442)	.000** (−2.26)	.000*** (−3.477)	.000*** (−3.459)

Note: HGLM = hierarchical generalized linear logit model. All country-level independent variables are lagged one year ($N = 13{,}763$ individuals in 18 countries). All models include the individual-level variables of Model 1 of Table 1 (not shown).
*$p < .10$. **$p < .05$. ***$p < .01$.

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Germany, Italy, or the United Kingdom, the results for this variable are consistent. If one drops this variable, the other results are consistent.

The first four models include one measure of centralized labor markets at a time. Neo-corporatism and wage coordination are not significant in Models 1 and 2. These results replicate past research's insignificant findings for measures of corporatism and labor market centralization (Western, 1994). The third model features a significant positive effect for Oskarsson's (2005) measure of workplace access. Workers in countries with high workplace access are 2.3 times more likely to be unionized than workers in countries with minimal access. The fourth model tests Oskarsson's claim that the interaction of centralization and access shapes unionization. Yet this interaction is not significant. In contrast to Oskarsson's claim, I find that workplace access predicts unionization by itself not in an interaction. Indeed, workplace access appears to be the more salient measure of labor market centralization, so I retain it in subsequent models.

The fifth model adds right cabinet, which is significantly negative. For each year right parties control government, the odds of being a union member decline by about 2%. For example, following the roughly 18 years of Thatcher and Major Tory rule, U.K. workers were 36% less likely to be unionized. Following the 12 years of Reagan and Bush Republican presidencies, U.S. workers were 24% less likely to be unionized. Notably, the effect of right cabinet is about one half as large as the effect of left cabinet. It appears to be more effective to build up unionization through left party rule than it is to dismantle it through right party rule.

Finally, Model 6 presents a revised institutional model by including workplace access and right cabinet along with the three original institutional variables. In this model, ghent becomes insignificant (though it returns to significance in later models) while the other variables remain significant. This revised institutional model, featuring left and right cabinet, ghent, workplace access, and a control for labor size, is retained in subsequent analyses.

Economic

Table 3 adds the older economic sources of the business cycle and the new economic sources of globalization to Model 6 from Table 2. The first two models examine the business cycle. Inflation and unemployment are insignificant in the first model.[20] Unemployment and economic growth are insignificant in the second model.[21] In these models, a few of the core institutional variables become insignificant—though left cabinet remains robustly significant throughout. These insignificant findings for business

Table 3

HGLM of Union Membership on Institutional Plus Economic Variables in 18 Affluent Democracies: Odds Ratios and T-Scores Displayed

	Model 1	Model 2	Model 3	Model 4	Model 5
Left cabinet	1.046*** (3.832)	1.045*** (3.793)	1.046*** (4.199)	1.045*** (3.948)	1.042** (3.111)
Ghent	1.866 (1.256)	1.644 (1.014)	1.734 (1.422)	1.681 (1.289)	1.786 (1.338)
Labor force participation (natural log)	95.166 (1.665)	218.764*** (1.894)	218.641*** (3.229)	115.790** (2.822)	118.232** (2.845)
Workplace access	2.076* (2.025)	1.770 (1.706)	1.849* (1.972)	1.859* (1.902)	1.910* (1.887)
Right cabinet	.982 (−1.310)	.978 (−1.748)	.980 (−1.666)	.977* (−2.029)	.976* (−2.071)
Inflation	1.135 (.837)	1.008 (.114)			
Unemployment	1.007 (.096)	1.063 (.821)			
Economic growth			1.002 (1.069)		
Trade and investment openness					
Net trade and investment				1.009 (.383)	
Deindustrialization					.994 (−.343)
Intercept	.000* (−1.852)	.000* (−2.029)	.000*** (−3.628)	.000*** (−3.223)	.000*** (−3.294)

Note: HGLM = hierarchical generalized linear logit model. All country-level independent variables are lagged one year (N = 13,763 individuals in 18 countries). All models include the individual-level variables of Model 1 of Table 1 (not shown).

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

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cycle variables confirm recent sociological work (Western, 1997). The business cycle is less relevant than institutional factors to explaining cross-national variation in unionization.

The third model adds trade and investment openness as a measure of globalization—the sum of international economic flows. This variable is not significant. Model 4 shows that net trade and investment has no effect on unionization.[22] It is noteworthy that all of the highly unionized Scandinavian countries (Denmark, Finland, Norway, and Sweden) also have quite high levels of trade and investment openness. By contrast, the United States and Japan have low unionization and low trade and investment openness. Although there has been a lot of concern with globalization in the United States, the United States is far behind most other affluent democracies in trade and investment openness. So it is unlikely that globalization is the cause of low unionization in the United States. Model 5 examines deindustrialization, which might have declined as a result of globalization and might trigger union decline; however, this variable is also insignificant. Despite all the concern with dramatically increasing globalization, these analyses provide no evidence that globalization undermines workers' likelihood of being union members.

It could be that globalization influences unionization by decreasing the likelihood that certain types of workers are unionized. This can be tested by setting the individual-level variables as random coefficients and testing the effect of globalization on those coefficients. In analyses available on request, I separately tested the globalization variables' influence on the skilled worker, manual worker, and, following Baldwin (2003), unskilled laborer coefficients. Also, I tested globalization's effect on the education slope. None of these analyses provided evidence that globalization undermines unionization.[23] Along with the business cycle results, these findings support the emerging sociological and political science consensus that institutional sources are far more important than economic sources to explaining unionization.

Solidaristic

In Table 4, I evaluate the claims of Hechter's (2004) solidaristic theory of negative effects for welfare state generosity and immigration. The first three models examine different measures of the welfare state: social welfare expenditures, decommodification, and Social Security transfers. The most general measure of the welfare services and transfers, Social Security expenditures, is significantly negative. Decommodification, a concept

Table 4

HGLM of Union Membership on Institutional Plus Solidaristic Variables in 18 Affluent Democracies: Odds Ratios and *T*-Scores Displayed

	Model 1	Model 2	Model 3	Model 4	Model 5
Left cabinet	1.059*** (5.382)	1.051*** (4.219)	1.056*** (6.133)	1.043*** (4.768)	1.060*** (6.407)
Ghent	2.171*** (2.259)	1.645 (1.299)	2.402** (2.758)	2.215** (2.337)	1.887* (2.188)
Labor force participation (natural log)	80.911*** (3.219)	258.638*** (3.284)	29.401** (2.568)	25.562* (2.189)	29.918** (2.672)
Workplace access	1.466 (1.361)	1.793* (1.887)	1.719** (2.243)	2.322** (3.032)	2.190*** (3.260)
Right cabinet	.971** (−3.015)	.967** (−2.420)	.977** (−2.739)	.982* (−1.924)	.989 (−1.219)
Social welfare expenditures	.937** (−2.404)				
Decommodification		.964 (−1.142)			
Social Security transfers			.906** (−3.049)		
% Foreign born				1.042** (2.503)	
Net migration					1.165*** (3.279)
Intercept	.000*** (−3.333)	.000*** (−3.676)	.000*** (−2.739)	.000*** (−2.782)	.000*** (−3.418)

Note: HGLM = hierarchical generalized linear model.
All country-level independent variables are lagged one year (*N* = 13,763 individuals in 18 countries). All models include the individual-level variables of Model 1 Table 1 (not shown).
*p < .10. **p < .05. ***p < .01.

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many infer is the most valid measure of welfare state generosity, is not significant. Social Security transfers is significantly negative. For a standard deviation increase in social welfare expenditures or social security transfers, we can expect about one third less likelihood of a worker being unionized. Thus, for two of the three welfare state measures, the evidence is supportive of solidaristic theory. Yet the core institutional variables actually become more significant than in Table 3. Left cabinet, ghent (in Models 1 and 3), workplace access (in Models 2 and 3), and right cabinet are all significant with slightly larger odds ratios than in previous models.

As mentioned above, social welfare expenditures and decommodification are correlated with left cabinet. In analyses available on request, I experimented with dropping left cabinet from the model. In these models, social welfare expenditures and decommodification would be insignificant and positively signed ($t = .31, .53$, respectively), and social welfare expenditures would be insignificant ($t = -.29$). Thus, caution may be appropriate in concluding that the welfare state results fully support solidaristic theory.[24] Moreover, Hechter (2004) clearly linked the importance of the direct rule effects to the effects of ethnic heterogeneity. So truly supporting solidaristic theory involves also finding negative effects of immigration.

The last two models examine measures of immigration. It is surprising to note that both—the percentage foreign born and net migration—have significant positive effects.[25] For a 1% increase in the percentage foreign born, the likelihood of unionization is expected to increase by about 4%.[26] For a 1% increase in net migration, the likelihood of unionization is expected to increase by about 17%. With a standard deviation increase in these two immigration measures, the likelihood of being a union member increases by about 27% or 34%. These findings contradict Hechter's claim that immigration undermines unionization.

Despite these findings, a careful sensitivity analysis of the models suggests that these results are sensitive to including the other country-level variables. For example, the percentage foreign born and net migration become insignificant if one drops all other country-level variables ($t = .23, -.16$, respectively). Also, the percentage foreign born becomes insignificant if one removes the ghent ($t = 1.63$) or workplace access variables ($t = 1.24$). So the significant positive results are not very robust. Including the country-level variables, however, workers in countries that have more immigrants and, in turn, ethnic heterogeneity, are more likely to be unionized.[27] At the same time, the core institutional variables remain significant (except right cabinet in Model 5).

A close look at the descriptive patterns also fails to confirm solidaristic theory's claims about immigration. Among countries with the highest levels

of net migration and percentage foreign born, most are middle-density countries (Australia, Canada, Ireland, New Zealand, Switzerland; Wallerstein & Western, 2000). By contrast, countries with the lowest percentage foreign born (e.g., Japan or Italy) or the lowest net migration (e.g., France or Austria) include middle-density and low-density countries. Hechter (2004) highlighted Switzerland and Australia for cultural heterogeneity and low levels of class politics (p. 435)—but he noted Switzerland's persistently high-class voting (p. 434), and Australia is a middle-density country. Departing from solidaristic theory, he explained Japan's cultural homogeneity and low union density as a function of Japan's distinctive firm-level union organization. The bivariate correlations between the WVS's mean levels of union membership in each country and the percentage foreign born and net migration are very weakly negative ($r = -.05, -.12$, respectively). As I mentioned above, the WVS probably underestimates unionization in Germany, Italy, and the United Kingdom. If one adjusted those country estimates accordingly, there would still be no apparent relationship between immigration and unionization.

These surprising and unexpected findings may prompt some readers to ask for a theory of why or how immigration increases unionization. Rather than speculating, I simply suggest the positive findings contradict Hechter's expectations of negative effects. Yet, given the lack of robustness to the results and the descriptive patterns, the safest conclusion seems to be that there is no relationship between immigration and union membership.

Ultimately, we can treat Models 1 or 3 as the "final" model for the analyses. These models reveal that institutional variables exert a great deal of influence on union membership. Although the welfare state is a significant influence, left and right cabinet are significant in both models, and ghent is significant in one model whereas workplace access is significant in the other.

Discussion

Returning to the orienting question of the current study, the analyses speak to why unionization varies across affluent democracies at the end of the 20th century. The analyses provide no support for older or new economic explanations. Like so much recent sociological and political science research, I do not find significant results for measures of the business cycle. Although economistic business cycle accounts held great sway in debates over unions for several decades, recent cross-national research has fundamentally challenged them. Proponents of business cycle explanations might counter that their models explain historical fluctuation within countries

more than cross-national variation; however, Western's (1997) study provided little support for even that application. Ultimately, institutional explanations are far more useful to understanding unionization than business cycle explanations.

What about globalization? There has been a lot of commentary on how globalization is altering labor relations and reshaping the politics and economies of affluent democracies. Globalization has certainly been a suspect in public debates about the decline of unions and seems to occupy the attention of labor organizers and politicians. Nevertheless, I am unable to show that globalization significantly influences the likelihood of union membership. Trade and investment openness and net trade and investment (and each of the components of these summary measures, see footnote 22) simply do not influence the likelihood that a worker is unionized. Supplementary analyses fail to support claims that globalization undermines unionization for specific types of workers. These multilevel cross-national analyses are not the same test as past macro-level analyses of union decline over time; however, the results fail to show that globalization undermines unionization.

The current study provides uneven, and not very robust support for Hechter's (2004) solidaristic theory. The theory is somewhat useful for helping to understand the decline of unionization and class politics in affluent democracies. However, the supportive evidence is limited to the role of the welfare state—what Hechter called *direct rule*. Workers in affluent democracies with more generous social welfare expenditures or Social Security transfers are less likely to be unionized. Because the welfare state provides services that class-based groups formerly provided, there may be less incentive to join class-based groups. At the same time, however, advocates of solidaristic theory need to explain why decommodification does not influence unionization. As I explain in footnote 17, Hechter (2004) referred to "the provision of welfare as an entitlement" (p. 427) that seems consistent with Allan and Scruggs' (2004) measure of decommodification. Given the widespread view among welfare state scholars (Allan & Scruggs, 2004; Esping-Andersen, 1990) that decommodification is purportedly a more valid welfare state measure, its insignificance is probably not due to measurement error.

Even more than the direct rule propositions, the current study challenges solidaristic theory's propositions about immigration. The results contain only positive effects, and significant at that, of the effect of the percentage foreign born and net migration on unionization. Although I leave it to others to theorize and account for this pattern (e.g., Watts 2002), I suggest the positive findings at least contradict this part of solidaristic theory. More

likely, the relationship between immigration and unionization is not robust, and the safest conclusion is that there is no relationship. Direct rule may trigger a process where status and identity groups form and compete with class groups; however, there is no evidence that immigration contributes to this process. Even if declining unionization is a manifestation of declining class politics—a controversial claim best left for future scrutiny in another forum—immigration is not triggering this decline.

The analysis I conduct revisits and updates Western's (1994, 1997) influential study. Even in this period after the widespread decline of unionization, the results are quite supportive of Western's institutional model. Left party control of government and ghent systems continue to influence unionization positively and explain cross-national differences. Although Western did not find a significant effect of bargaining centralization, another measure of centralization—workplace access—has a significant positive effect. Although Oskarsson (2005) highlighted this variable (also Ebbinghaus & Visser, 1999), I cannot substantiate his claim that the interaction of workplace access and centralization is most crucial. The results show that measures of neo-corporatism, wage coordination, and Oskarsson's interaction are not significant. Overall, these analyses confirm the value of institutional explanations of unionization. Moreover, the current study updates analyses of 1980s data and demonstrates that institutional explanations are useful with data for the late 1990s, after the cross-national decline of unionization.

In addition to updating prior research on the multilevel sources of unionization, the paramount, novel contribution of the current study might be to demonstrate the role of right parties as an institutional influence. Right cabinet has a significant negative effect on unionization. For each year of right party control of government since 1946, workers in that country are about 2% less likely to be unionized. To my knowledge, this finding has not been previously established. Future institutional explanations of unions should incorporate right cabinet. It is valuable to recognize that it is not simply the Left that influences working class organization. The Right powerfully shapes the political context for labor mobilization.

Because there is no evidence that globalization and deindustrialization undermine unionization and only limited evidence that immigration is consequential, the current study provides a chance to consider what are truly the most important causes of the decline of unionization and working-class organization and mobilization. It may be too easy to associate the decline of working-class organization with immigration, globalization, or deindustrialization. Even though unionization, like most market phenomena, is institutionalized within domestic economies, some would have us depart

from institutional explanations and look outside a country to account for union decline. The current study suggests we should not abandon institutional explanations in this era of declining working-class organization. Given the findings for the welfare state variables, I suggest we may be better off incorporating the welfare state into an institutional explanation. Rather than using solidaristic theory, institutional explanations may be flexible enough to incorporate this additional mechanism. In economic sociology, the welfare state is routinely considered an "institutional" variable, and the state meets almost any reasonable sociological definition of what is an *institution*. Hence, we should broaden institutional explanations of unionization and working-class organization by including the welfare state.

Obviously, the current study is not the last word on the sources of unionization in affluent democracies. Future research would be valuable in at least two directions. First, the current study has mostly set aside the issue of how institutions affect the relationship between individual-level characteristics and union membership. Although Western (1994) illustrated the importance of these cross-level interactions, I have mostly relegated it to footnotes. Because the current study is highly supportive of institutional explanations, further work on how institutions influence the individual-level coefficients certainly would be productive.

Second, despite its popularity, multilevel models cannot answer all questions. HGLM is valuable because it fosters the macro-level theorizing of contextual causes while utilizing the greater information of individual-level data. Nevertheless, one cannot fully incorporate historical variation in HGLM. One solution might be a three-level model with multiple time points (spaced over a longer period) for each country; however, the data needed for that remain far off. Therefore, we continue to need qualitative and quantitative historical analyses as well. It is important to recognize that advocates for globalization accounts and solidaristic theory might respond that a true test of historical change is necessary. Indeed, there have been empirical analyses that include historical variation that demonstrate globalization has contributed to the decline of labor unions (Brady & Wallace, 2000; Lee, 2005; Western, 1995, 1997). Maybe rising globalization and increasing immigration influence historical variation in unionization more than cross-national variation. As a result, macro-level pooled time series analyses of country-level variation remain an essential approach for understanding unionization as well. Of course, it is possible that immigration, globalization, and deindustrialization might be consequential to the historical decline of unions in some particular countries, and case studies remain essential as well.

Ultimately, the current study contributes to a revised institutional model of unionization. This revised model does not replace, but rather augments, the institutional models provided by previous research (Western, 1997). Institutional explanations continue to be the most useful approach for understanding cross-national differences in unionization across affluent democracies. However, the current study suggests that those models should include right cabinet and the welfare state along with left cabinet, ghent systems, and workplace access. Political and labor market institutions exert tremendous influence on workers in affluent democracies.

Appendix A
Descriptive Statistics, Measurement, and
Sources for Variables

	M (*SD*)	Description	Source(s)
Country level			
Left cabinet	16.88 (12.53)	Cumulative sum of left seats as a proportion of all government parties in each year since 1946.	Huber, Ragin, Stephens, Brady, & Beckfield (2004)
Ghent	.17 (.38)	1 = ghent system	Oskarsson (2005); Western (1997)
Labor force participation (natural log)	3.89 (.08)	Labor force as a percentage of the population	OECD (2003b)
Neo-corporatism	.48 (.34)	An index based on multiple indicators measuring the presence of cooperative arrangements between firms, labor, and the state	Kenworthy (2003)
Wage coordination	3.33 (1.57)	An index scaled 1-5, with 1 being the least coordinated and most fragmented and 5 being the most centralized, concentrated, and coordinated	Kenworthy (2003)
Workplace access	.61 (.40)	Measure of access to shop floor scaled 0-1, with 1 having most access	Oskarsson (2005); Ebbinghaus and Visser (1999, 2000)

(continued)

Appendix A (continued)

	M (SD)	Description	Source(s)
Wage Coordination × Workplace Access	.45 (.37)	Interaction of two previous measures after coordination is rescaled (0-1)	See above
Right cabinet	19.93 (13.84)	Cumulative sum of right seats as proportion of all government parties in each year since 1946.	Huber et al. (2004)
Inflation	1.46 (.93)	Annual rate of change in cost of living	International Monetary Fund (2003)
Unemployment	7.30 (2.78)	Percentage of labor force unemployed	OECD (2003b)
Economic growth	2.88 (1.75)	Annual rate of change in real GDP PPP	OECD (2003a)
Trade and investment openness	98.37 (71.68)	Sum of imports, exports, and inward and outward portfolio and direct investment as % of GDP	IMF (2003)
Net trade and investment	−.08 (4.76)	Sum of net trade and net investment as % of GDP	IMF (2003)
Deindustrialization	−25.82 (7.86)	Rate of change between survey year and twenty years prior in manufacturing as a % of total employment	OECD (2003b)
Social welfare expenditures	22.99 (5.32)	Spending on welfare transfers and services as % of GDP	OECD (2001, 2003a)
Decommodification	27.38 (5.39)	Index of coverage, qualifying period for eligibility, and replacement rates for unemployment, sickness, and pension	Allan and Scruggs (2004)
Social Security transfers	14.82 (3.51)	Spending on welfare transfers as % of GDP	OECD (2003b)
% Foreign born	10.81 (6.32)	% of resident population born in another country	OECD (2005)

(continued)

Appendix A (continued)

	M (*SD*)	Description	Source(s)
Net migration	2.20 (2.07)	Difference between in population between previous and current year after births and deaths	OECD (2003b)
Individual level			
Union membership	.26 (.44)	1 = union member	Inglehart & Collaborators (2005)
Sex	.48 (.50)	1 = female	See above
Age	39.41 (11.31)	Years	See above
Education	2.05 (.75)	WVS standardized values: 1 = lower level, 2 = middle level, 3 = upper level	See above
Self-employed	.09 (.29)		See above
Manager and/or professional	.43 (.50)	Supervisors, administrators, legislators, and foremen	See above
Clerical	.27 (.45)		See above
Skilled worker	.18 (.38)	Craft and related trades or skilled manual workers	See above
Manual worker	.17 (.37)	Plant and machine operators, assemblers, unskilled and semiskilled manual workers	See above
Unskilled laborer	.02 (.14)	Elementary agricultural, fishery, mining, construction, and manufacturing workers	See above

Appendix B
Details from World Values Surveys (WVS) and Key Country-Level Variables

	WVS Year	Original Sample	Employed Workers Sample	Union Membership Mean (*SD*)	Left Cabinet	Ghent	Workplace Access	Right Cabinet	% Foreign Born
Australia	1995	2048	1102	.340 (.474)	18.77	0	.5	30.25	23.0
Austria	1999	1485	771	.249 (.433)	32.75	0	.5	20.27	12.5
Belgium	1999	1912	865	.230 (.421)	17.89	0	1.0	6.97	9.3
Canada	2000	1931	1058	.213 (.409)	0	0	1.0	15.74	19.0
Denmark	1999	1023	589	.723 (.448)	30.38	1	1.0	10.26	6.8
Finland	1999	1038	499	.479 (.500)	22.34	1	1.0	5.86	2.5
France	1999	1615	787	.065 (.246)	14.17	0	.0	29.39	7.4
Germany	1999	2036	876	.106 (.308)	12.56	0	.5	29.805	12.5
Ireland	1999	1012	537	.160 (.367)	5.98	0	.5	13.69	10.4
Italy	1999	2000	1053	.082 (.274)	7.25	0	.5	1.39	2.2
Japan	2000	1362	763	.104 (.305)	1.37	0	1.0	51.73	1.0
Netherlands	1999	1003	631	.271 (.445)	12.74	0	.5	12.11	10.1
New Zealand	1998	1201	766	.200 (.400)	16.25	0	.0	35.47	19.5
Norway	1996	1127	801	.569 (.495)	37.88	0	1.0	6.36	6.7
Sweden	1999-2000	1015	651	.730 (.444)	42.86	1	1.0	2.77	12.0
Switzerland	1996	1212	736	.193 (.395)	12.79	0	.0	23.52	20.2
United Kingdom	1999	1000	474	.103 (.305)	17.83	0	.0	35.17	8.3
United States	1999-2000	1200	804	.142 (.349)	0	0	1.0	28	11.1

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Notes

1. Western (1997) wrote,

> I have used the term "labor market centralization" a little loosely to refer to (1) the level of collective bargaining coverage, (2) the centralization of unions' and employers' own internal administration, and (3) the role of unions in economic and social policy. In practice, these distinctions may not be so important for this analysis. All three aspects of labor market centralization contribute to union growth, and all three are closely related empirically. (p. 30)

Oskarsson (2005) used measures of workplace access and wage coordination to tap into this concept, whereas others used measures of corporatism or bargaining centralization. Below, I try to sort out which indicator of centralization best exemplifies this concept. Like Western, I view the various indicators as complementary dimensions of the same concept.

2. In 1994, Western merged 10 surveys from Wright's (1997) comparative class structure and consciousness survey (Australia 1986, Canada 1982, Denmark 1985, Finland 1981, Germany 1985, Japan 1987, Norway 1982, Sweden 1980, United Kingdom 1984, United States 1980) with four Eurobarometer surveys (Belgium 1988-1989, France 1988-1989, Italy 1988-1989, Netherlands 1988-1989), and two surveys from the International Social Survey Program (Austria 1987-1988, Switzerland 1987). In 1997, he only used the 10 surveys from Wright's data set. Oskarsson (2005) merged four of Wright's surveys (Australia, Canada, United Kingdom, United States) with 11 1993 Eurobarometer surveys. One advantage of the analyses below is that I exclusively rely on one common survey and all are from 1995 to 2000.

3. Western (1997) elaborated, "Thatcher's innovation was to build a formal legal framework where none had previously existed. This significantly reduced the ability of unions to coordinate, and enhanced the capacity of employers to resist. Reagan, on the other hand, restaffed the existing legal machinery with staunch union opponents. As employers, both governments took a strong hand against unions, fueling hostility to labor in the private sector" (p. 195).

4. This matter is hardly settled, however, as Lee (2005) found right party governments have no effect on unionization in a pooled time series analysis of affluent democracies from 1962 to 1997.

5. I make no claim to represent all dimensions of "globalization" in the diverse literatures deploying the concept. It is beyond the bounds of the current study to examine cultural, political, and legal dimensions of globalization, the much longer historical process of international economic integration that marks the rise of the modern capitalist system in the 16th century, or the link between globalization and unions in developing countries.

6. Hechter (2004) wrote, "Working-class organizational capacity has been eroding since the end of World War II. . . . The proportion of the unionized labor force has generally fallen in advanced societies since 1950 (Golden and Pontusson, 1992)" (p. 408). This is difficult to substantiate because Western (1997) and Ebbinghaus and Visser (2000) showed unionization rose at least until the late 1970s. Regardless, few dispute unions have declined since the 1980s.

7. This is one point where Hechter's (2004) compelling theory is questionable. Basically acknowledging Western's model, Hechter wrote: "At least three other institutions are also associated with union density. These provide unions with access to representation in the workplace, recognition by employers through nationwide and sectoral corporatist institutions, and closed-shop rules that make membership compulsory (Ebbinghaus & Visser, 1999)" (p. 435). Although he wrote that these institutions "support[ing] member recruitment and retention . . . guarantee[ing] union influence with employers, politicians and civil servants . . . [and]

act to increase the private benefits of union membership, these findings turn out to be consistent with the solidaristic theory rather than anomalous" (p. 435); it is difficult to see how these institutions truly fit in his theory. If any material benefit that unions provide (e.g., wage premiums) can be folded within solidaristic theory, his theory may become so all encompassing it is vacuous.

8. The details of the models are the default setting in HLM 6.0. I experimented with an overdispersion parameter (e.g., Western, 1994) but found it only very minutely altered the *T*-scores and did not change any of my conclusions. Under Laplace estimation, the *T*-scores for the country-level variables were larger while the *T*-scores for the individual-level variables were slightly smaller, and the odds ratios were almost identical. I also estimated the models with the country-level variables grand mean centered; however, it did not change the conclusions.

9. As mentioned above, because Western's (1994) and Oskarsson's (2005) individual-level data is drawn from different surveys, it may or may not be comparable. The World Values Surveys (WVS) provide a common survey for all 18 countries.

10. In analyses available on request, I analyzed age as three dummies (18-34, 35-51, and 52-65) like Western (1994). I found that my measure had the most significant effects and union membership appeared to increase linearly with age, whereas the results were basically identical with the dummies. In analyses available on request, I also analyzed a set of dummies for the three levels of education. Again, I found my measure was most significant, union membership appeared to increase linearly with education, and the results were consistent with the dummies.

11. Eighteen percent of the sample is included in more than one class. The most common are professional and/or manager and another category. By comparison, 309 respondents (2.2% of the sample) are in the other category and not included in any of the six class categories. The smallest class is unskilled laborer (2% of the sample).

12. For example, if the Left controls government by itself for 10 years, this variable would have a value of 10. If the Left is in the ruling coalition with one half the power for 10 years, this variable would have a value of 5. Western (1994, 1997) also uses a historically cumulative measure of left cabinet, though a slightly different operationalization.

13. I also experimented with labor force size but decided against including it because it would result in collinearity with several of the key institutional variables.

14. Western (1997) used an index from Bruno and Sachs (1985) that to my knowledge has not been updated.

15. Of course, reasonable debate can occur about the coding of parties. I defer to Huber, Ragin, Stephens, Brady, and Beckfield's (2004) coding because it is perhaps the most well-established. Most parties that readers would define as "right" are coded as "right" (e.g., U.S. Republicans, U.K. Tories, etc.). The most controversial cases might be the coding of Italian Christian Democrats (ICD) as centrist and German Christian Democrats (GCD) as rightist. Allan and Scruggs (2004) explained this is because there are parties to the right of the ICD in the Italian parliament—for example, the Northern League. By contrast, there is no party to the right of the GCD in the German parliament. Dropping Italy or Germany does not change the results. I acknowledge that these party measures do not assess the "intensity" of rightness or leftness—all rightist parties are coded equally. Although the left cabinet variable is more conventional in the union literature (Western, 1997), the right cabinet variable is perhaps less questionable. Only true leftist parties are coded leftist—regardless of whether there are parties further left in a country's parliament. As a result, the United States and Canada are coded as 0 for left cabinet. Although I build on Huber and Stephens (2001) measures, my right cabinet variable is quite distinct from their more widely used Christian Democrat cabinet variable.

16. In analyses available on request, I analyzed manufacturing employment as a percentage of the labor force, and this variable was not significant.

17. Hechter's (2004, p. 425) discussion of the scope and penetration of state direct rule seems consistent with social welfare expenditures and social security transfers. Hechter also referred to "the provision of welfare as an entitlement" (p. 427), which seems consistent with decommodification.

18. The WVS has some variables that tap into whether the respondent is an immigrant. However, there is an enormous amount of missing data on these variables. Because of that and because I am more concerned with testing the contextual effect of immigration according to solidaristic theory, my analyses cannot directly speak to the literature on organizing immigrant workers in the United States

19. In analyses available on request, I found that the only country-level variable that significantly affected the female coefficient (as a random coefficient) was left cabinet, which is significantly negative.

20. As I explained above, labor force participation and unemployment are correlated (.74). In analyses available on request, I dropped labor force participation from the first two models in Table 2. Unemployment would not have a significant effect in Model 1 but would be significantly negative at the .10 level in Model 2. Because its effect is not robust and most include a control for the labor force, I chose not retain unemployment.

21. In analyses available on request, I included inflation, economic growth, and unemployment individually in separate models. There is some evidence that inflation has a weakly significant positive effect without unemployment in the model; however, it is not robust. Unemployment and economic growth would not be significant.

22. As I mentioned above, I analyzed each of the components of the summary globalization measures: inward and outward portfolio investment, inward and outward foreign direct investment, imports and exports, investment openness and net investment, and trade openness and net trade (all as a percentage of GDP). I also examined indexes of capital and current accounts liberalization and legal openness, and a measure of agreement to major trade arrangements (Quinn, 1997). Besides the 1-year lags, for each globalization indicator, I analyzed the average for the previous 5 years. None of these variables had a significant effect. These results are available on request.

23. In addition to the summary globalization measures in Table 3, I also examined each component in these supplementary analyses. Most globalization effects were insignificant; however, the only significant effects were positive on the skilled or unskilled worker slopes. These contradict the modal claims about how globalization reduces unionization (Baldwin, 2003).

24. Hechter (2004) inaccurately asserted that 1989 was the peak for "welfare effort in advanced societies" (p. 432). Brady, Beckfield, and Seeleib-Kaiser (2005) showed that the average peak for decommodification actually came in the mid-1980s, whereas the average peak for social welfare expenditures and social security transfers probably came later in 1993 if at all. Closely examining the countries, only three countries (Belgium, Ireland, and the Netherlands) actually peaked in social welfare expenditures and Social Security transfers before 1990. Eight countries experienced their peak decommodification before 1990; however, five experienced it after 2000.

25. These findings are not due to collinearity. None of the bivariate correlations between % foreign born or net migration and the other country-level variables exceed .35. In an ordinary least squares (OLS) model of the percentage foreign born ($n = 18$), left cabinet, ghent, the natural log of labor force participation and workplace access are all insignificant and the R^2 is only .27. In an OLS model of net migration, none of those variables is significant, and

the R^2 is only .19. These variables continue to be significantly positive if a welfare state measure is added to the model or if the United States, Germany, Italy, or the United Kingdom are dropped from the analyses.

26. In analyses available on request, I substituted a different estimate of the percentage foreign born from the World Bank's *World Development Indicators* database. This variable would also be significantly positive ($t = 2.33$). These two estimates are correlated .71. If one treats the individual-level variables as random coefficients, the percentage foreign born has a positive significant effect on the manual or skilled worker slopes.

27. There might be a selection effect such that immigrants go to richer countries with better economic performance, and richer, better performing countries might also have high union density. However, sensitivity tests provided no support for this. If one adds the aforementioned inflation and unemployment or economic growth variables to the models, the immigration variables remain significantly positive. If one adds real per capita GDP, the immigration variables remain significantly positive.

References

Allan, J. B., & Scruggs, L. (2004). Political partisanship and welfare state reform in advanced industrial societies. *American Journal of Political Science, 48*(3), 496-512.

Bain, G., & Elsheikh, F. (1976). *Union growth and the business cycle: An econometric analysis*. Oxford, UK: Basil Blackwell.

Baldwin, R. E. (2003). *The decline of U.S. labor unions and the role of trade*. Washington, DC: Institute for International Economics.

Bluestone, B., & Harrison, B. (1982). *The deindustrialization of America*. New York: Basic Books.

Brady, D., Beckfield, J., & Seeleib-Kaiser, M. (2005). Economic globalization and the welfare state in affluent democracies, 1975-2001. *American Sociological Review, 70*, 921-948.

Brady, D., & Denniston, R. (2006). Economic globalization, industrialization, and deindustrialization in affluent democracies. *Social Forces, 85*(1), 297-329.

Brady, D., & Leicht, K. (2006). *Party to inequality: Right party power and income inequality in rich Western democracies*. Unpublished manuscript, Duke University, Durham, NC.

Brady, D., & Wallace, M. (2000). Spatialization, foreign direct investment and labor outcomes in the American states, 1976-1996. *Social Forces, 79*, 67-100.

Briggs, V. M., Jr. (2001). *Immigration and American unionism*. Ithaca, NY: Cornell University Press.

Bruno, M., & Sachs, J. (1985). *The economics of worldwide stagflation*. Oxford, UK: Blackwell.

Clark, T. N., & Lipset, S. M. (2001). *The breakdown of class politics*. Washington, DC, Baltimore: Woodrow Wilson Center Press and Johns Hopkins University Press.

Clawson, D., & Clawson, M. A. (1999). What has happened to the U.S. labor movement? Union decline and renewal. *Annual Review of Sociology, 25*, 95-119.

Cooke, W. N., & Gautsch, F. H. (1982). Political bias in NLRB unfair labor practice decisions. *Industrial and Labor Relations Review, 35*, 539-549.

Cornfield, D. B. (1989). *Becoming a mighty voice*. New York: Russell Sage Foundation.

Cornfield, D. B. (1991). The U.S. labor movement: its development and impact on social inequality and politics. *Annual Review of Sociology, 17*, 27-49.

Ebbinghaus, B., & Visser, J. (1999). When institutions matter: Union growth and decline in Western Europe, 1950-1995. *European Sociological Review, 15*, 135-158.

Ebbinghaus, B., & Visser, J. (2000). *The societies of Europe: Trade unions in Western Europe since 1945.* New York: Grove's Dictionaries.

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism.* Princeton, NJ: Princeton University Press.

Farber, H. S., & Western, B. (2001). Accounting for the decline of unions in the private sector, 1973-1998. *Journal of Labor Research, 22*, 459-485.

Farber, H. S., & Western, B. (2002). Ronald Reagan and the politics of declining union organization. *British Journal of Industrial Relations, 40*, 385-401.

Fiorito, J., & Greer, C. R. (1982). Determinants of U.S. unionism: past research and future needs. *Industrial Relations, 21*, 1-32.

Freeman, R. B., & Medoff, J. L. (1984). *What do unions do?* New York: Basic Books.

Golden, M., & Pontusson, J. (1992). *Bargaining for change: Union politics in North America and Europe.* Ithaca, NY: Cornell University Press.

Golden, M. A., Wallerstein, M., & Lange, P. (1999). Postwar trade-union organization and industrial relations in twelve countries. In H. Kitschelt, P. Lange, G. Marks, & J. D. Stephens (Eds.), *Continuity and change in contemporary capitalism* (pp. 194-230). New York: Cambridge University Press.

Gordon, D. (1994). The global economy: New edifice or crumbling foundation? In D. M. Kotz, T. McDonough, & M. Reich (Eds.), *Social structures of accumulation: The political economy of growth and crisis* (pp. 292-305). New York: Cambridge University Press.

Harrison, B., & Bluestone, B. (1988). *The great U-turn.* New York: Basic Books.

Hechter, M. (2004). From class to culture. *American Journal of Sociology, 110*, 400-445.

Hirsch, B. T., & Addison, J. T. (1986). *The economic analysis of unions: New approaches and evidence.* London: Allen & Unwin.

Howell, C. (1995). Trade unions and the state: A critique of British industrial relations. *Politics & Society, 23*, 149-183.

Huber, E., Ragin, C., Stephens, J. D., Brady, D., & Beckfield, J. (2004). *Comparative welfare states data set.* Northwestern University, University of North Carolina, Duke University, and Indiana University.

Huber, E., & Stephens, J. D. (2001). *Development and crisis of the welfare state.* Chicago: University of Chicago Press.

Inglehart, R., & Collaborators (European Values Study Group and World Values Survey Association). (2005). *European and world values surveys integrated data file, 1999-2002, Release I* (2nd ICPSR Version). Available at www.worldvaluessurvey.com

International Monetary Fund. (2003). *International financial statistics database.* Washington, DC: Author.

Kenworthy, L. (2003). Quantitative indicators of corporatism. *International Journal of Sociology, 33*, 10-44.

King, D., & Wood, S. (1999). The political economy of neoliberalism: Britain and the United States in the 1980s. In H. Kitschelt, P. Lange, G. Marks, & J. D. Stephens (Eds.), *Continuity and change in contemporary capitalism* (pp. 371-397). New York: Cambridge University Press.

Kingston, P. W. (2000). *The classless society.* Palo Alto: Stanford University Press.

Kitschelt, H., Lange P., Marks G., & Stephens, J. D. (Eds.). (1999). *Continuity and change in contemporary capitalism.* New York: Cambridge University Press.

Korpi, W. (1983). *The democratic class struggle.* Boston: Routledge.

Lee, C. S. (2005). International migration, deindustrialization and union decline in 16 affluent OECD countries, 1962-1997. *Social Forces, 84*, 71-88.

Leicht, K. T., Wallace, M., & Grant, D. S., II. (1993). Union presence, class, and individual earnings inequality. *Work and Occupations, 20*, 429-451.

Lopez, S. H. (2005). Bring out yer dead. *Work and Occupations, 32*, 355-359.

Milkman, R. (2000). *Organizing immigrants: The challenge for unions in contemporary California.* Ithaca, NY: Cornell University Press.

Moene, K. O., & Wallerstein, M. (1999). Social democratic labor market institutions: A retrospective analysis. In H. Kitschelt, P. Lange, G. Marks, & J. D. Stephens (Eds.), *Continuity and change in contemporary capitalism* (pp. 231-260). New York: Cambridge University Press.

Ness, I. (2005). *Immigrants, unions, and the new U.S. labor market.* Philadelphia: Temple University Press.

Organization for Economic Cooperation and Development. (2001). *OECD social expenditures data base, 1980/1998.* Paris: Author.

Organization for Economic Cooperation and Development. (2003a). *OECD health data CD-ROM, eco-sante.* Paris: Author.

Organization for Economic Cooperation and Development. (2003b). *Organization for economic cooperation and development, labor force statistics.* Paris: Author.

Organization for Economic Cooperation and Development. (2005). *Trends in international migration.* Paris: Author.

Oskarsson, S. (2005). Institutional explanations of union strength: An assessment. *Politics & Society, 31*, 609-635.

Pakulski, J., & Waters, M. (1996). *The death of class.* London: Sage.

Polanyi, K. (1957). *The great transformation.* Boston: Beacon.

Quinn, D. (1997). The correlates of change in international financial regulation. *American Political Science Review, 91*(3), 531-551.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Newbury Park, CA: Sage.

Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., & Congdon, R. T., Jr. (2004). *HLM 6: Hierarchical linear and nonlinear modeling.* Lincolnwood, IL: Scientific Software International.

Rothstein, B. (1992). Labor market institutions and working-class strength. In S. Steinmo, K. Thelen, & F. Longstreth (Eds.), *Structuring politics* (pp. 33-56). New York: Cambridge University Press.

Sassoon, D. (1996). *One hundred years of socialism: The West European left in the twentieth century.* London: Fontana Press.

Schofer, E., & Fourcade-Gourinchas, M. (2001). The structural contexts of civic engagement: Voluntary association membership in comparative perspective. *American Sociological Review, 66*, 806-828.

Scruggs, L., & Lange, P. (2002). Where have all the members gone? Globalization, institutions, and union density. *Journal of Politics, 64*, 126-153.

Stephens, J. D. (1979). *The transition from capitalism to socialism.* London: Macmillan.

Sutcliffe, B., & Glyn, A. (1999). Still underwhelmed: Indicators of globalization and their misinterpretation. *Review of Radical Political Economics, 31*, 111-132.

Visser, J. (2002). Why fewer workers join unions in Europe: A social custom explanation of membership trends. *British Journal of Industrial Relations, 40*, 403-430.

Voss, K., & Fantasia, R. (2004). The future of American labor: Reinventing unions. *Contexts, 3*(2), 35-41.

Wallace, M., & Brady, D. (2001). The next long swing: Spatialization, technocratic control, and the restructuring of work at the turn of the century. In A. L. Kalleberg & I. Berg (Eds.),

Sourcebook on labor markets: Evolving structures and processes (pp. 101-133). New York: Plenum.

Wallace, M., Leicht, K. T., & Raffalovich, L. E. (1999). Unions, strikes, and labor's share of income: A quarterly analysis of the United States. *Social Science Research, 28*, 265-288.

Wallerstein, M., & Western, B. (2000). Unions in decline? What has changed and why. *Annual Review of Political Science, 3*, 355-377.

Watts, J. R. (2002). *Immigration policy and the challenge of globalization.* Ithaca, NY: Cornell University Press.

Western, B. (1994). Institutional mechanisms for unionization in sixteen OECD countries: An analysis of social survey data. *Social Forces, 73*, 497-519.

Western, B. (1995). A comparative study of working-class disorganization: union decline in eighteen advanced capitalist countries. *American Sociological Review, 60*, 179-201.

Western, B. (1997). *Between class and market.* Princeton, NJ: Princeton University Press.

Wood, A. (1994). *North-South: Trade, employment and inequality.* Oxford, UK: Clarendon.

Wright, E. O. (1997). *Class counts.* New York: Cambridge University Press.

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