

Building and Using Strategic Capacity  
Labor Union Confederations and Economic Policy

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**Abstract**

Building and Using Strategic Capacity  
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Mancur Olson made strong claims about the importance of “encompassing” groups for economic performance. He argues that broadly-based interest groups, especially those that transcend regional or industrial barriers, are more likely to push for policies that yield longer-term benefits for a larger proportion of the population. Groups with narrower constituencies tend to pursue parochial goals with the aim of securing a bigger share of the national income for themselves. Observers of labor market institutions have relied on this line of reasoning, especially pertaining to the centralization of wage bargaining, to explain the variance in macroeconomic performance of rich democracies since the oil shocks. Even though the “encompassingness” of unions drives these theories no one has attempted to explain how union federations develop the capacity to bargain at the national level or the wide variation they display in their abilities to influence outcomes they care about. This project begins to explain how economic actors aggregate their interests and how these aggregates develop the capacity to influence national-level policy, with an empirical focus on confederations of national labor unions.

The first part of the project asks why labor unions form confederal organizations and what explains the variation in the confederal authority over affiliates. I devise a model of confederal organization in which I conceive of the confederal problem as akin to a re-





peated Stag Hunt game. Unions have an incentive to cooperate in collective projects but they vary in how much they value the collective project. To enable ongoing cooperation, unions have the option of signing a contract that allocates decision rights about how best to invest collective effort. Weaker affiliates have an incentive to yield decision rights to the stronger. For their part, stronger unions will only permit confederal influence over wage bargaining when there are pronounced economies of scale in cooperation and/or they are compensated in other ways, e.g., through political concessions. The model also predicts a trade-off between the size of the confederation and the number of domains over which it has competency. Subsequent chapters explore the model empirically. Chapter 3 is a paired historical study of the American Federation of Labor and the Knights of Labor. Chapter 4 presents the first econometric study of union confederal centralization. I find consistent evidence for the size-scope trade-off as well as evidence that the structure of political authority, especially federalism and more frequent Left government, affect degree to which unions centralize membership and authority in confederal organizations. I also find large and significant effects for structural variables like trade exposure, size of the economy, and cultural/linguistic fractionalization.

The second half explores the emergence of formal policy agreements between governments and unions in 20 OECD countries, 1974-2000. In chapter 6 I model these agreements as self-enforcing contracts that allow political parties to make policy promises credible to voters. Unions agree to abide by the pact so long as economic conditions make policy a better tool than industrial action for achieving gains in living standards. The model implies that 1) the emergence of pacts should follow the electoral cycle and that the 2) organizational linkages between unions and parties are critical for providing both the incentives for partisan politicians and unions to sign pacts and for making agreements self-enforcing in equilibrium. Chapter 7 is an event history analysis of pact onset using an original dataset of social pacts covering 20 OECD countries between 1974 and 2000. I find that, as expected, pacts are strongly influenced by the electoral cycle. In chapter 8 I apply the model to an empirical puzzle in the cases of Australia and New Zealand. Both countries faced similar



economic crises in the early 1980s yet a pact emerged in Australia but not in New Zealand. Relying on original interviews with key policy makers in both countries, I conclude that the organizational relationship between the union peak associations and the Labor parties were the critical differences that made intertemporal political transactions possible (and self-enforcing) in Australia but not in New Zealand.

The findings in the dissertation have implications across several areas. Part I endogenizes a key variable in current models of wage-price bargaining: union centralization. Part II links the literatures on social pacts and wage bargaining with the larger debates on political business cycles in policy and outcomes. I provide better micro-foundations for theories relating the organizational structure of unions to macroeconomic outcomes. Overall I contest Olson's pessimism about the emergence of strategically meaningful encompassing groups. There are also normative implications for inequality and democracy. Findings in the study show that the cost of implementing needed economic reforms has been both lower and more equitably shared in countries where unions and employers were capable of behaving as unified strategic actors in national-level politics and industrial relations.



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## Chapter 1

## INTRODUCTION

“Peak associations frequently lack the unity needed to have any great influence on public policy, or even coherent and specific policies.” —Mancur Olson (1982:50)

Politics is the process, peaceful or otherwise, through which humans reconcile competing interests. Major political events, however, are rarely the result of interactions between isolated individuals. Rather the interests of individuals are filtered through the groups speaking on their behalf and refracted through political and economic institutions. Groups make up the ensemble cast on the historical stage, but they differ. They can be more or less ephemeral, advocate for positions that are more or less coherent and take actions that vary in their predictability in the name of narrower or broader slices of the population. How groups organize themselves, structure decision making, and choose leaders affects their behavior.

It has long been held that interest groups tend to form in a manner reflecting incentives and opportunities presented to them, especially those generated by political institutions (North, 1990; Schattschneider, 1935; Skocpol, Ganz and Munson, 2000; Wilson, 1973).<sup>1</sup> Where political authority is fragmented and jurisdictions are many, interest groups tend to be fragmented as well. There are also arguments that the “industrial organization” of interest groups has strong implications for economic performance. Mancur Olson (1971, 1982), in particular, makes strong claims about the importance of “encompassing” groups for economic performance. He argues that groups with narrower constituencies (“distributional coalitions”) tend to pursue parochial goals with the aim of securing a bigger share of the

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<sup>1</sup>Theories linking electoral rules to the number of political parties (Cox, 1997; Duverger, 1954; Sartori, 1976) have a similar flavor. Indeed Cox’s attempt to explain the emergence of national-level parties given district-level institutional incentives can be seen as analogous to my project here.

national income for themselves. Each group lacks an incentive to take into account the effects of its demands on the size of the national pie. If groups are “encompassing”, i.e., they aggregate interests in such a way as to transcend ethnic, industrial, or regional divisions, then they act more responsibly and engender correspondingly better outcomes. Olson was famously pessimistic about the likelihood that encompassing groups would emerge and persist, favoring instead a system that approximates the atomistic individuals of orthodox economic theory.

Taken together, these two arguments seem to imply that there should be a strong interrelation between political institutions, interest organization, policy, and economic performance. Furthermore, more fragmented political systems should evince weaker economic performance. These arguments are rarely taken together, however, and for good reason. They jointly generate predictions that seem at odds with the observed economic outcomes of the last century. I argue that the disconnect between these two individually plausible lines of reasoning is an insufficiently nuanced understanding of the relationship between structural variables, political institutions, policy, and the organizational choices of interest groups. Olson’s pessimism stems from a failure to insufficiently account for policy makers’ adaptive potential and how that might vary across different institutional contexts. Arguments linking the organization of interests directly to the formal division of legal authority cannot account for organizational changes in the absence of major institutional reconfigurations.

The central explanandum is the varying ability of organizations to display *strategic capacity*—the ability to act as coherent agents at the national level. My empirical focus is on one particular set of interest groups: national-level labor organizations in rich democracies.<sup>2</sup> My purpose here is well-summarized by Kathleen Thelen: “It may be more appropriate to think of coordination as a process and indeed an outcome that has to be actively sustained and nurtured, produced and reproduced. In other words, where Soskice [among many

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<sup>2</sup>I see no *a priori* reason to restrict the theoretical arguments to apply only to rich countries; this scope restriction is more one of empirical necessity than anything else. Data on the organizational structure of unions and wage bargaining is only available for about 15 Western countries over 30-40 years. For some preliminary thoughts on how social democratic models of wage/price bargaining might apply in developing countries, see Moene and Wallerstein (2006). That said, the argument does not apply to cases in which unions are not independent of direct government and/or employer control.



others] stresses the economic benefits of having coordination, my analysis emphasizes the dynamics of sustaining it.”<sup>3</sup>

### ***1.1 Union Confederations, wage bargaining, and policy making***

Actors organized to defend their economic interests loom large in social science for good reason. Groups of workers and capitalists lie at the intersection of political conflict and economic exchange. Where workers and/or employers are highly organized they can affect the evolution of prices and the distribution of income through their actions in the market. These groups can also command political respect, both directly to the extent they can aggregate votes (in democratic systems) and affect social peace and indirectly via their ability to affect economic outcomes.

On the theoretical side, the organizational structure of labor lies at the heart of numerous literatures across several disciplines. Labor federations are important elements of theories of political party formation and competition (Korpi, 1983; Murillo, 2001), development, economic restructuring (Levitsky, 2003; Murillo, 2000, 2001), social movements (Levi, 2003, 2006; Piven and Cloward, 1978), and revolutionary politics (Lenin, 1963). Confederal centralization is a major component of important typologies of industrial capitalism, from Esping-Andersen’s “three worlds” (Esping-Andersen, 1990) to the Varieties of Capitalism project (Hall and Soskice, 2001; Kitschelt et al., 1999). Bargaining coordination is at the core of current theories of political control of the economy and the New Keynesian macroeconomics (Iversen and Soskice, 2006; Soskice, 2000).

Empirically, where labor unions represent a large portion of the workforce (and therefore the electorate), proportional electoral institutions are more common (Boix, 1999; Cusack, Iversen and Soskice, 2007), Left and Social Democratic parties more frequently in government (Korpi, 1983; Western, 1997), social spending greater, and redistribution more profound (Bradley et al., 2003; Lee and Roemer, 2005). What is more, the organization of labor interests—filtered through partisan politics and economic institutions like the central bank—has an influence on economic outcomes from wage compression (Wallerstein, 1990,

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<sup>3</sup>Thelen (2000:166)

1999) to unemployment and inflation (Alvarez, Garrett and Lange, 1991; Bruno and Sachs, 1985; Calmfors and Driffill, 1988; Garrett, 1998; Iversen, 1999; Layard, Nickell and Jackman, 1991; Nickell and Layard, 1999). While the robustness and magnitude these relationships as well as the directionality of causation are contested (Flanagan, 1999; Golden and Londregan, 2006), there is broad consensus on the negative relationship between union centralization and wage dispersion, as depicted in figure 1.1.<sup>4</sup> More centralized bargaining is strongly associated with greater wage and disposable income equality.

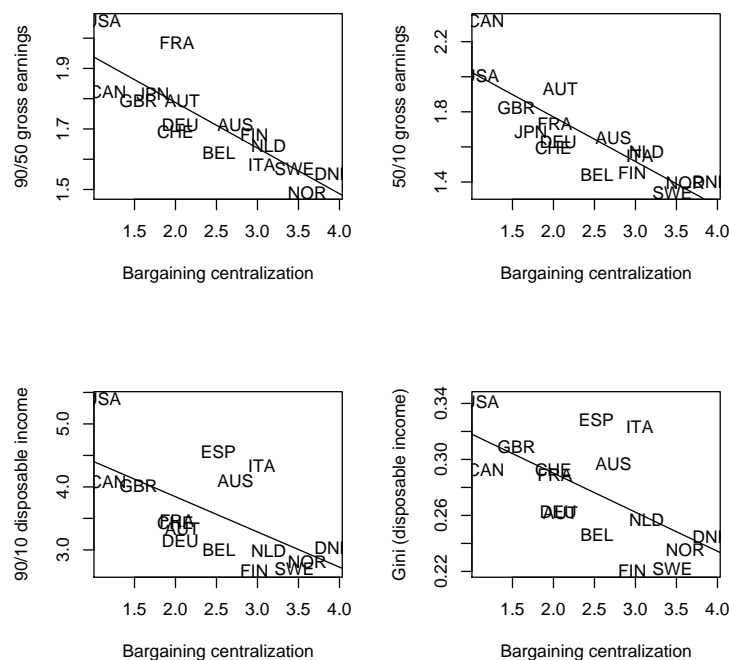


Figure 1.1: Inequality is declining in bargaining centralization. Data are averages for all available years, 1950-1995. See appendix for data definitions and sources.

Relations among unions and between governments and peak associations of labor and capital vary substantially over both time and space (Golden, Wallerstein and Lange, 2002;

<sup>4</sup>But see Scheve and Stasavage (2007) for a recent challenge to the centralized bargaining-inequality relationship.

Marks, 1989; Wallerstein, 1999; Wallerstein, Golden and Lange, 1997). Consider the following examples:

On July 21, 2005 four of the largest unions in the United States announced that they would boycott the AFL-CIO convention. They and three other unions ultimately disaffiliated from the AFL-CIO forming a second federation, taking with them close to 40% of the AFL-CIO's membership base. What this means for the future of the American labor movement is unclear.

In the early 1991, Argentina's Peronist president Carlos Menem and his Finance Minister, Domingo Cavallo, took a drastic policy decision in the face of spiralling inflation and capital flight: they pegged the Argentine currency to the US dollar, effectively ceding Argentine seigniorage and monetary policy to the US Federal Reserve. The CGT, the Argentine labor confederation whose vociferous opposition to the neoliberal policies of Menem's predecessor removed him from office, remained quiescent in the face of Menem's similar policies. Several unions within the CGT, primarily in the public sector, showed dissatisfaction with the hierarchical structure of the CGT and the "collaborationist" policies of its leaders. These unions formed a new faction, splitting from the CGT in 1992 to form the CTA. In 1997 Menem extended legal recognition to the CTA.

Ever since the early 1960s, Swedish wage/price bargaining has been highly centralized, with the peak employer and labor organizations, the SAF and LO respectively, bargaining over wage levels for the entire economy. This institutional configuration has been credited with explaining post-War Sweden's low levels of unemployment, inflation, and wage inequality coupled with high levels of taxation, welfare state effort, and public sector service provision. In 1983, however, the high-wage machinist and metal workers union won the prerogative to opt out of the peak-level bargaining institutions in favor of more decentralized wage negotiations directly with employers. Since then the LO has lost its hegemonic position, particularly with high-wage workers in the tradeable sectors; Swedish wage bargaining has become progressively more decentralized.

Each of these examples demonstrates a change in the strategic capacity of a major union federation. The first two represent clear organizational changes in which the federations split. The third represents a change in the competencies of the confederal organi-

zation. This change in strategic capacity begs several questions that I attempt to address throughout the dissertation: Why do labor unions organize into confederations? What determines which powers are ceded to the central organization and which are retained at lower functional levels? How, if at all, can the opportunities and incentives offered through the political system affect unions' organizational structure? How, in turn, do unions affect politics? What leverage can we gain on understanding variation in the core component of Social Democratic governance and new Keynesian economic theory, namely centralized, coordinated wage bargaining?

### *1.1.1 The organizational ecology of unions*

The distribution of unionists over unions and union confederations varies over both time and space. Speaking in broad terms, unions tend to be organized along either craft or industrial lines. Craft unions seek to organize workers possessing particular skills into the same union, regardless of who employs them whereas industrial unions seek to organize all the workers in a particular industry into the same union. Craft unions tend to be smaller and more numerous whereas industrial unions tend to be larger. Where craft unions predominate, firms tend to have several unions in a single workplace whereas firms generally confront only a single union where organization is along industrial lines. Organizing basis has a strong effect on the fragmentation of the labor movement, as figure 1.2 displays. Membership concentration across unions is measured using the approximate within-confederation Herfindahl index. Confederal concentration is a Herfindahl index of members across confederations.<sup>5</sup> Even using a crude, categorical indicator for the historical basis for union organizing (taken from Iversen and Soskice (2007)), we see that a strong relationship between industrial unionism and membership concentration across unions. It also appears industrial unionism is associated (weakly) with less confederal concentration.

The long-term decline in union membership rates in rich democracies is an important and extensively documented trend (Ebbinghaus and Visser, 2000; Golden, Wallerstein and

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<sup>5</sup>A Herfindahl index is a common measure of concentration. The value is given by  $\sum_i s_i^2$ , where  $s_i$  is the share of  $i$ th organization. For the intra-confederal index,  $s_i$  is the share of unionists belonging to union  $i$ . In the inter-confederal index,  $s_i$  is the proportion of confederal unionists organized into confederation  $i$ . Note that confederal unionists are those whose unions are affiliated to a confederation.

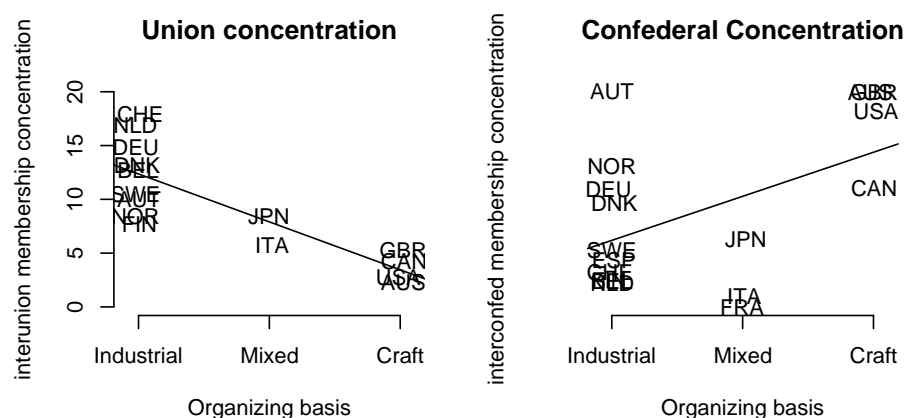


Figure 1.2: The concentration of union members across unions and union federations as a function of historical basis for organizing. Membership concentration is an average from 1950-1995. See appendix for data definitions and sources.

Lange, 1999; Visser, 2006; Wallerstein and Western, 2000; Western, 1997). Even in the places where union membership numbers are not drastically diminished there is still a sense that unions are losing political clout. Sweden's strong, centralized labor movement has been celebrated as one of the pillars of successful social democratic governance but the union movement has fragmented over the last 15 years along public/private sector lines, altering workers' collective political voice (Iversen, 1999; Swenson, 2002; Wallerstein, 1999). The golden age of social democracy appears to have past. If we are to gain analytic purchase on the decline of unions' economic and political salience as well as the prospects for social democracy more broadly, we must have a coherent argument that can account for more than just union membership; we need a theory explaining the variation in the organizational structure of labor movements.

While the causes, implications, and remedies for union membership decline are widely debated, it has been suggested that membership decline may itself have some effect on the distribution of workers across unions. As unions dwindle, the remaining ones try to shore up membership by merging with other unions or attempting to raid dying unions for members (Chaison, 1996; Wallerstein and Western, 2000). Figure 1.3 documents both these trends.

While overall union membership has softened in most OECD countries, the concentration of unionists has remained steady or increased almost everywhere. That said, the percent change in membership concentration between 1980 and 2000 correlates at a modest  $-0.22$  with the percent change in union density.

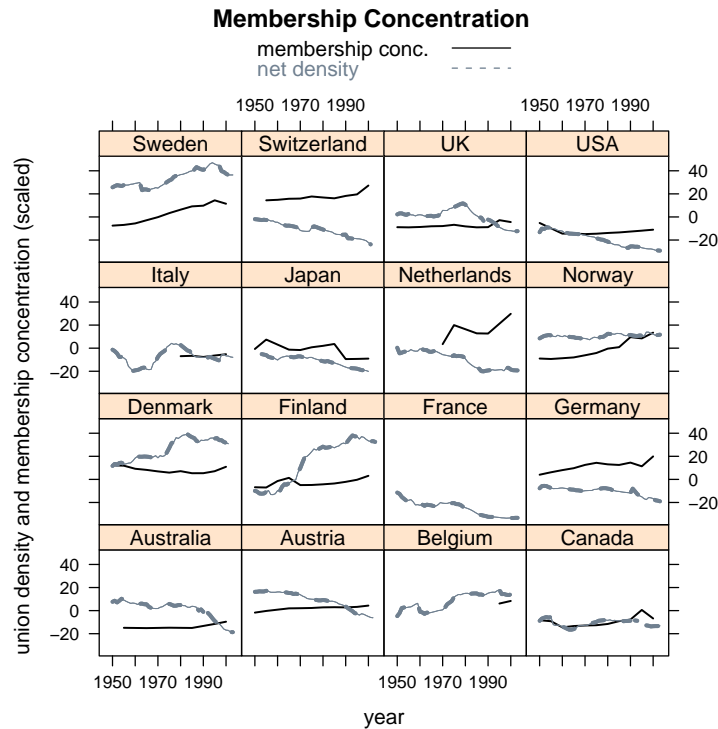


Figure 1.3: Inter-union, within-confederation membership concentration has been increasing while union density has been decreasing since the 1980s. See appendix for data definitions and sources.

The distribution of members across confederations of unions is a less-studied phenomenon. Figure 1.4 shows the evolution of two measures of confederal concentration: the share of unionists organized into confederations and a Herfindahl index of membership across confederations. These two variables show no clear cross-national pattern. In Australia, we see evidence of a steady incorporation of independent unions into the ACTU. In the USA and UK we see that unions join and leave the AFL-CIO and TUC respectively but, up until

very recently in the USA, do not form alternate confederal organizations. While unions in the Scandinavian countries are quite likely to belong to confederations, the fragmentation across confederations has increased over time, reflecting the relative membership growth in public sector and white-collar unions organized into separate federations.

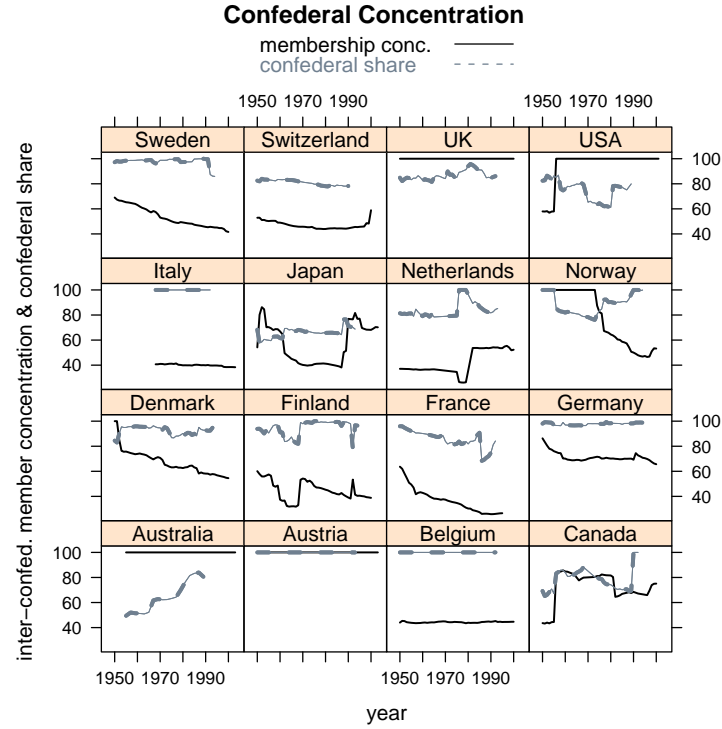


Figure 1.4: Inter-confederal membership concentration and the share of unionists organized into confederations show no clear pattern over time or in relation to one another. See appendix for data definitions and sources.

How does increased or decreased union concentration relate to the structure of confederal organization? From the plots above it is not obvious that they relate at all. If, however, we consider independent (i.e., non-confederally affiliated) unions to be another “confederation” and adjust the cross-confederation centralization measure accordingly<sup>6</sup>, then the inter-union and inter-confederal concentration indices correlate at  $-0.41$ . This suggests that union

<sup>6</sup>i.e., confederal centralization = confederal share  $\times$  Herfindahl index + (1-confederal share)<sup>2</sup>

Table 1.1: Major activities of labor federations

Common Activities	Controversial Activities
Provide jurisdictional guarantees/arbitrate disputes	Hold strike funds at the confederal level
Coordinate political activity at national level	Veto strikes
Provide support during industrial disputes	Veto affiliates' wage agreements
Disseminate information on wages, policy issues, etc.	Affiliate directly with a political party
Support organizing efforts	Negotiate wages/benefits
	Declare a confessional affiliation
	Appoint leaders of affiliates

membership concentrated into a few unions or into a few confederations may be partial substitutes. The relationship is, in fact, considerably more complex, as I show in subsequent chapters. How unions organize together is affected by the distribution of unionists across unions and federations as well as the opportunities available in the political system.

### *1.1.2 What union confederations do: variation in space and time*

Confederations of labor unions engage in a variety of activities, some of clear utility and others that would seem more controversial. Table 1.1 summarizes some of the major activities falling into both categories. The latter are “controversial” as they have potential distributional consequences across unions or implicate religious and partisan passions. Confederal-level strike powers, for example, can prevent unions capable of winning more immediate concessions on their own from doing so, usually in the name of price stability. Possessing centralized strike funds makes the confederation’s strike veto power more meaningful, raises the costs of confederal secession for any one union, and gives the federal leadership leverage over affiliates that is most effective precisely when affiliates are most vulnerable.

Figures 1.5 and 1.6 present comparative data on some of the more controversial confederal activities for union federations in sixteen rich democracies.<sup>7</sup> The most obvious feature in figure 1.5 is the tremendous variation in the level of wage bargaining both across and

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<sup>7</sup>Data here are from Golden, Wallerstein and Lange (2002). In figure 1.5, the data are ordinal, with one representing “plant level wage setting” to “central wage setting with sanctions”.



within countries; this variation seems to have little to do with the number of federations in a country. This variation in wage bargaining involvement overstates the extent to which union federations vary in their organizational structure and capacity.<sup>8</sup> To get a different view of the stability of within-country confederal-affiliate relations, consider strike powers possessed by the major federations as depicted in figure 1.6.

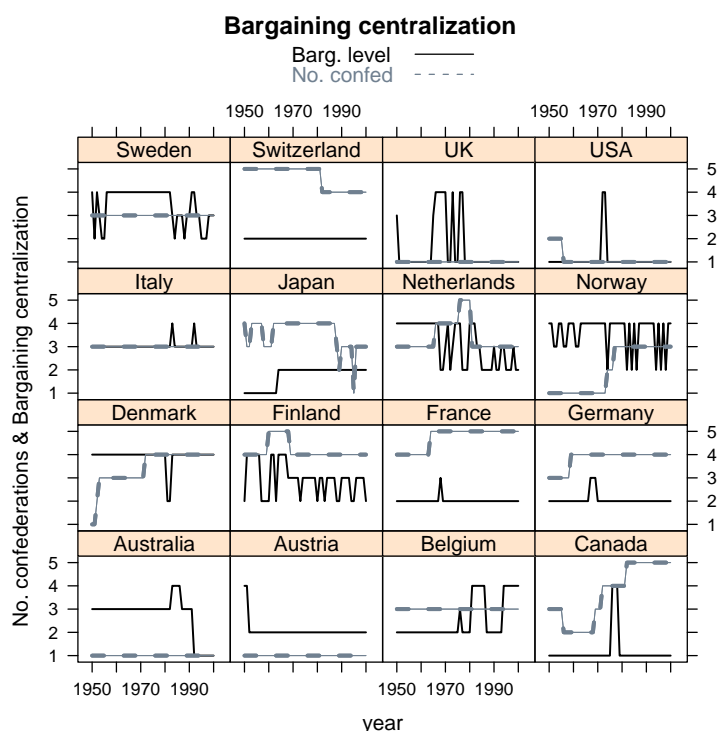


Figure 1.5: The centralization of wage bargaining and number of union confederations has varied both longitudinally and cross sectionally. See appendix for data definitions and sources.

<sup>8</sup>For example, in Sweden national-level wage agreements were negotiated biannually, with supplementary industry or firm-level bargaining taking place in off years. This supplemental bargaining was constrained by the confederal no strike pledge, however (Golden, Wallerstein and Lange, 1999; Swenson, 1989).

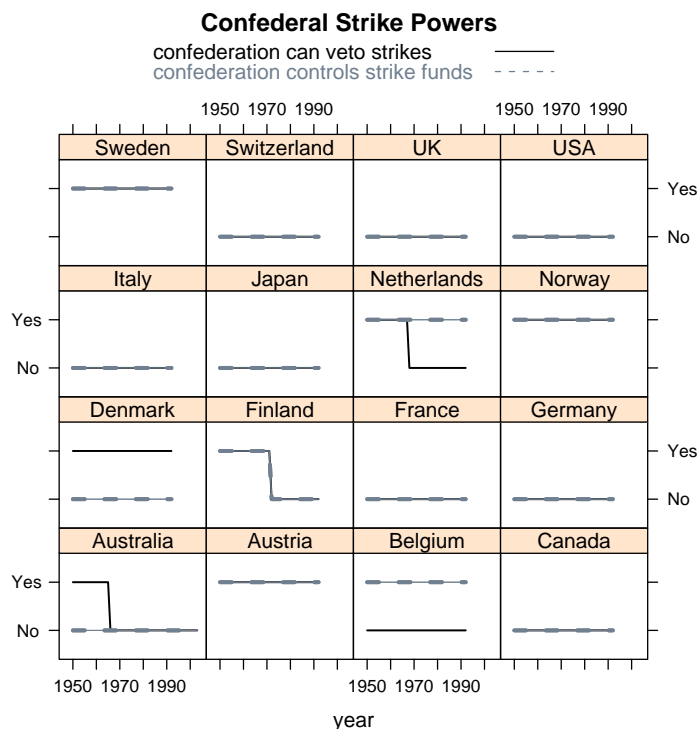


Figure 1.6: Strike powers ceded to labor confederations vary across countries but are relatively stable within countries. See appendix for data definitions and sources.

### 1.1.3 Wage bargaining coordination

Theoretically, nowhere is the organizational structure of federations of labor unions of more explicit importance than in models of wage/price bargaining and political control of the macroeconomy. Building on Olsonian arguments about encompassing groups, the well-developed literature on the *consequences* of bargaining centralization attempts to link the ability of unions and employers to coordinate wage bargaining at the national level with good unemployment and inflation outcomes (Adolph, 2006; Alvarez, Garrett and Lange, 1991; Calmfors and Driffill, 1988; Cameron, 1984; Franzese, 2001; Iversen, 1999; Lange, 1984; Lehmbruch, 1979; Schmitter, 1979). The argument goes more-or-less as follows: In highly organized economies, unions in aggregate can affect the evolution of nominal wages economywide. In making its wage settlements with employers, each union only considers the

unemployment costs of its wage demands on its members, disregarding the spillovers that its wage-employment settlement might have on other workers in other unions.<sup>9</sup> Furthermore, since each union's wage demands affect producer and, ultimately, consumer prices, nominal wage gains will be inflated away, yielding unchanged real wages but imposing higher inflation and unemployment. Centralization, it is argued, will generate the "public good" of wage restraint, with the attendant benefits of low unemployment and inflation with the same (average) real wages as under decentralized bargaining.<sup>10</sup>

Real wage restraint in centralized bargaining often focuses on the highest-wage unions through an explicit policy of "solidaristic bargaining." Even in the absence of official solidaristic bargaining stance, however, centralized bargaining generates a distributive tension. Specifically, centralized bargaining flattens the wage distribution, both by increasing wages for those at the bottom and restraining wage growth for those at the top (Wallerstein, 1990, 1999).<sup>11</sup> This then poses a puzzle: what induces high-wage workers to go along with a centralized arrangement in the first place? Viewing this as a standard collective action problem (Cameron, 1984; Lange, 1984), the neo-corporatist literature of the 1970-80s claims that they don't go along willingly; centralized unions must be compulsory and union leaders must be "insulated" from rank-and-file wage demands. In this traditional view of the labor central (at least in highly unionized economies), the role of the federation is explicitly antidemocratic in the sense that leaders are meant to be a conservatizing influence on the presumably more radical, strike-prone rank-and-file.<sup>12</sup> Nevertheless, few countries, even among the most centralized, have mandatory union membership; government-granted bargaining monopolies only exist in a handful of cases.<sup>13</sup> The appropriate bargaining agents

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<sup>9</sup>These spillovers could take the form of higher product prices in the first unions' industry, reducing the purchasing power of other unions (Calmfors and Driffill, 1988), general price inflation (Iversen, 1999), or unemployment insurance costs incurred by those outside the given union's bargaining area.

<sup>10</sup>Note that this argument linking wage bargaining and economic outcomes has been expanded to include an important role for the monetary authority. See Adolph (2006); Franzese (2001); Iversen (1999).

<sup>11</sup>The mechanism inducing this is frequently a wage bargaining posture that demands nominal (rather than percentage) wage increases for all workers. These nominal gains are a bigger percentage wage increase for lower wage workers.

<sup>12</sup>But see Baccaro (2000) for a re-evaluation of this thesis in the Italian case.

<sup>13</sup>By government-sanctioned monopolies, I mean explicit government recognition of a union as a special legal entity with exclusive rights. This differs from government-administered mechanisms for choosing a

and jurisdictional boundaries are most frequently decided by unions and employers. Noting this, current theories of wage bargaining have looked away from the state-imposed arrangements explicitly or implicitly driving the earlier arguments. The current state of theory relies on the active support (indeed, insistence) of employers through their coordinated use of lockouts and in alliance with unions in the tradeables sector to explain the existence and subsequent collapse of centralized bargaining (Iversen, 1999; Swenson, 1991; Wallerstein, 1985).

I find this argument insufficiently general in that it does not have at its base any theory of why confederal organizations might be more or less willing or able to coordinate at all. Olson, by his own admission, thought labor unions to be a particularly important set of groups. He and others before and since have also recognized that groups of workers have varied spectacularly in both the extent to which their actions can affect political-economic outcomes *and the extent to which they can marshal their influence to act strategically vis-à-vis employers and governments*. As an example of the latter, consider the puzzle posed by Australia and New Zealand, explored in detail in chapter 8. Both countries faced similar economic crises in the early 1980s, had similar levels of union density and elected Labor governments within a year of each other. In Australia, the Labor government and the union peak association negotiated a formal Accord, trading real wage restraint by the unions for union-favored social policies from the government. In New Zealand, the unions were unable to formulate a coherent position with the Labour government and were consequently left out of economic policy making, paying a very steep price both organizationally and in terms of economic policy. It is this variation in the strategic capacity of union peak associations that I focus on here.

We need a better theory of encompassing groups. To begin to fill this gap, I will present a theory arguing that where actors' interests are sufficiently aligned, and resources are not too unequally distributed, highly centralized and capable confederal organizations are more likely to emerge. In domains where diversity of intraconfederal opinion is too great to support coordinated action, it is the emergence of a counterparty capable of punishing

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bargaining agent (e.g., workplace union elections).

or payoff recalcitrant confederal affiliates that can induce an expansion of confederal competence. Strategic capacity is dynamic and can be affected by the strategic opportunities available. In terms of wage bargaining centralization, I will argue that employers' insistence, while perhaps the most durable source of support, is only one way in which unions can be induced to coordinate their wage bargaining activities. Governments can have an important role to play in inducing more centralized and coordinated wage bargaining arrangements.<sup>14</sup>

#### *1.1.4 Social pacts*

The above-mentioned Australian Accord of the mid 1980s is but one example of what have come to be called "social pacts." Since the mid 1970s, governments and peak-level labor- and employer confederations in several countries have been able to jointly formulate national-level policies on wages, working conditions, training regimes, industrial policy, taxation, and government welfare spending. This is remarkable since these agreements occurred in countries not historically enjoying centralized labor movements and bargaining institutions. What's more, these social pacts began emerging at the same time that the neo-corporatist institutional arrangements of northern Europe came under pressure, most notably in Sweden.

Pacts have occupied something of a stepchild position in the larger literature examining the political control of the economy. I argue that social pacts are worth understanding for two reasons. First, they can, under some circumstances, be shown to influence important macroeconomic outcomes. Second, I use pacts as an empirical lever to pry apart important theoretical issues: electoral cycles in economic policymaking, the origins and evolution of union centralization, and, ultimately, institutional formation and change.<sup>15</sup>

The pacts literature is largely a collection of case studies with little to connect one to

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<sup>14</sup>This role, which I explain in detail in the discussion of social pacts, contrasts with direct government intervention in wage bargaining and the labor market. Direct interventions in the form of wage/price freezes have been imposed in most countries at one point or another. Less drastic government intrusions have occurred at intervals in several countries most notably, Belgium, the Netherlands, and New Zealand.

<sup>15</sup>The most interesting work on pacts has a similar goals. For example, Culpepper (2008) uses pacts in Ireland and Italy to explore the development of common knowledge among key players as wage bargaining institutions change. Baccaro (2000) uses the Italian case to make larger points about deliberative democracy.

another and maintains a heavy West European bias in case selection. While the literature on pacts has yielded a number of conjectures and hypotheses no general model of pacts has emerged. The most significant attempt to date to address pacts in a systematic fashion comes from Lucio Bacarro and co-authors (Baccaro, 2006; Baccaro and Simoni, 2006; Baccaro and Lim, forthcoming). In a series of papers, they argue that pacts emerge when the following conditions obtain: “weak” governments<sup>16</sup> face a “crisis” in a country where the union movement is dominated by a political moderates (i.e., not Communists). Whether pacts are “durable” is determined by whether employers buy in.

I propose a different, though possibly complementary model to Bacarro et al. I argue that pacts are fundamentally generated by the political concerns of office-interested politicians. In times of crisis when the existing wage bargaining and macro policy institutions no longer generate adequate economic results, pacts provide a way for governments to credibly promise effective policies to voters.

## **1.2 Outline of the dissertation**

### *1.2.1 My approach*

I self-consciously employ a variety of theoretical and empirical approaches in what I hope to be complementary ways. The underlying theoretical assumptions are those of game theory. I assume that actors are strategic and forward looking, taking purposeful actions that best achieve their goals, given the actions of the other actors, information at hand, and constrained resources. The key question is under what conditions will strategic actors choose to agglomerate so as to retain some degree of this strategic capacity at a higher level of aggregation? I rely on standard notions of equilibrium (subgame perfection, and its Bayesian extensions for games of imperfect information) to solve the games.

Unions are notoriously difficult to describe in terms of an objective function (Booth, 1995; Flanagan, 1993; Martin, 1980). They are both political and economic actors and their internal decision-making procedures vary tremendously. Nevertheless, leaders must “deliver the goods” to the rank and file if their leaders hope to remain in office. In the

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<sup>16</sup>They are typically referring to minority coalitions and caretaker governments.

literature already discussed, unions typically maximize some weighted function of wages and employment levels. In order to focus on the distributive politics across unions my model follows this reasoning and makes the simplifying assumption that members care only about wages and employment prospects. For now, I ignore the roles and interests of union leaders, assuming that leaders are the faithful representatives of the membership and that all members of a union have identical preferences.<sup>17</sup> These assumptions imply that I can consider individual unions as the fundamental agents. I implement these assumptions by assuming an additively separable, scalar-valued utility function for all agents.

The formal models presented here are both mathematically simple and substantively abstract. Given the complexity of the situations I'm trying to model, they do not generate crisp predictions about the values of specific empirical variables. Nor is it obvious how to map the models in their entirety directly in to empirical work. While this is clearly a deficiency of the modeling enterprise, or at least my attempts at it, it is worth noting that others modeling centralized wage bargaining (Agell, 2002; Freeman and Gibbons, 1995) have punted rather than attempt to address the complicated internal politics of union federations. The models I develop are meant to clarify the key points of my reasoning to make my subsequent empirical discussions more readily understandable. Specifically I employ a formal approach for five major reasons: 1) to make my theoretical assumptions explicit; 2) to make my reasoning more transparent; 3) to discipline and organize the empirical discussion, especially the historical/case material; 4) to better link my arguments with the existing literature; and 5) to highlight where certain assumptions are logically *insufficient* to yield the plausible empirical hypotheses generated elsewhere.

I have been told that it is impossible to understand labor politics without reference to ideology, personality conflicts, and historical contingency. Even a cursory reading of the historical literature on labor movements makes obvious the importance of the various ideological and confessional factions that cross-cut labor. Historians routinely attribute the splintering of federations to conflict between Socialists, Communists, and Anarchists over ideological and tactical issues. Several countries have developed Catholic union confederations.

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<sup>17</sup>See Wallerstein (1985:ch.3) for an extended defense of these assumptions.

tions that parallel the non-confessional unions. The AFL and CIO were long divided due to (among other reasons) the Communist presence in several CIO unions. None of these issues are readily incorporated into the type of model I've outlined above.

As someone who has spent significant time with union members, labor activists and other fellow travelers, I am immediately sympathetic to these claims but find them ultimately unconvincing. In my mind, the excessive focus on individuals, contingency, and the frequently strident rhetoric of labor politics has obscured more general and fundamental relationships. Understanding these more general relationships may help us understand why specific moments in history were pivotal or why one set of personality conflicts was more salient than another.

Regarding ideology, my approach here is that workers' preferences for one type of leadership over another is a function of the workers' positions in the economy and therefore epiphenomenal if the model already captures this heterogeneity. Industrial workers organized by plant are more likely to select Communist leaders whereas skilled craft workers organized along craft lines will conform more to the social-democratic or "business union" models (Stepan-Norris and Zeitlin, 1995, 2003). This amounts to saying that ideology is really a signal of tactics and that workers benefit differently from different tactical approaches. Anarchists were typically committed to the general strike as the primary weapon while eschewing any dealings with government; Social Democrats were committed to partisan politics and the ballot (when available). Unskilled and low-skilled industrial workers typically have more to gain by "borrowing strength" from their better situated comrades in the class struggle in a general strike or other large-scale industrial action. It is precisely this sort of division across skill lines over tactics and goals that separated the Knights of Labor and the AFL (chapter 3) and that later divided the AFL and the Wobblies (Kimeldorf, 1999). While the leadership of individual unions can (and does) affect the revealed willingness of members to take political action on behalf of others and might even affect some members broader political goals and orientation, these leaders will only be successful insofar as they continue to deliver fundamentally sound bargaining outcomes to the membership (Ahlquist and Levi, 2008).



### *Linking theory and empirics*

Empirical approaches to evaluating game theoretic models typically take one of three forms. By far the most common is to derive comparative static predictions and then construct statistical models that more-or-less conform to game theoretic underpinnings, or, failing that, introduce or interpret regression parameters as reflecting the comparative statics. Analysts then use these findings as a reason to be more or less confident that the (game theoretic) model is a useful approximation to the real world.<sup>18</sup> A second approach is the analytic narrative (Bates et al., 1998), where the analyst iteratively uses historical narrative to evaluate (and possibly revise) an abstract model while using the model to discipline and focus the narrative. A final approach I mention only in passing is the increasing use of experimental methods to test game theoretic models. Experimental methods have most commonly focused on testing the applicability of the *homo economicus* assumptions, particularly at the micro level.<sup>19</sup>

My approach here does not fully conform to any of these. Rather, I use the intuition behind the game theoretic exercises to discipline the empirical strategies. I then interpret the findings from the empirical work based, in part, on its congruence with the theoretical logic. I leverage the models of confederal activity and social pacts by describing the covariates they imply for the statistical work. They focus attention on certain events and variables when examining historical variation in the AFL and Knights of Labor or on decisions taken in Australia and New Zealand. While I do not conduct any experiments, I do turn toward micro-level interviews to establish that important actors are indeed thinking about the strategic situation in ways that conform with the models' assumptions. Finally, I use historical and qualitative discussion to explore aspects of the models not readily observable in cross-national quantitative settings (players' time horizons, for example), but these discussions are typically more comparative in nature than the ideal-typical analytic

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<sup>18</sup>Building on McKelvey and Palfrey's (1992; 1995) quantal response equilibrium, Signorino (1999) presents what is currently held to be the gold standard in linking formal models and empirical tests. See Carrubba, Yen and Zorn (2007) and Signorino (2007) for a debate over the merits of these exercises in the discrete choice setting.

<sup>19</sup>See McDermott (2002) for a review of experiments in political science and economics.

narrative. I make no claim that my approach here is optimal in some general sense. Rather it is an attempt to link abstract thinking and messy real world data along as many dimensions as possible with the goal of both defending the models and identifying areas for future research.

### *Models and measurement*

In terms of measurement and operationalization, strategic capacity is a difficult concept. On the one hand, it seems fairly straight forward: a group possesses maximal strategic capacity when it can be treated as if it were a single (rational maximizing) individual.<sup>20</sup> On the other hand, the term begs the question “strategic capacity for what?” It is this latter question I find the more interesting and useful to address. As a result I take strategic capacity to be a high dimensional concept and therefore measure it in several ways. In part I of the dissertation, I focus primarily on organizational indicators: how long a federation exists; the concentration of membership across the major confederation(s); whether the confederation possesses strike funds and veto rights over strikes and contracts; whether the federation affiliates to a political party. Though the goal of this project is *not* to explain<sup>21</sup> wage bargaining coordination and centralization per se, I also evaluate the determinants of wage bargaining coordination as an important indicator of strategic capacity. One might construct a continuum in which a confederation that includes all categories of workers (blue- and white-collar, public and private sector), possesses strike funds and strike and contract veto power, regularly engages in wage bargaining, and formally affiliates to a political party would be considered maximally capable of acting strategically.

In part II of the dissertation, I take a different, one might say behavioral approach to strategic capacity. Are union federations able to strike explicit bargains with governments

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<sup>20</sup>In this way the median voter theorems and agenda control results provide ways in which we can understand the strategic capacity of electorates and legislatures.

<sup>21</sup>Explain in the sense of providing a unified formal model in which heterogenous unions and firms endogenously agree to form central federations and cede bargaining power to them through time. Indeed, the major models of bargaining centralization (Agell and Lommerud, 1992; Freeman and Gibbons, 1995; Iversen, 1999; Lange, 1984; Wallerstein, 1990; Wallerstein and Moene, 2003) model the effects of centralized wage bargaining on, e.g., wage levels, and then reason backwards about why unions and employers would want it or, more commonly, why they would *cease* to want it. More on this in subsequent chapters.

over important policies when the conditions for doing so seem auspicious? I take this both evidence of the existence of strategic capacity and a demonstration of its deployment. Part II also reports on two different sets of original data gathered for this project. On the quantitative side, I report the analysis of a new dataset on social pacts. On the more qualitative side, I also report conclusions drawn from elite interviews with union, business, and government officials in Australia and New Zealand.

### *1.2.2 Overview*

The dissertation is organized into two parts. Part I tries to understand the varying degrees of organizational coherence displayed by union peak associations. The next chapter presents a general model of interest group organization and draws out empirical implications. Unions have an incentive to cooperate but vary in their outside options and in the share of the collective good they can expect. To enable ongoing cooperation, unions have the option of forming a confederation within which decision rights about how best to invest collective effort are allocated. In this set up, weaker affiliates have an incentive to yield decision rights to the stronger. For their part, stronger unions will only permit confederal influence over wage bargaining when there are strong economies of scale in cooperation and/or they are compensated in other ways (e.g., through political concessions) for foregone money wages. The dispersion of resources across affiliates and the nature and number of confederal activities affect the degree to which unions coordinate in a central, confederal organization. The subsequent two chapters examine the model's logic and implications in two different empirical contexts. Chapter 3 is a paired historical study of the American Federation of Labor and the Knights of Labor. I argue that the AFL's allocation of decision powers prevented stronger unions from leaving, making it more durable than the Knights. Chapter 4 is the first sustained quantitative analysis of the centralization of labor movements in rich democracies. I find that political institutions and government partisanship, historical cleavages, and the dispersion of membership across unions all affect labor movement centralization.

Part II explores the emergence of formal policy agreements between governments and unions in 20 OECD countries, 1974-2000. In chapter 6 I model these agreements as self-

enforcing contracts that allow political parties to make policy promises credible to voters. Unions agree to abide by the pact so long as economic conditions make policy a better tool than industrial action for achieving gains in living standards. The model implies that 1) the emergence of pacts should follow the electoral cycle and that the 2) organizational linkages between unions and parties are critical for providing both the incentives for partisan politicians and unions to sign pacts and for making agreements self-enforcing in equilibrium. In chapter 8 I apply the model in to an empirical puzzle in the cases of Australia and New Zealand. Both these countries faced very similar economic crises in the early 1980s yet a pact emerged in Australia but not in New Zealand. Relying on original interviews with key policy makers in both countries, I conclude that the organizational relationship between the union peak associations and the Labor parties were the critical differences that made intertemporal political transactions possible (and self-enforcing) in Australia but not in New Zealand. To look at a broader set of countries, I collected data on social pacts 20 OECD countries between 1974 and 2000. Chapter 7 is an event history analysis of pact onset. I find that, conditional on electoral institutions and economic conditions, pacts are strongly influenced by the electoral cycle.

The last chapter summarizes the research and makes some observations about normative and policy implications. A key implication is that in the context of wage bargaining, government can substitute for employers in inducing more centralized bargaining. Even if increased economic openness has reduced the strategic capacity of employers' organizations (Thelen, 2000), union coordination is not impossible. Pact-induced centralization, however, can be more fragile precisely because the employers may not be on board. I conclude by arguing that future analysis of the policies and organization of union federations should direct attention to the career concerns of labor leaders, particularly how unions' relationships with political parties affect the career paths of union leaders. Where union leaders aspire to use their leadership position in the labor movement as a springboard into politics, we can expect very different behavior in both wage bargaining and political exchange.

My work also has normative implications for inequality and democracy. Findings in the study show that the cost of implementing needed economic reforms has been both lower and more equitably shared in countries where unions and employers were capable of behaving as

unified strategic actors in national-level politics and industrial relations. Given the intense challenges of health care provision, skills (re-)acquisition, and environmental pressure facing modern economies, understanding how economic actors negotiate over their differences is of central importance if future wealth is to be shared equitably and sustainably.

## Chapter 2

# **BUILDING STRATEGIC CAPACITY: A THEORY OF GROUP ENCOMPASSINGNESS**

This chapter develops a theoretical model of core components of what Iversen calls “strategic capacity”. He defines strategic capacity as “the extent to which the actions of economic actors have predicable, discernable effects on the welfare of others players” (Iversen, 1999:94). I interpret this to mean that an organization has strategic capacity when it can usefully be considered a player in a game rather than simply a constraint or exogenous state of the world.

Strategic capacity has three fundamental attributes that I attempt to capture in the model: size, scope, and scale. Size is the extent to which a group counts as affiliates the entirety of potential affiliates. While the definition of the set of potential affiliates can become hazy, in the context of labor union federations it is relatively straight forward: what proportion of the organized labor force is affiliated with a particular federation? How important are those not affiliated? Scope refers to the confederation’s domains of competency. Over how many (and which) activities is the confederal organization allowed to act?<sup>1</sup> Scale refers to the level of resources or amount of authority ceded by the affiliates to the confederal organization. Clearly scale is defined domain-by-domain. An organization can be extremely centralized in one dimension only or moderately centralized across many.

Strategic capacity is, I believe, a useful way to reconsider the Olsonian notion of encompassingness. Encompassingness, at least in Olson’s elucidation, dealt primarily with overcoming collective action problems at various levels. Strategic capacity, however, implies more than just maintaining a group such that free riding does not totally undermine periodic cooperation; it implies a group capable of taking forward-looking strategic action,

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<sup>1</sup>Scholars of federalism have recently begun focusing on the fact that the powers allocated to federal and sub-federal levels of government frequently overlap, belying the neat divisions posited by model of federalism (Rodden, 2002; Wibbels, 2006). Nevertheless, in union federations the powers reserved for different tiers tend to be more reliably demarcated.

i.e., bargaining with other actors and/or responding to exogenous changes in the state of the world. But things are not so simple. An organization can display strategic capacity in one domain but not in another. In considering the strategic capacity of a group, we do more than delimit its size; we describe the limits of the decisions it can take. In the model below, these limits come in two flavors: scale—the breadth of membership and extent to which actors will allocate resources to the group project—and scope—the number of activities over which the confederation has jurisdiction.

The model I present below is quite abstract in that it does not directly model wage bargaining or political action. In fact, the model does not even mention unions directly. Rather I attempt to capture three fundamental facets of the world relating to any sort of ongoing collaborative enterprise: economies of scale and gains from trade, heterogeneity, and uncertainty. Economies of scale motivate the desire for cooperation. Heterogeneity engenders a distributive conflict among potential cooperators (beyond the standard free rider problem) and uncertainty provides a rationale for establishing a separate, ongoing concern. Nevertheless, I anticipate the empirical applications in subsequent chapters and therefore also discuss in this chapter issues specifically relating to wage bargaining.

A fundamental insight of the model here is that strategic capacity is neither independent of “initial conditions” (in the sense of the distributions of preferences or endowments across agents) nor is it independent of the nature of the strategic environment in which the actors are embedded. The activities of third parties can influence scope of cooperative activity. Referring directly to peak associations of labor unions, the scope of confederal activity will be affected both by the existing distribution of interests across unions and by the willingness of other groups (i.e., employers and/or political bodies) to alter the incentives facing affiliates to the labor confederation.

To briefly summarize the results derived below, given some set of heterogeneous agents and some activity over which they can combine resources for mutual gain, there generally exists some subset that will be willing to work together. The size of this subset and the amount they contribute to the cooperative enterprise depends on the returns to cooperation, the heterogeneity of endowments, and the manner in which they take their decision, i.e., the identity of the pivotal voter. Agents better able to achieve their goals on their own

are the most difficult to entice into the cooperative arrangement. To induce these more productive agents to contribute to the cooperative project, the group will need to allocate decision rights such that these more powerful agents have a disproportionate influence over group decision-making. If we allow for uncertainty through time over the returns to the cooperative endeavor, we have a justification for an ongoing confederal organization. When we introduce the possibility of multiple activities, my set up then inherits Alesina, Angeloni and Etro (2005)’s trade-off between organizational size and the scope of its activities. In order for an organization to expand its scope of activities, there will have to exist some outside factor that links the outcomes in one domain with outcomes in another.

## **2.1 Extant work**

In this section, I describe the extant work related to the model I develop. In particular, I discuss the (few) existing models of bargaining centralization, pointing out why I believe a more abstract, micro-oriented model of confederation can be of use. I then look to the literature on fiscal federalism to give purchase on the confederal organization problem. I map the basic concerns of unions into the concepts used in the federalism literature, identifying where the commonalties point the way for productive cross-fertilization.

### *2.1.1 Union centralization: free riding, redistribution, information, and insurance*

While there has been some early comparative work on the authority of labor union confederations (Headey, 1970; Martin, 1962; Windmuller, 1975), the most sustained theoretical work on the underpinnings of “neo-corporatism” began in the aftermath of the oil shocks. These early theories of corporatism and centralized bargaining focused on the collective action problem across unions. Indeed, much of this work was directly inspired by Olson’s predictions about encompassing groups and economic performance. The wage bargaining problem was viewed as an  $n$ -player Prisoners’ Dilemma (Lange, 1984) in which the primary challenge was preventing the free-riding of some affiliates on the wage restraint of others. Lange appeals to the repeated nature of the game and exogenous norms of solidarity as providing a way for unions to sustain the cooperative, centralized bargaining arrangement.



Other theorists of corporatism have emphasized that “the state” has an interest in creating and enforcing a particular organizational structure among unions, and what the state wants shall be. To my knowledge the only attempt to formalize this argument comes from Battaglini and Benabou (2003). Their model is a variation of a cheap talk game. They show that there exist conditions under which a policy maker can elicit better information about the policy environment in a cheap talk game when two interest groups coordinate their signals compared to when they operate separately. Their model, however, only provides a rationale for a policy maker to attempt to induce coordination; they model neither the means nor the mechanisms nor the interest groups’ desire to coordinate. Empirically, arguments relying on the state as the driving force behind centralized bargaining have foundered: what explains the collapse of corporatist arrangements in several countries in the 1980s if the state did not will it?<sup>2</sup> If policymakers did have an interest in creating and later destroying corporatist institutions, why did they change their minds? Finally, corporatist writers have nothing to say about the organization of labor interests in situations where the state is *not* actively managing wage bargaining.

Subsequent work (Wallerstein, 1990, 1999; Wallerstein and Moene, 2003) shows that even if the free riding problem can be overcome, the fundamental conflict induced by centralized bargaining is redistribution from high- to lower-wage workers. This critical insight lies at the core of the model, so it merits a more detailed treatment. We begin with the results of Horn and Wolinsky (1988). In their set up, a firm bargains with two different groups of workers. They show that when the workers are close substitutes in production (the marginal revenue product of one group’s labor is decreasing in the quantity of the other group’s) they are better off coordinating their bargaining; when they are complements (MRP of one is increasing in the amount of the other’s labor employed in production), then they are *individually* better off by bargaining separately. The basic intuition is simple: where workers are substitutes, bargaining separately allows the firm to play them off against one another, lowering the overall wage bill. Where unions are complements, each union can effectively stop production and can therefore extract a bigger portion of the surplus. Each

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<sup>2</sup>In 1980s Sweden, for example, the governing Social Democrats actively tried to salvage centralized bargaining but failed (Pontusson and Swenson, 1996).

union does not take into account the losses imposed on the other workers for striking; a higher wage for one union implies a lower wage or lower employment levels for the other. Wallerstein (1990) applies these insights to centralized wage bargaining. He assumes that each union organizes workers who are substitutes in production; economy-wide centralized bargaining then unites unions whose members are production complements into a single bargaining unit. In so doing, the centralized bargainer takes into account the effect of each union's wages on those of the others, leading the (utilitarian) bargainer to set a lower wage than would occur under decentralized bargaining. This lower wage induces a faster rate of (real) wage growth and, for certain parameter values, is pareto-preferred by all unions and employers. The catch, however, is that centralized bargaining also generates a contraction in wage differentials between high- and low-productivity workers. This shrinkage in relative wages is a direct result of unifying bargaining power across workers such that the lower-productivity workers benefit (relatively) from the restraint of the higher wage workers, engendering distributional conflict that can only be overcome by having the central bargaining agent favor high-productivity workers. Wallerstein observes that such favors violate union norms of solidarity and are contrary to the solidaristic bargaining policies pursued in, e.g., Sweden.

In a fascinating paper, Agell and Lommerud (1992) argue that wage compression might actually provide a justification for centralized bargaining. They provide a model in which centralized wage bargaining provides income insurance to workers who are *ex ante* uncertain as to whether they will be "skilled" or "unskilled" once the labor market opens under the (very plausible) assumption that insurance markets for human capital are missing. Similar to Wallerstein, they show that a single union monopolizing bargaining will pursue a wage policy that compresses wage differentials across workers. In the spirit of Horn and Wolinsky, the degree of compression covaries positively with the elasticity of substitution between high- and low-skilled workers and negatively with the reservation wage. While this justification for bargaining centralization deserves further exploration, it has two weaknesses. First, it fails to account for the existence of centralized bargaining in a dynamic setting. Why would workers be willing to go along with the wage compression after they realize their

position in the wage distribution?<sup>3</sup> Second, it fails to explain the absence of any centralized bargaining except at extreme levels of complementarity across workers. Nevertheless, the Agell-Lommerud model has an important implication: “wage compression is a *substitute* to social insurance provided via redistributive income taxation but a *complement* to social insurance via [unemployment] benefits.” (Agell, 2002:120, emphasis in original) While this argument seems to conflict with the empirical observation that countries with centralized union movements also redistribute more, the implied interaction between unions’ strategic capacity and public policy will emerge in the model below and also in the discussion of social pacts in later chapters.

Freeman and Gibbons (1995) provide yet another model of centralized bargaining. Their model relies on informational asymmetries between local bargaining agents and the central confederations to highlight the reasons for wage drift and the restrictions on lower-level bargaining that may cause centralized bargaining to break down. When the bargaining groups become more heterogenous or the value of wage restraint declines, centralized bargaining becomes less likely. While their fundamental problem is explaining the decline of wage bargaining, their focus on informational asymmetries between local and central bargaining agents is something I look to in the model below.

Finally the political-economic arguments of Iversen (1999); Swenson (1989, 1991); Wallerstein (1985) point to the pivotal role of unions and employers in the traded sector. In these models, the wage demands of strong, militant workers in the non-traded sectors, especially construction and the public sector, have a negative influence on the earning power of workers and the profitability of firms in the traded sector where world markets set the prices for outputs. They argue that where the exposed sector is large and employers well organized, i.e., they can coordinate to punish all unions for the industrial actions of the few, then centralized bargaining emerges from a cross-class alliance of unions and employers in the exposed sectors. While this argument is reasonably convincing from an historical perspec-

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<sup>3</sup>An intriguing extension I leave for later work is modifying their model for a dynamic setting in which skilled workers have some probability of becoming “unskilled” (or unemployed) in each period. Under such a set up, seniority rules could serve the same insurance function as centralized bargaining. Pontusson and Swenson (1996) and Thelen (1993) observe that Swedish employers turned to more seniority-based systems after the collapse of centralized bargaining.

tive when looking at a handful of cases, it still fails to explain how the union movement got to be so strong and coordinated in the first place. Specifically, the employers' lock out weapon was so effective in Sweden and Denmark because the union federation had an obligation to support locked out affiliates by dipping into its strike fund. The AFL-CIO, in contrast, has never been able to develop a strike fund. Furthermore, their arguments simply beg the question of why employers were so coordinated in some places and not others.

In general, then, there has been relatively little work attempting to explain the centralization of the union movement *per se*. Those who do tend to restrict their attention to explaining why unions might engage in centralized bargaining with employers, not how unions might (endogenously) develop the capacity to make strategic decisions on this front. What's more, these attempts to explain centralized bargaining tend to posit some outcome that, under certain conditions, is preferred to decentralized bargaining and then reason backwards as a justification for bargaining coordination. Nowhere are the *political* relations between unions treated in any serious fashion. That said, there are several insights I take from these papers. First, the distributional conflict between unions is at least as important as the collective action problem among them. Second, information and uncertainty can provide a fundamental justification for the existence of a multi-tiered organization. Third, the role of external actors like employers and governments can affect the willingness and/or ability of union federations to centralize decisions in certain policy domains.

### 2.1.2 *From federalism to union federations*

I look to insights from contract economics and, more specifically, the fiscal federalism literature to gain theoretical traction. Authors in this literature have developed several models attempting to explain the existence, allocations of authority, policy outcomes, and welfare implications of federally organized states.<sup>4</sup> These models typically posit federal institutions as the equilibrium result of a game between the "center" and regions of differing endowments. To my knowledge these models have never been leveraged outside the setting of

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<sup>4</sup>The most relevant works for my purposes here are Alesina and Spolaore (1997); Alesina, Spolaore and Wacziarg (2000); Alesina, Angeloni and Etro (2005); Bolton and Roland (1997); Cremer and Palfrey (1996, 1999); de Figueiredo and Weingast (2005); Hafer and Landa (2007); Lulfesmann (2002); Wibbels (2005).

federally organized polities.

The endogenous federalism perspective begins with two assumptions: the activities of sub-federal units generate externalities that induce inefficient outcomes when these units act independently; and the sub-federal units are heterogeneous in some analytically important way. In the case of nations, both the externalities and heterogeneity are relatively easy to identify.

Confederal organization offers unions several benefits.<sup>5</sup> Cooperative union activities can include sympathy strikes, boycotts, political lobbying, organizing drives and get-out-the-vote campaigns. Cooperation among unions can help them economize on “defense” on two fronts. First, a union confederation can prevent cross-union raiding, by enforcing property rights in jurisdictional monopoly.<sup>6</sup> Competition for workers in different job categories or at different firms has caused major conflicts between unions in countries all over the world. Second, confederal cooperation can make unions more effective in their struggles with employers, especially during strikes. Indeed, many smaller regional labor bodies as well as major union confederations emerged in the process of planning general strikes or in the aftermath of failed attempts. A confederation can coordinate activities and enable cooperation in sympathetic actions but also (possibly) restrain some unions from taking industrial action that will lead to reprisals by employers or government on uninvolved unions. There are economies of scale in public goods provision across unions. Coordination and size are assets in political activity and participation. The more votes labor unions can effectively deliver, the more weight they have, at least with the Left party(ies). A central organization can coordinate political activities across subunits as well as bargain with political parties and governments more efficiently than a fragmented union movement. Finally, the reason typically given for union centralization is the ability to provide the public good of wage restraint, which arguably leads to lower inflation and unemployment but certainly reduces wage inequality.

These benefits, though compelling, are far from certain. Confederal arrangements can

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<sup>5</sup>Unlike Wallerstein (1985) I do not assume that the only goal of a federation is to secure policy favors from government.

<sup>6</sup>Raiding can be considered a negative externality of organizing activities

plausibly involve redistribution across constituent members. In the case of unions, redistribution involves the redistribution of *political* resources, typically from those with more market power to those with less. For example, centrally held strike funds redistribute income from richer to poorer unions (conditional on a strike); a labor PAC does the same for political contributions. These shared benefits are more valuable to some unions than others and contingent on the costly but imperfectly observable and possibly unverifiable actions of other agents. These issues point to the extensively studied problems of time inconsistency and moral hazard.<sup>7</sup> An allocation of decision rights within an organizational structure rather than *ad hoc* agreements might help to overcome these problems.

Models of fiscal federalism lend themselves well to the issue here as they typically address the collective action problem across sub-federal units (de Figueiredo and Weingast, 2005), agency problems between the center and the regions (de Figueiredo and Weingast, 2005; Treisman, 1999), and distributional concerns across regions (Alesina and Spolaore, 1997; Alesina, Spolaore and Wacziarg, 2000; Alesina, Angeloni and Etro, 2005; Hafer and Landa, 2007; Treisman, 1999). The model I propose here is similar to that analyzed by Alesina, Angeloni and Etro (2005) and Hafer and Landa (2007).<sup>8</sup> I modify their set-up in two ways. First, I endow agents with varying levels of productivity. Agents better able to secure their local objectives are also more productive when contributing to the group project. Second, I investigate the possibility that a third party can induce the confederal affiliates to broaden the scope of their activities, thereby mitigating Alesina et al.’s scope-size trade off.

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<sup>7</sup>Bolton and Dewatripont (2005) provide a comprehensive graduate-level textbook treatment of the current state of contract theory and its various applications, including models involving time inconsistency and moral hazard.

<sup>8</sup>The Alesina et al model simply allows agents to vary in their preferences for confederally-provided public goods. Hafer and Landa derive these preferences over public goods from an underlying income distribution. My set-up allowing agents to vary in their endowments is similar in flavor to the Hafer and Landa project in this regard.

## 2.2 The Basic Model

In the model there is a set of  $N$  agents. Each agent  $i$  has a fixed endowment,  $r_i \geq 1$ , that it can allocate to two different tasks.<sup>9</sup> The first generates purely local returns whereas the second has positive returns to scale, i.e., there are spillovers across agents and possible gains from cooperation.<sup>10</sup> I refer to the first activity as the *local activity* and the second as the *confederal activity*. Agents can join a confederation in which their contributions to the confederal activity are pooled; I refer to these agents as *affiliates*. Those remaining outside the confederation do not receive any of the scale benefits of group production.<sup>11</sup> Each agent's utility is given by<sup>12</sup>

$$u_i = (1 - t_i)r_i + \beta \log\left(\sum_{i \in C} r_i t_i\right) \quad (2.1)$$

where  $t_i \in [0, 1]$  is  $i$ 's allocation to the confederal activity and  $\beta$  is a known (for now) productivity<sup>13</sup> factor and  $C$  denotes the set of agents (along with  $i$ ) in the confederation  $C$ . We can interpret  $\beta$  as summarizing how valuable or productive confederal cooperation is.

The basic game is played as follows:

1. Each agent decides if it wants to affiliate with a confederation.
2. Affiliated agents then decide on the common contribution level, i.e.,  $t_i = t \quad \forall \quad i \in C$ , according to some decision rule.<sup>14</sup> For the moment, the decision rule is taken to be

<sup>9</sup>As an alternative interpretation, each agent has the same endowment (normalized to unity) but some are more productive (higher  $r_i$ ).

<sup>10</sup>In the model below I assume that spillovers are positive. Results are easily extended to incorporate negative spillovers from the actions of other agents. While the case of negative spillovers might better resemble the wage bargaining problem, for simplicity I speak of all spillovers as if they were positive.

<sup>11</sup>Note that agents who do not affiliate can still allocate some portion of their endowment to the confederal activity. They just happen to be in a "confederation" with only one member.

<sup>12</sup>The separable preferences and logarithmic confederal production function make exposition simpler but are not strictly necessary. Alesina, Angeloni and Etro (2005) and Hafer and Landa (2007) work with more general versions of a similar model and derive similar results.

<sup>13</sup>Or, alternatively, a commonly held valuation for confederally-produced goods relative to locally produced ones.

<sup>14</sup>A confederation of this sort is "rigid" in the language of Alesina, Angeloni and Etro (2005). The welfare

exogenous.

### 3. Contributions are made and outcomes realized.

I initially assume that decisions on the common contribution level for affiliates are binding and enforceable, i.e., there is no collective action problem. The set up here is similar to an  $N$ -player Stag Hunt game with endogenously determined  $N$ .

I begin by defining each agent's outside option. On its own, each agent picks  $t_i$  to maximize (2.1). The first-order condition necessary and sufficient for a maximum defines the agent's optimal  $t_i$  as

$$t_i^* \equiv \min \left( 1, \frac{\beta}{r_i} \right) \quad (2.2)$$

It is clear that  $t_i^*$  is (weakly) increasing in  $\beta$  and (weakly) decreasing in  $r_i$ , implying that, for fixed  $C$ , 1) agents' preferences are single-peaked around  $t_i^*$  and 2) agents can be ordered by  $r_i$ . This, in turn, implies that the median voter theorem holds for voting games over common  $t$ . Substituting  $t_i^*$  an agent's utility for remaining outside the federation is

$$u_i^{out} = u_i(t_i^* \mid i \notin C) = \begin{cases} r_i + \beta(-1 + \log \beta), & \beta < r_i \\ \beta \log r_i, & \beta \geq r_i \end{cases}$$

It will also be useful to define the total endowment of agents affiliated to a confederation with membership  $C$  as

$$\bar{r}_C \equiv \sum_{j \in C} r_j$$

The game will be solved by backward induction. Since agents can be ordered by  $r_i$  we can define the  $\alpha$ -decision rule to be one in which the  $\alpha$ th quantile of the affiliates is the

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benefits of relaxing this rule by, e.g., having the confederation set some minimum contribution to the group effort and allowing agents to allocate more to public goods provision if they prefer to do so (mandates), is the subject of several papers (Alesina, Angeloni and Etro, 2005; Cremer and Palfrey, 2000; Hafer and Landa, 2007; Lulfesmann, 2002). In general, (and in the model I describe) overall welfare is maximized if each agent is allowed to contribute its optimal amount to the group effort. I focus on rigid federations for two reasons: it simplifies exposition and I am more interested in highlighting the distributional conflicts retard the emergence of strategic capacity. Allowing mandates would mitigate some of the problems I outline in relation to proposition 2.2 below but would not eliminate the fundamental tension.



pivotal voter; if  $\alpha = 0.5$  then the median affiliate is decisive.<sup>15</sup> At the voting stage, affiliates vote for their most-preferred  $t$ . Let  $t_\alpha$  denote the winning  $t$  under decision rule  $\alpha$  and let  $C_\alpha$  be the confederation with decision rule  $\alpha$ .

Define the utility of an affiliate to confederation  $C_\alpha$  as

$$u_i^{in} = u_i(t_\alpha \mid i \in C_\alpha) = (1 - t_\alpha)r_i + \beta \log(t_\alpha \bar{r}_{C_\alpha})$$

Thus an agent's net utility of joining a  $C_\alpha$  confederation is  $\Delta u_i = u_i^{in} - u_i^{out}$ . More precisely, letting  $r_\alpha$  be the affiliate such that  $\text{quantile}(r_i) = \alpha$

$$\Delta u_i(C, t, \alpha, \beta \mid r_\alpha > \beta) = \begin{cases} (1 - t_\alpha)r_i + \beta \log \frac{t_\alpha \bar{r}_{C_\alpha}}{r_i} & \beta \geq r_i \\ -t_\alpha r_i + \beta \left[ \log \frac{t_\alpha \bar{r}_{C_\alpha}}{\beta} + 1 \right] & \beta < r_i \end{cases} \quad (2.3)$$

$$\Delta u_i(C, t, \alpha, \beta \mid r_\alpha \leq \beta) = \begin{cases} \beta \log \frac{\bar{r}_{C_\alpha}}{r_i} & \beta \geq r_i \\ -r_i + \beta \left[ \log \frac{\bar{r}_{C_\alpha}}{\beta} + 1 \right] & \beta < r_i \end{cases} \quad (2.4)$$

Lemmata 2.1 and 2.2 follow directly from the comparative statics of  $\Delta u_i$ :

**Lemma 2.1** *If  $r_\alpha, r_i > \beta$  and  $r_i/r_\alpha > 1 + \log \bar{r}_{C_\alpha} - \log r_\alpha$  then  $\Delta u_i$  is decreasing in  $\beta$ . Otherwise  $\Delta u_i$  is weakly increasing in  $\beta$ .*

*Proof:* See appendix A

Intuition would suggest that as the returns to the confederal activity increase cooperation would automatically be more likely. Lemma 2.1 shows that this is not necessarily the case. The lemma says that if difference between an agent's endowment and that of the decisive affiliate is bigger than the difference between the mean and decisive member's endowment, the attractiveness of the confederation is actually *declining* in the productivity of the confederal activity. Put another way, if, for fixed  $\alpha$  a small number of agents (potentially) looms very large in confederal production, the likelihood that these richest agents will cooperate with the poorest declines as the confederal activity becomes more produc-

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<sup>15</sup>I discuss below how different values of  $\alpha$  might be achieved by assigning voting weights to affiliates. Note that it *cannot* be achieved by simply requiring a coalition of size  $\alpha$  to decide on a value of  $t$ ; all a supermajority requirement will do is bias the confederal decisions toward the status quo, but any policy in  $[(2t_m - t_\alpha), t_\alpha]$ , where  $t_m$  is the median affiliates'  $t_i^*$ , is in the core.

tive. The intuition here is reminiscent of the logic behind the Meltzer and Richard (1981) inequality and redistribution result. If the median affiliate is pivotal, i.e.,  $\alpha = 0.5$ , then the RHS of the antecedent is the (log) difference between the mean and median endowments. As  $\beta$  increases (up to the point where  $\beta = r_\alpha$ ), the relatively poor affiliates want to “tax” more heavily for confederal activity. But the rich agent is so big relative to the poorer ones that their contributions matter little to it and the big agent is less inclined to find affiliation profitable.

Figure 2.1 illustrates how this works. Both panels represent three-member confederations with the endowment values of  $\{1, 10, 100\}$  and  $\{1, 10, 20\}$  for the left and right panels, respectively. The left panel displays how, for values of  $\beta < r_\alpha$  the net utility to the richest agent is declining while that for the median agent is increasing. As  $\beta$  continues to increase, however, the productivity of confederal activity swamps the redistributive pressures of confederal membership. In the right panel, the difference between the richest agent and the pivotal one is much smaller. In this scenario, net utility is everywhere increasing in  $\beta$ .

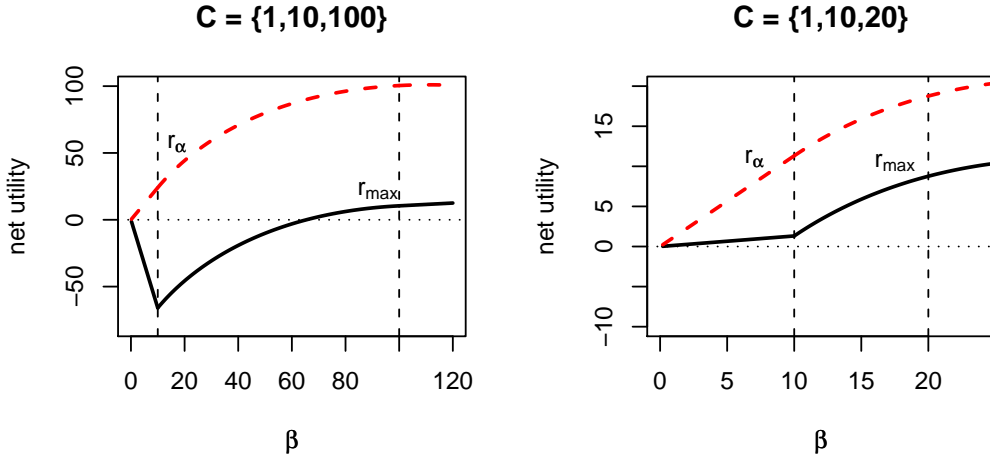


Figure 2.1: Illustrating lemma 2.1. Changes in the net utility of being in a confederation as a function of  $\beta$  depend on the relative size of  $r_{max}$ ,  $r_\alpha$ , and  $\bar{r}_{C_\alpha}$ . If  $r_{max}$  is too large, net utility for the richest agent decreases in  $\beta$  so long as  $\beta < r_\alpha$ . Based on three agents with  $r_i \in \{1, 10, 100\}$  and  $\{1, 10, 20\}$  for the left and right panels, respectively.  $r_\alpha = r_m = 10$ .

**Lemma 2.2** *For fixed  $\beta$  and assuming an instantaneous change in  $r_i$  does not change the identity of the decisive affiliate, if  $\beta \leq \bar{r}_{C_\alpha}$  then  $\Delta u_i$  is weakly decreasing in  $r_i$  for all  $i$ .*

*Proof:* See appendix A

In words, the profitability of being an affiliate of a fixed confederation decreases the bigger the endowment, holding all other endowments fixed. An increase in an agent's endowment has two effects. It increases the amount of overall resources devoted to the confederal activity but it also increases that agent's relative contribution. This lemma says that the latter effect outweighs the former. Only when the returns to confederal activity are very high does net utility increase in the endowment.

Agents will join  $C_\alpha$  iff  $\Delta u_i \geq 0$ . If  $\beta < r_\alpha$ , then we can substitute  $\beta/r_\alpha$  for  $t_\alpha$ , yielding the following condition:

$$\frac{r_i}{r_\alpha} \leq 1 + \log \frac{\bar{r}_{C_\alpha}}{r_\alpha} \quad (2.5)$$

Whereas if  $\beta \geq r_\alpha$  then we substitute 1 for  $t_\alpha$  and get

$$r_i \leq \beta \left[ 1 + \log \frac{\bar{r}_{C_\alpha}}{\beta} \right] \quad (2.6)$$

Note that  $\beta$  only (directly) affects the attractiveness of joining the confederation when it is large relative to the endowment of some decisive affiliate. Also note that both conditions always hold for all  $i$  such that  $r_i \leq r_\alpha$ . This follows directly from the insights of lemma 2.2: all agents with endowments smaller than the decisive affiliates endowment will find joining the confederation increasingly attractive, once again reinforcing the redistributive aspect of confederal organization.

Define an *equilibrium confederation under decision rule  $\alpha$*  as one in which 1)  $\Delta u_i \geq 0 \forall i \in C_\alpha$  and 2)  $\Delta u_i < 0 \forall i \notin C_\alpha$ . We can also say that agents  $i$  and  $j$  have *weakly contiguous endowments* and hence *weakly contiguous preferences* if either 1)  $r_i = r_j$  or 2)  $r_i \leq r_j$  and  $\nexists$  an agent  $k$  such that  $r_i \leq r_k \leq r_j$ . I can now state the following proposition:

**Proposition 2.1** *For fixed  $\alpha, \beta$  there exists a unique equilibrium confederation composed of affiliates with contiguous preferences. The size of the confederation is weakly increasing in  $\beta$ .*

*Proof:* See appendix A

**Corollary 2.1** *If  $\beta > r_{max}$  then all agents belong to the confederation and allocate all resources to the confederal activity.*

There are two immediate implications. First, as the returns to the confederal activity increase (decrease), the size of the federation will increase (decrease). Combining proposition 2.1 with lemma 2.2 we have a second substantive claim: the more an agent's endowment exceeds that of the pivotal agent, the less "likely" that richer agent will find it in its interest to join the confederation. Put differently, the more skewed the distribution of endowments, the less likely the best endowed or most productive agents will join a confederation. The reasons for this are clear: by submitting to the collective choice procedure inherent in a confederation, the weaker affiliates borrow strength from the stronger. If these differences in endowments are sufficiently large, the weaker agents will demand a contribution by the stronger beyond what the stronger finds profitable. The strongest agents foresee this and will refuse to join.

The flip side of this observation is that we can now consider points along a continuum of affiliation where one pole is the "grand coalition" of all  $N$  agents. A horizontally integrated federation is one in which  $\beta$  is sufficiently high and/or each agent's endowment is sufficiently similar that all agents prefer to join the confederation. Returns to group activity are sufficient to outweigh the loss of local autonomy.

Whenever the equilibrium confederation falls short of horizontal integration there is a tension between the  $t_\alpha$  and the fact that the less-powerful affiliates would generally prefer that the more powerful agents outside the confederation join. Those remaining outside the federation see  $t_\alpha$  as too high a price to pay. Under what circumstances is it worthwhile for those in the federation to alter the group decision rule so as to attract these better-endowed as members? Is there some lower contribution rate that would make confederal membership worthwhile for an agent outside the federation while not making any of the current members worse off?<sup>16</sup> Formally, for some  $i \in N$ ,  $\Delta u_i(t_\alpha; C) < 0$ , but  $\Delta u_i(t_{\alpha'}; C) \geq 0$  for some

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<sup>16</sup>I focus on unanimity and the Pareto optimality it implies, but we could imagine the choice over  $\alpha$  taking place through some other decision procedure. More on this below.

$t_{\alpha'} < t_{\alpha}$  where  $C$  is the confederation including  $i$ . It must also be the case that for all  $j \in C_{-i}$ ,  $u_j(t_{\alpha'}; C) \geq u_j(t_{\alpha}; C_{-i})$ , where  $C_{-i}$  is the confederation excluding  $i$ .

**Proposition 2.2** *Assuming  $\beta < r_{max}$ , given some  $i$  such that  $\Delta u_i(t_{\alpha}; C) < 0$  then there exists some  $\alpha' > \alpha$  such that  $\Delta u_i(t_{\alpha'}; C) \geq 0$  and  $u_j(t_{\alpha'}; C) \geq u_j(t_{\alpha}; C_{-i}) \quad \forall j \in C_{-i}$  if and only if the following condition holds:*

$$r_j(\bar{t}_{\alpha'} - t_{\alpha}) \geq \beta \left( \log \frac{\bar{r}_{C_{-i}}}{r_C} - \log \frac{t_{\alpha}}{\bar{t}_{\alpha'}} \right) \quad \forall j \in C_{-i} \quad (2.7)$$

where  $\bar{t}_{\alpha'}$  solves  $t_{\alpha'} r_i = \beta(1 + \log t_{\alpha'} \bar{r}_C / \beta)$ .

*Proof:* See appendix A

Condition 2.7 is  $j$ 's constraint. If it were not met then even if  $i$  were made exactly indifferent between joining and not ( $t_{\alpha} - t_{\alpha'}$  is as small as possible),  $j$  would still be better off in the  $\alpha$ -rule confederation without  $i$ . The inequality of endowments and the relative returns to the confederal activity describe the extent to which these conditions are met for different  $i$ .

To make this easier to see, table 2.1 presents a numerical example. In column 1 we have the set of agents ( $|N| = 3$ ) indexed by their endowments,  $r_i$ . Column 2 displays the value of  $\beta$ . Column 3 presents each agent's net payoffs for being in the grand confederation where the median affiliate sets  $t$  and Column 4 presents the same information when  $t = \bar{t}_{\alpha'}$ , i.e., when  $t$  is set so that the best endowed agent is just indifferent between joining and not. Column 5 displays agents 1 and 2's net payoffs to being in the grand confederation where  $t = \bar{t}_{\alpha'}$  compared to a confederation by themselves with  $t$  set by the median. In row 1, agent 3 will not join a confederation made up of all three agents when agent 2 sets  $t$ . It is possible, however, for agents 1 and 2 to offer a  $t_{\alpha'}$  that makes agent 3 indifferent about joining. Agents 1 and 2 benefit from this arrangement relative to what they could achieve in a confederation without agent 3. The situation described in row 2 is different. Even if at agent 3's maximum acceptable contribution level is set, agent 1 is still better off in the confederation with just agent 2.<sup>17</sup> The difference between agents 1 and 3's preferred

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<sup>17</sup>Note that this example points to the possibility that if admittance to the confederation were determined

Table 2.1: Numerical simulation exploring when it is possible for weaker agents to induce stronger agents to join a confederation by letting the stronger determine confederal contribution levels. contributions.

$N$	$\beta$	$\Delta u_i(t_m)$	$\Delta u_i(\bar{t}_{\alpha'})$	1 & 2's gain
$\{1, 2, 9\}$	1.5	$\{3.0, 2.5, -0.6\}$	$\{2.7, 2.3, 0.0\}$	$\{1.1, 1.7\}$
$\{1, 5, 40\}$	1.0	$\{3.0, 2.2, -4.8\}$	$\{1.6, 1.4, 0.0\}$	$\{-0.1, 2.1\}$

confederal contributions is so large that no mutually acceptable  $t$  exists that would induce agent 3 to join while making agent 1 at least as well off as it is with just agent 2. What's more, a confederation of agents 2 and 3 (not shown), with  $t$  set as the average between the two's  $t^*$ s would be unacceptable to agent 2; agent 2 could do better in the confederation with agent 1. Only when the confederal contribution level is biased toward agent 2's preferred  $t$  will it join into confederation of agents 2 and 3.<sup>18</sup>

All this leads to several important points to be drawn from propositions 2.1 and 2.2. First, even in the absence of collective action problems, there is no guarantee that all agents will join together for cooperative activity. Distributional concerns can get in the way to such a degree that confederal cooperation is difficult and negotiation costs potentially high. Furthermore, when some agents do not affiliate with the confederation, it is the best endowed ones that remain alone. This has implications for the strategic capacity of federations of interest groups. Where groups are unable to coalesce into one federation, it is likely that the most powerful ones will be the ones standing alone.

Second, the exact nature of the internal decision process is important in determining which agents will be part of the confederation and how stable the confederation will be. Whether or not a confederation can include all its potential members is largely driven by how internal organizational rules determine the pivotal affiliate. As the discussion of

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by majority vote then agent 3 would not gain admittance. Alesina, Angeloni and Etro (2005) addresses this exact situation in a similar model where each agents vary in their preferences for public goods (as opposed to their productivity, as here). They prove that only other agents with preferences close to the median affiliate will be admitted under majority rule.

<sup>18</sup>Also note that such a confederation would be attractive to agent 1. While agent 1 prefers the confederation of just 1 and 2 to the one including 3, it prefers the one with all three to being on its own.

table 2.1 points out, it may pay to alter the decision rule to attract other agents, but altering this rule changes the behavior of the group. This then implies at least two possible ways the organization could evolve. When agents are heterogeneous in important ways, we can expect decision rules to skew the pivotal affiliate away from the median so as to protect the better endowed affiliates from the demands of the less wealthy, but only to the extent that the poorer agents benefit from this arrangement. Third, once a confederation is fixed, changes in the relative endowments and/or in  $\beta$  (the returns to confederal activities) can put a strain the confederal arrangement. If the decision rules in the federation no longer map onto the actual distribution of endowments across members it might induce an existing federation to fragment or prevent the inclusion of a wealthier member into an existing one.

### *2.2.1 Possible extensions*

#### *allocation of voting weights*

A simple way to consider variation in the decision rule of the confederation is as an affine function of endowments. Let the weighted vote for affiliate  $i$  be  $v_i = k + \gamma r_i$ . Generating a confederal arrangement will involve bargaining over the (relative) values of  $k$  and  $\gamma$ . Characterization of equilibrium voting weights involves a multilateral bargaining game that I do not take up here.

Thus far, I have only considered  $r_i$  as the vague theoretical concept of “endowment” or “power”. It is unlikely that such an attribute is directly observable and measurable. It is more likely that contracts and bargaining over voting weights will take as input something observable that is likely to proxy for “power”. As an empirical matter, most union federations tax affiliates and allocate voting rights on a per capita basis, though the German federation (DGB) taxes affiliates on the dues income from members (Windmuller, 1975). If we think of  $i$  as an affiliate union in a union confederation and  $r_i$  as membership, then, for fixed total membership, the parameter  $\gamma$  is an index of malapportionment. As  $\gamma \downarrow 0$  the confederation becomes increasingly malapportioned. The argument here implies that whether a given confederation is more or less malapportioned will depend on the distribution of membership across affiliates. Where membership is concentrated in a relatively small number of

unions but there are many unions, we would expect less malapportionment whereas more equitably distributed membership might lead to either perfectly proportional representation or simply fixed number of votes for each affiliate (i.e.,  $\gamma = 0$ ). Note that the latter is less adaptable to exogenous changes in affiliates' endowments. If the underlying distribution of endowments gets too out of kilter with the voting weights, serious organizational tensions can result.

### *ego rents*

A frequently mentioned impediment to greater organizational unity in confederal organizations is the interests of local or affiliate leaders. They are assumed to value the perks and attention holding office and are therefore loathe to give up local autonomy, even if their constituents are ambivalent about such an arrangement. A simple way to formalize this is by modifying the agent's objective function:

$$u_i = (1 - t)r_i + \beta \log(t\bar{r}_C) - \psi t$$

where  $\psi$  represents the degree to which an agent dislikes being taxed. It follows directly that as  $\psi$  increases an agent's  $t_i^*$  declines, making affiliation less likely or, for a fixed confederation, decreases the scale of the confederation's activities. Note however, that  $\psi < 0$  (an attraction to the confederal project) might increase the scale of confederal activity. We can therefore think of  $\psi$  as measure of ego rents. Where  $\psi > 0$ , we have a model in which agents (e.g., union leaders) derive value from autonomy whereas  $\psi < 0$  implies a model in which union leaders might see excess value in the confederal organization, perhaps because participation in the confederal organization opens up additional career paths.

### *2.2.2 Multiple activities, the size-scope trade off, and third parties*

Suppose now that there is more than just one possible confederal activity, with each additional (possible) confederal activity,  $q$ , having its own  $\beta_q$  implying that these activities can be ordered by  $q$ .<sup>19</sup> Alesina, Angeloni and Etro (2005) show that the federation faces a trade-

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<sup>19</sup>I assume that the logarithmic production technology remains constant across these activities.



off between the scope of the federation's competence—the number of activities for which the group determines common contribution levels—and its size, i.e., number of affiliates. With a fixed distribution of preferences across unions, organizations with competency over a larger number of issues will tend to be smaller whereas broad-based federations will be sustainable in equilibrium if they have competency only along dimensions offering unions the highest returns (highest  $\beta_q$ ). The intuition behind these results is fairly straight forward. Imagine affiliates join a federation and then decide what activities to engage in and the contribution level(s) by majority vote.<sup>20</sup> Affiliates that would like centralized provision of only (say) one of the possible activities of the confederation will not want to pay the costs of contributing to activities from which they receive little benefit. They will be better off outside the federation if the affiliate union demands too high a contribution for other activities. When more types of activities are centralized, only those unions that value centrally provided services the most highly are willing to pay the cost. The organization, to survive, must strike a balance between the contribution level demanded and the willingness of potential affiliates to pay for any particular activity. In the extreme case discussed by Johnson (1990), the median union could demand contributions that exceed the expected payoffs to some affiliates, causing them to withdraw from the organization and thereby changing the median union. If this process were to continue, the entire organization could “unravel”.

This extension points out that it is, in general, unlikely that we will observe confederations that are both highly centralized over several dimensions and broad-based in terms of encompassing a large portion of the possible affiliates. On its face this seems to conflict with the caricature of Scandinavian and, to a lesser extent, Germanic union federations. Nevertheless, it comports with historical observations about the initial emergence of labor federations in the 19th century. Windmuller (1975:105) emphasizes the “tenuous position that the founding organizations at first assigned their national centers.” Union confederations, including the Swedish and Danish LO and the Dutch NVV which subsequently

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<sup>20</sup>This is consonant with the evolution of central authority in most union federations. There is a multidimensional policy space here implying the possibility of cycling majorities. Alesina *et al.* avoid this problem by construction, since they posit “intermediate class” preferences (Grandmont, 1978). In general, it seems that these votes over activities and contribution levels should be sequential and agenda setting powers will be important for determining the outcome. Johnson (1990) finds evidence of agenda control by the leadership of the AFL.

became some of the most powerful, typically began with irregular meetings, precarious finances, and very circumscribed powers. The AFL, discussed at length in the next chapter, was formed by craft unions' dissatisfaction with the centralizing tendencies of the Knights of Labor. The bigger and more powerful AFL affiliates repeatedly resisted attempts to centralize strike funds. The Norwegian federation is the exception that proves the rule. The Norwegian LO formed in 1899 with strong powers to intervene in affiliates' bargaining and strike decisions right out of the gate. Nevertheless, this confederation formed *without* the participation of the much stronger unions in the printing and metal working trades (Windmuller, 1975). When these unions later affiliated, the central organization was obliged to give up major central powers.

This then begs an important question: if central federations tend to emerge weakly centralized, how can we explain their differing evolution? The model above gives some guidance: exogenous changes to the value of some  $\beta_k$  or the distribution of endowments could affect the willingness of some affiliates to contribute more and/or expand the confederation's scope for action. This may explain some of the variation, but I argue for more. Specifically, the existence of a counterparty with an interest in the outcome of the confederation's activities may be able to alter incentives so as to induce the federation to broaden the scope of its activities.

Suppose there are two possible confederal activities, domain 1 and domain 2, but that, in equilibrium, a given federation has competency to take actions over issue 1 only. Suppose further that there is a third party who cares about the outcome of (decentralized) union activities in the second domain. If this third party is capable of imposing costs on all affiliates for outcomes it dislikes and/or credibly promising inducements for ones that it prefers it can alter the incentives to centralize. In the notation of the model, these counterparties can induce a correlation between  $\beta_1$  and  $\beta_2$ , thereby linking two previously disconnected issue areas. In order for such an intervention to be successful, the model predicts that it is the more powerful potential affiliates who must be compensated (or threatened). The ability of a third party to influence the confederation will depend on a number of factors that affect the decision to centralize in any domain: the size of  $\beta_1$  and  $\beta_2$ , the net value the richest affiliates attach to the gains along the first dimension, and the counterparties' ability to

affect payoffs.

To make the discussion more concrete and to foreshadow the discussion of social pacts in part II, imagine that there is a union federation in which the affiliates have agreed to centralize lobbying and political activities but all decisions over industrial issues (such as strikes or wage bargaining) remain at the affiliate level. Now suppose there is an incumbent government or political party whose fortunes may depend in part on the outcome of the unions' industrial activities. A government in a position to credibly promise policies preferred by the unions may be able to induce unions to centralize activities along another dimension. Similarly, employers able to impose costs on all unions for the industrial actions of a few might be able to induce unions to expand the scope of their confederal activities while maintaining their membership levels.

There are examples of the iterative nature of centralization of power in confederations. Consider the longshore workers on the US west coast. Prior to 1934, longshoremen were organized into port-by-port and sometimes dock-by-dock locals. These locals were, in turn, loosely federated under the International Longshoremen's Association (ILA). West coast shipping lines had been able to collude to break local (port-wide) strikes.<sup>21</sup> In 1934, the union leader Harry Bridges was able to orchestrate a coast-wise strike, ultimately centralizing bargaining for all west coast longshore unions, winning a coast-wise contract, and breaking away from the ILA to form the International Longshore and Warehouse Union (ILWU) (Kimeldorf, 1988; Nelson, 1988). Employers on the western US waterfront responded by forming the Waterfront Employers' Association (later the Pacific Maritime Association), in which they centralized wage bargaining operations (and later political lobbying) to match the centralization of the ILWU. Similarly, Bowman (1989) discusses how American coal mining companies, unable to restrain price competition among themselves, looked to United Mine Workers to "organize the employers." Swenson (1989, 1991) provides extensive evidence describing how Danish and Swedish employers in the export sector repeatedly employed lockouts on their workers in response to strikes in the construction sector, inducing the union federations to undertake centralized bargaining.

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<sup>21</sup>In the event of a strike in one port, ships were simply diverted to others, or even to other terminals in the same port.

### 2.3 Why a confederal organization?

To this point, I have ignored the question of why there must be a confederal *organization*. Why pay the (unmodeled) costs of offices, salaried officials, etc.? Why not decide once and for all on  $t_\alpha$ ? Alternatively, why not merge into one organization? Regarding the latter, I have explicitly assumed that there are some activities best undertaken at the local level. The degree to which is pays to engage in these activities is governed by the parameter  $\beta$ . When there are relative benefits to taking some purely local action, a confederal structure preserves some autonomy.<sup>22</sup> Regarding the former, there are two immediate and complementary answers: enforcement and uncertainty.

The enforcement rationale deals with the collective action problem I have until now assumed away. Put in the context of the game above, the problem involves enforcing the agreed contribution  $t_\alpha$ , especially on agents who would prefer to contribute less. A central organization, provided it has the power to impose costs on the membership, might be one solution to this problem, but not one without its own complications. Indeed this is the reasoning pursued in several models of fiscal federalism, most notably that of de Figueiredo and Weingast (2005). A chief concern for these theorists is the agency problem that exists between the affiliates and the center: a central organization strong enough to punish agents for deviating from the group decision is also strong enough to expropriate resources for its own uses.

Uncertainty presents the second rationale for an ongoing confederal arrangement. To see this, consider a simple extension of the basic game. Let  $\beta \in \{\beta^H, \beta^L\}$ ,  $\beta^H > \beta^L$ . All agents hold the common prior that  $Pr(\beta = \beta^H) = p$ . I assume the state is observable but unverifiable, i.e., the agents observe the value of  $\beta$  but contracts cannot be made conditional on  $\beta$ . Suppose the game is repeated through time. In each period the value of  $\beta$  is revealed and then agents allocate resources between local and confederal activities. At time 0, agents can decide whether or not to cooperate. One way to proceed involves simply agreeing to a rigid and binding  $t_\alpha$  that holds for all periods. This option relies on some sort of enforcement

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<sup>22</sup>These benefits could arise from informational needs at the local level, unmodeled heterogeneity in local preferences, or simply the fact that the local activity has no spillovers for any other agent and therefore need not concern the group.

mechanism in the event it is in the interest of some to renege *ex post*.<sup>23</sup> With this set up, the decision has been taken; there is no need to maintain an organization through time unless it is specifically created to enforce the agreement.

The other option, in the spirit of Aghion and Tirole (1997), is the possibility of contracting over decision rights rather than outcomes. By agreeing to take decisions through time, i.e., vote in each period on the level of  $t$ , we now have a justification for the existence of confederal organization. In this simple set up, it is clear that those willing to link their decisions over  $t$  can *always* do better by forming a confederal organization in which they observe  $\beta$  and then jointly make their allocation decisions. The ability to adapt to the changing values of  $\beta$  through time will yield benefits over the once-and-for-all option; the scale of these benefits will depend on  $\beta^H - \beta^L$ . What's more, cooperation can be sustained<sup>24</sup> using trigger strategies in the same manner as above. If trigger strategies are stable, a confederal organization can exist and improve the welfare of its members *without* specifically endowing the confederation with enforcement powers.

We can extend the informational logic of confederal organization. Suppose that learning the true value of  $\beta$  is costly.<sup>25</sup> For example, in the union context,  $\beta$  could describe the returns to supporting a political campaign. Learning the value of  $\beta$  might involve incurring the costs of opinion polling. A confederal organization economizes on information acquisition costs. If there is uncertainty at the local and national levels or if local conditions require adaptation, a confederal structure preserves some level of local autonomy while permitting gains from economies of scale.<sup>26</sup>

The uncertainty rationale seems a more compelling explanation for the initial emergence of confederally-structured organizations. If we imagine “bottom-up federalism” where lead-

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<sup>23</sup>For example, affiliates might coordinate on a trigger strategy in which all agents refuse to cooperate in subsequent periods if the level of contributions to the group activity does not reach a certain value in the current period.

<sup>24</sup>conditional on the usual caveat that agents are sufficiently patient.

<sup>25</sup>Once again, the value of this information depends on the variance of  $\beta$ .

<sup>26</sup>This notion of federalism as way to take advantage of economies of scale while permitting flexibility for local adaptation is at the heart of the federalism literature from at least Tiebout (1956). From the opposite angle, Freeman and Gibbons (1995)'s model of bargaining centralization focuses on just this tension between the opportunities for local adaptation and the rigidity of confederal dictates.

ers of independent organizations are considering sustained cooperation, a confederation seems the logical point of departure. They retain local control over some activities while gaining benefits. From an empirical perspective, many confederal organizations have very weak enforcement powers. Few have the ability to fine or otherwise penalize affiliates and even fewer exercise those rights. Yet all engage in some sort of meaningful group activity. One way to explain this might be norms of solidarity, but these norms might just be another name for a trigger strategy that enables conditional cooperation over time. The confederal arrangement provides both the organizational mechanism for delivering the benefits of cooperation and the focal point that delivers compliance.

## ***2.4 Summary and implications***

The model developed here makes three major claims and several subsidiary ones. First, where affiliates vary widely in their resources or capabilities, confederations will be smaller in scale and/or more agents will remain outside the confederal organization; we can refer to this as the scale-size trade off. The exact form this trade off takes will depend on the internal decision rules developed in the confederal organization. Whether these rules enable the better-endowed affiliates to protect their interests from the demands of others will depend on the desirability of bringing the better-endowed agents into the fold.

The second major claim is that there is a trade-off between size and scope. Where a large portion of the potential affiliates actually affiliate to the confederation, the confederation is less likely to have competency over a broad range of activities. This tendency is exacerbated as the variance in affiliates' endowments increases.

Third, the presence and interests of organized counterparties can induce more centralization among the agents. The degree to which this happens, however, is affected by a slew of conditions. Among them are the ability and willingness of the counterparty to make credible promises, the extent to which the better endowed agents value confederal cooperation and the extent of compensation required to induce these better-endowed agents to cede additional powers to the confederal organization.

I also presented an uncertainty-based rationale for the existence of confederal organizations. A direct implication of this argument is that as the degree of uncertainty in the

policy environment increases, so does the desirability of a confederal organization.

Finally, I discussed the possibility that affiliate leaders garner benefits simply from being leaders. In terms of confederal organization, this can be viewed as a cost accruing to leaders for loss of autonomy, thereby inhibiting confederal cooperation. Or it might be a benefit to them if it provides access to other resources or future career paths potentially increasing confederal cooperation.

All this implies that strategic capacity of amalgamations of independent units has its limits. There is a tension between expanding the scope of the organization and maintaining membership. The restrictiveness of these limits is driven by exogenous inequality in resource endowments. The ability to transcend them will largely depend on the actions and support of third party agents.

#### *2.4.1 implications and hypotheses*

In this section I distill these claims into implications applicable to the empirical case of union federations. To do so, I must map the parameters  $r_i$  and  $\beta$  onto the union case. What might they look like in the real world?

I referred to  $r_i$  as an endowment, “wealth”, and effectiveness as achieving goals. In the union case, the ability to win good contracts is the basis for everything. A union’s bargaining power vis-a-vis employers comes, ultimately, from its ability to effectively impose costs on them. This typically comes about when a union has organized a sufficiently high *percentage* of the relevant labor force that they can slow or stop production. Relevance can be defined by skill, as with craft unions, or simply with the type of firm, as with industrial unions. Unions also gain leverage from their position in the production process and the nature of their industry. Typographical workers were referred to as the “labor aristocracy” due to both their relatively small numbers and their industrial power. Their scarce skills, nearly universal unionization, and ability to bring production to a halt at will made for very strong unions (Lipset, Trow and Coleman, 1956). Construction workers have been able to gain leverage by striking at key moments in a construction project. That dockworkers occupy a critical position in the just-in-time economy was reinforced in 2002 when a lockout on

the American west coast disrupted holiday retail and brought production to a near-halt in numerous industries. The ILWU is numerically small but, as was demonstrated, industrially powerful. It is clear, then, that numerically small unions can, in fact be industrially powerful. This industrial power can be translated into financial resources as well. Craft-based unions tend to charge significantly higher dues than industrial ones, for example. Nevertheless, sheer numbers count as well, especially in politics. What's more, notwithstanding the examples just given, the most powerful unions tend to be both large in terms of membership and strategically placed. Since virtually all unions (and federations) raise funds on a per-head basis, membership levels seem to be the most immediate and obvious empirical proxy for  $r_i$ .

We then have an implication from the model: *where membership is unequally distributed we will observe federations that are smaller in size and/or scope, all else equal.* But what is scope in the union setting? Three domains of activity stick out: organizing, politics, and bargaining. Putting organizing into the confederal domain can refer both to cooperation across unions in recruiting members and in confederal jurisdictional guarantees and no-raiding enforcement. Political involvement can vary in scale from simple lobbying to a formal relationship with a political party. Involvement in bargaining can range from *ad hoc* displays of support for striking affiliates all the way to confederal control of bargaining and strikes. The size scope trade-off implies that *where membership across confederations is highly concentrated, the centralization of bargaining is less likely to occur; this is exacerbated by fragmented membership across unions within federations. Where federations possess bargaining power we are less likely to see single-federation countries.*

The model also provides some guidance about internal decision making: *where membership (or other resources) is unequally distributed rules will be developed to induce stronger unions to affiliate to the (equilibrium) confederation.* These rules will allow stronger affiliates to exert some degree of veto power over the scale and scope of the organization.

The model provided several comparative statics results for  $\beta$ , the parameter governing the returns to confederal cooperation. One way to use the model to generate hypotheses is to consider what might plausibly affect the returns to confederal cooperation over time and across countries. Given the three domains I've outlined above, I first consider what



might affect returns to cooperation in organizing and bargaining. I take up political activity separately.

In terms of organizing, economies of scale are strongest when the average union is relatively small and when there remain a large number of unorganized workers. Further, where unions are organized along craft lines more unions have workers at every workplace, exacerbating jurisdictional disputes. The value of confederal cooperation in this regard is correspondingly higher. *Where union membership is more fragmented, especially where unions are organized along craft lines, the value of centralizing organizing activities, especially jurisdictional guarantees, increases.*

In terms of bargaining centralization, there is an oft-discussed link between trade exposure and the value of wage restraint, discussed above. *Where a greater portion of the unionized workforce is in the traded sector, centralized bargaining becomes more valuable.* On the assumption that centralized strike powers limit the militance of affiliates and/or undergirds centralized bargaining, greater trade exposure implies more central control over strikes.

#### *counterparties*

The most obvious counterparties affecting unions in their decisions over how much and over what to cooperate are employers and government. The variation in the centralization and interests of these actors can therefore have an effect on union's confederal organization. *Where employers centralize bargaining unions will be more likely to do so.*

#### *politics and political institutions*

A key reason for unions to come together in confederations is to press political demands. The political institutional structure therefore conditions the gains available from political activity. It also affects the credibility and resources available to governmental actors, conditioning their abilities to induce further centralization among unions.

In terms of institutions, the greater the dispersion of political authority, the less valuable is national-level political action. For example, Hattam (1993) argues American political in-

stitutions, particularly the dominance of the judiciary, reduced the value of direct political action and partisan alignment for unions, encouraging the development of syndicalist “business unionism” as embodied in the AFL. More generally, there is a venerable literature linking federalism to fragmented and federally structured interest groups (Schattschneider, 1935; Skocpol, Ganz and Munson, 2000; Wilson, 1973). The model here puts a new twist on these arguments: *where political authority is dispersed, especially under federal systems, centralizing political activities at the national level is less valuable.*

Furthermore, to the extent political parties can act as counterparties affecting union centralization, fragmented political authority means politicians can credibly promise fewer goodies. As an example, the status quo bias in American institutions inhibits what can credibly be promised to unions by, e.g., a President. As a result *centralized bargaining is less likely in more fragmented political systems.*

Similarly, the structure of the party system can play a role, albeit it more ambiguous. Where there are two parties it is usually clear which one better represents union interests, increasing the value of centralizing political activities in a single federation. In multiparty systems, however, there are more avenues through which to affect government policy. Whether this corresponds to more centralized authority on political matters but more federations is not obvious from the model. But the availability of multiple channels for affecting policy seems likely to have some effect on union confederal organization.

## Chapter 3

**WHO SITS AT THE TABLE IN THE HOUSE OF LABOR?**

“An injury to one is the concern of all.”—motto, Knights of Labor

“A fair day’s wage for a fair day’s work.”—motto, American Federation of Labor

On July 21, 2005 four of the largest unions in the United States announced that they would boycott the AFL-CIO convention, a blow to the federation’s embattled leader, John Sweeny. In press leaks, high level officers in two of the unions signalled their intentions to secede from the federation. These leaders argued that the AFL-CIO had failed to arrest the long term decline in union membership and that radical restructuring was necessary. Specifically, they wanted to drastically reduce union expenditures on political projects, increase affiliates’ financial commitment to organizing activities, and consolidate smaller unions into larger industrial unions. Ultimately, the International Brotherhood of Teamsters (1.5 million members), the Laborers International Union of North America (500,000 members), the Service Employee International Union (1.9 million members), the United Farm Workers, the United Food and Commercial Workers (1.3 million members), and UNITE HERE (hotel and restaurant workers) would secede from the AFL-CIO and form the Change to Win coalition.<sup>1</sup> These unions claimed to represent approximately six million workers, representing 35% of the AFL-CIO’s membership (now claimed to be 10.5 million) but holding 20% of the delegate votes at the AFL-CIO convention.<sup>2</sup> This rupture in the organizational structure of American labor is hardly new, a fact to which the AFL-CIO’s hyphenated name bears witness. The AFL was borne out of a dispute within the Knights of Labor, engaged in bitter organizing battles with the Industrial Workers of the World (Wobblies) in the 1910-20s, and

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<sup>1</sup>The United Brotherhood of Carpenters and Joiners (520,000 members) would later also affiliate with the Change to Win group, but was at the time an independent union. All membership figures are as reported by the union websites as of March 27, 2008.

<sup>2</sup>As reported on [http://en.wikipedia.org/wiki/Change\\_to\\_Win\\_Federation](http://en.wikipedia.org/wiki/Change_to_Win_Federation)

then expelled, competed with and later re-merged with the Congress of Industrial Organizations between 1935 and 1955. Given the state of American unions today, this latest schism, while having implications for electoral politics and union organizing drives, may simply be little more than “rearranging deck chairs on the titanic.”<sup>3</sup>

The model in the last chapter highlighted the importance of membership allocation and, ultimately, collective decision procedures for building and maintaining federations of labor unions. This chapter explores issues of organizational structure, decision procedures, and, ultimately, rank-and-file democracy in two specific cases: the American Federation of Labor and the Knights of Labor. 19th century American workers found themselves in very different labor market positions depending on their skills and geographic locations. Some were in relatively strong positions while others were essentially exploited. As workers’ organizations developed, they had to balance the ambitions of the weaker groups with the limited resources of the strong. The weaker wanted to “borrow strength” from their stronger brethren by inducing the stronger unions to contribute more to collective activities, especially sympathetic strike support. For their part, stronger unions attempted to avoid bankrolling efforts not benefitting their members, even if it is good for workers overall. It is this asymmetry in resources that gives rise to different allocations of decision rights within the confederal organizations in an effort to mitigate the possibility of “unraveling” (Johnson, 1990). Consistent with theoretical expectations, the more durable AFL limited the scope of its activities and allocated decisions rights so as to enable the stronger affiliates to protect their interests whereas the KoL had no such mechanism. As the population of workers became more heterogenous in the 1880s, craft unions felt their interests would be better served outside the KoL; they left. The AFL continues to this day while the KoL died out by the turn of the 20th century.

This allocation of decision rights has implications for rank-and-file democracy in confederal organizations. The literature on union democracy, beginning with Lipset, Trow and Coleman (1956), has restricted its attention to individual unions. Lipset et al. use the International Typographical Union as the exception that proves Michels’ so-called “iron law”

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<sup>3</sup>At the time this hackneyed phrase was so ubiquitous in the press and in speeches by union leaders and that it is not worth citing a source.

(Michels, 1915). I push the literature up a level and begin the project of understanding the costs and implications of formal organizational democracy in confederations. I break from the Michels-Lipset tradition in that I conceive of rank-and-file enfranchisement as one of many possible collective decision structures that agents may try. In so doing, the model points to conditions that will affect the level of rank-and-file citizenship that a union confederation can sustain. Though the model does not provide much reason to be optimistic about the prospects for rank-and-file democracy, it does recast the Michelian conclusion. While democracy and accountability are surely intrinsically valuable, I outline how abridging the rank-and-file's democratic voice is one way to enable beneficial cooperation between labor organizations that might otherwise not have taken place. In so doing, I temper some of the antidemocratic criticism frequently leveled at the AFL.

The chapter will be organized as follows. The next section links the core ideas to the theoretical model discussed in the last chapter with the concrete empirical concerns. Section two illustrates the model's logic by comparing the failed Knights of Labor of the 19th Century United States with its more durable successor, the American Federation of Labor. Section three concludes with comments on the specific instance of the recent AFL-CIO/Change to Win schism.

### ***3.1 Mapping the model onto history***

Labor unions' defining activities—bargaining, striking, organizing, and lobbying—have implications for other workers and unions that were not involved in the initial decision-making process. In the presences of these externalities, central coordination across unions can be beneficial, at least in certain domains. Labor centrals are organizational attempts to internalize the spillovers of the activities of other labor unions. Creating and maintaining an organization that can internalize these spillovers often entails rules that abridge the democratic voice of rank-and-file union members as embodied in voting rights and direct access to confederal-level resources and services. This same centralization can even erode the democratic responsiveness of union leaders themselves by providing them with additional options for policy implementation as well as incentives to pursue policies other than those most preferred by their constituents.

As an empirical observation, “citizenship” in peak-level labor organizations is rarely extended to the rank-and-file; the unit of membership is almost always the union, not the individual worker. This state of affairs differs markedly from the situation in federally structured nation-states in which citizens vote over specialized, federal-level offices and interact directly with their federal governments. There are, however, exceptions among labor federations. The Knights of Labor (KoL), the first major nationwide labor federation in North America, admitted individual workers as “knights” whether these workers were members of previously organized unions or not.<sup>4</sup> Representatives to the KoL General Assembly were elected directly from the Local Assemblies, all of which were organized geographically, frequently cutting across occupational boundaries. Ulman (1955), in his seminal work, argues that it was precisely this characteristic of the KoL that led the newly ascendent national craft unions to abandon the KoL and form the American Federation of Labor (AFL) in 1887. The AFL is noted for, if nothing else, jealously guarding the jurisdictional privileges and “sovereignty” of its most important constituent unions. The expulsion of the CIO from the AFL, eventual merger into the AFL-CIO, and the recent struggles between the AFL-CIO and new Change to Win federation reveal the persistent tension between organizational cohesion and the representation of the interests of workers in different structural positions in the economy. The puzzle, then, is two-fold: why is rank-and-file citizenship so rare in union confederations and, in the specific instance of the late 19th-century USA, why did the KoL and AFL evolve so differently in this regard? Can their differing internal organization shed light on their different historical trajectories?

The model developed in the previous chapter has something to contribute here. To recap: unions vary in their preferences for different types of centrally provided services. Some may benefit more from organizing activities than others. Weaker unions may want to draw on the financial resources of their richer brethren during strikes and lockouts while strong unions may have little use for the reciprocal privilege. Thus, when considering the formation of a federation, union leaders must anticipate the contribution level that the

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<sup>4</sup>The KoL admitted all wage laborers except lawyers, bankers, stockbrokers, gamblers, and purveyors of liquor since they were deemed to be unproductive. Another more contemporary example of direct worker suffrage at the confederal level is the Argentine Central de los Trabajadores Argentinos (CTA), a breakaway group of the CGT.

federation will impose. A union will only join a federation if the benefits it receives (in the form of spillovers from the contributions of other unions) exceeds the investment that the federation will require of its affiliates. For simplicity, suppose we have three unions,  $A$ ,  $B$ , and  $C$ . Without loss of generality, assume that  $A$  is bigger than  $B$  or  $C$ . Suppose that all three unions form a confederation in which the members take the decision on the uniform contribution level by majority vote. In this case, the median union member sets the contribution rate by choosing the level that will maximize her overall consumption. There are then two cases to consider: in the first,  $A$  is bigger than  $B$  and  $C$  combined in which case  $A$  sets the contribution rate. Members of  $B$  and  $C$  can decide to affiliate or not as their preferences dictate, but  $A$  has little incentive to alter its choice since it receives relatively little of the scale benefits of confederation. The second case is more interesting (and realistic). Suppose that  $A$  is smaller than  $B + C$ , i.e., the median voter is not a member of  $A$ . In this case, the policy-setting union member is a member of  $B$  or  $C$ , so the outcome under rank-and-file voting with majority rule will be that preferred by one of the two smaller unions.  $A$  knows this, however, and, for preferences sufficiently far apart, will not agree to a confederation. Since there are scale economies here,  $B$  and  $C$  have a strong incentive to induce  $A$  to join their federation since  $A$ 's size will provide the greatest spillover benefits to any confederal partnership.  $B$  and  $C$  will promise to enact a contribution level below their ideal level. Under majority voting and without external enforcement, however, this promise is not credible.  $B$  and  $C$  therefore offer a contract in which  $A$  has disproportionate influence on the collective choice over of contribution levels, even if the level is below that preferred by  $B$  and/or  $C$ .  $A$  will demand institutional guarantees that enable it to protect its interests in exchange for affiliating.  $B$  and  $C$  will be forced to tie their own hands by yielding some decision power to  $A$ . This may be a good thing insofar as it enables an efficient political transaction. It does, however, compromise the representativeness of the confederal collective choice mechanism.

What's more, as the number of activities increases, so do the possibilities for organizational unraveling if decision rights do not reflect the unions' resources. This size-scope trade-off implies that the more diverse the activities engaged in at the confederal level, the greater the organizational tension between richer and poorer affiliates. If an organization

is to maintain and reproduce itself through time, heterogeneity in size and strength will induce asymmetric distributions of decision rights that deviates from full enfranchisement at the rank-and-file level. The logic here shares a family resemblance with Johnson’s “unraveling problem” in democratically governed groups: in order to induce the strongest and most valuable members to remain in an organization, they must anticipate these unions’ willingness to exit the organization (or refrain from affiliating in the first place) and design collective choice mechanisms accordingly. He posits that “majority rule operates on the members’ ideal points while long-term membership is determined by tolerance” (Johnson, 1990:10). Tolerance (the willingness to endure collective decisions that do not coincide with one’s ideal point) in this case is determined by what a union can achieve outside the confederation relative to the benefits of affiliating.

The discussion above yields several assertions. First, the more heterogenous worker groups are in their interests, sizes, and abilities to control their own labor jurisdictions, the less likely we will observe rank-and-file “citizenship” at the confederal level. Second, the more diverse and heterogenous the economic activities subsumed in a labor organization, the narrower will be the confederal organization’s competency and objectives. Third (and related to the first two), when workers who benefit less from confederal activities are both valuable members and not the decisive voters, these stronger organizations will require institutional guarantees in the form of voting rules and secession guarantees that will make credible the organization’s promises to restrict the labor central’s activities and/or extractions.

### ***3.2 The Knights of Labor and American Federation of Labor***

To illustrate the logic outlined above I turn to a comparative examination of the founding contracts and subsequent behavior of the KoL and AFL. These two organizations provide an excellent paired case comparison. They shared the same politico-economic institutional environment while overlapping in time, space and membership. Yet they developed very distinct organizational structures and followed different historical trajectories. The Knights



died out by the end of the 19th Century while the AFL continues to the present.<sup>5</sup> The discussion focuses on the “Gilded Age” period 1869-1900 and employs mainly secondary sources.

### *3.2.1 The Knights of Labor*

The KoL was founded in Philadelphia in 1869 as a secret fraternal society. It grew quickly, especially after abolishing secret rites in 1881. Its membership and influence peaked in 1886, when it counted over 700,000 workers as affiliates. KoL Local Assemblies were found in every major American city of the time. Knights locals were instrumental in winning early eight-hour-day concessions from cities and employers. They successfully prosecuted numerous industrial actions and helped elect several public officials to local, State, and Federal offices on labor and populist slates.

In keeping with the grandiosity of its motto, the KoL was very much a “generalist” movement (Kaufman, 2001), embracing objectives as diverse as “bring[ing] within the folds of organization every department of productive industry”; “secur[ing] to the toilers a proper share of the wealth that they create”; “the establishment of co-operative institutions”; educating workers; fighting railroad speculation and private ownership of public lands; agitating for the eight hour day, worker safety legislation, equal pay for men and women, and prohibitions on child labor; and establishment of paper currency (Knights of Labor, 1878).<sup>6</sup> Though the Knights initially rejected political action as a means to address the workers’ plight, the organization eventually became involved in explicit policy initiatives and larger movements for political realignment. District and Local Assemblies became embroiled in electoral politics and sustained political movements, most notably the eight-hour campaign. The Knights exercised political clout at the municipal and State levels, making a variety of political alliances occasionally with Democrats but more often with rural interests, Green-

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<sup>5</sup>The cause(s) of the Knights’ destruction has been much debated by historians and sociologists. See Voss (1993) for a critical review of the literature and Kaufman (2001) for a reconsideration of Voss’ thesis that employer repression effectively crushed the KoL. Kimeldorf and Stepan-Norris (1992) offer a broader survey of the KoL in the context of other workers’ movements in the USA.

<sup>6</sup>Note that collective bargaining and benevolent services (e.g., sickness insurance, death benefits, etc.) were not explicitly mentioned as within the purview of Knights’ activities.

back groups, Socialists, the Grange, and other third-party movements (Fink, 1985). They succeeded in winning elections in Chicago, Kansas City, Milwaukee, and Seattle (Fink, 1985:28-9). These activities were typically uncoordinated across districts.

The Knights' precipitous decline is just as striking as its growth. Almost as soon as membership reached its apex, it began to drop dramatically. Contributing to the decline, Knights' locals were involved in the disastrous Missouri Pacific railroad strike in 1886 and felt the brunt of political and public approbation in the aftermath of the Haymarket incident in 1887. The KoL began hemorrhaging skilled members after the founding of the American Federation of Labor in 1886. The KoL counted 350,000 members in 1888 and 100,000 in 1890. They were effectively gone by the turn of the century (Kaufman, 2001; Voss, 1993).

#### *Organizational structure and collective choice in the KoL*

Pre-existing craft organizations formed the basis of the Knights initial organization, but this changed rapidly in the 1880s. As noted above, the KoL was extremely liberal in admitting individuals to the order. All wage laborers, regardless of skill, race (after 1883), gender, or union membership status, were admitted to the KoL. Initially sympathetic shop owners and middle-class professionals were also admitted, though the Knights became a more "proletarian" organization over time. The admission of semi- and unskilled workers is a distinguishing feature of the KoL. As we will see below, this rapid diversification in membership away from the skilled white male unionist that formed the initial core of the KoL put significant strains on the organization.

The fundamental unit of membership in the Knights of Labor was the individual worker. Workers organized into Local Assemblies that combined both geographic and craft attributes. Local Assemblies then combined into District Assemblies. These Assemblies could be either "trade" or "mixed". Mixed assemblies counted as members workers from different trades.<sup>7</sup> All workers within each Local and District Assembly voted and decisions (except for strikes) were by majority.<sup>8</sup>

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<sup>7</sup>Mixed assemblies did not become numerous until after 1878 (Ware, 1959).

<sup>8</sup>As several commentators have noted, however, the mixed Assemblies were often not as heterogeneous as they sounded. In order to qualify as "mixed" they simply needed to have at least ten members of different

District Assemblies elected delegates to the KoL General Assembly, the supreme legislative body in the organization, which in turn elected the chief executive Grand Master Workman. The Assembly was empowered to issue transfer and travel cards to workers, enabling them to move between locals of any type. The General Assembly also established maximum dues to be charged by the district assemblies. Importantly, the Assembly was also the “supreme tribunal” of the KoL; workers brought before their Local or District Assemblies for disciplinary action could appeal the General Assembly. The General Assembly also claimed the right to assess Districts for a strike fund and to withhold these funds from unapproved strikes.

There has been much controversy as to the centralization of the Knights organization. On paper, the federation looks to be patterned after the US federal system, with a hierarchy of national, district, and local assemblies, each with its own powers and bureaucracy. The powers retained at the General Assembly level appear significant and highly centralized, especially compared to the AFL. Most observers, however, have noted that the District Assembly was the real locus of power (Fink, 1985; Ulman, 1955; Ware, 1959; Weir, 2001). Although the KoL attempted to centralize control over districts composed of heterogeneous worker populations, this effort often failed and left the central organization in a weak position with the national leadership playing catch-up. District Assemblies frequently disregarded or selectively obeyed national directives. As an oft-cited example, the KoL leadership was all but impotent in controlling strike activity. The mandated collection of centralized strike funds never occurred and the KoL finances were frequently precarious.

The issue of strike and sympathy support is a key instance of the centrifugal pressures on the KoL organization. The Knights, as a matter of policy, eschewed the strike as industrial weapon, preferring the boycott, arbitration, and, later, political activity. Formal rules for declaring strikes were quite stiff, requiring a 2/3 supermajority of all local assemblies involved and permitting the General Assembly to demand spot plebiscites of striking workers. This does not mean that workers in the KoL were acquiescent; indeed the KoL found itself embroiled in some of the biggest industrial disputes in American history. As Commons said,

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trades. In many instances mixed assemblies combined workers from related trades (e.g., various trades within the metal working industry).

workers “struck first and joined the Knights of Labor afterward” (Commons, 1926*a*:368). The Knights successfully concluded the Union Pacific railroad strike in 1884 and Wabash Railroad strike in 1885, along with many smaller industrial disputes.

Strikes and the calls for sympathy action from others caused significant friction within the Knights at least as early as 1885.

In that year, a special session [of the General Assembly] was held...for the purpose of taking action looking to protect the Order against unauthorized strikes and boycotts by District and Local Assemblies...Long discussions relative to the attitudes of trades-unions consumed much time...the trades unions struggling to preserve their organizations against what was considered the encroachment of the Knights of Labor, while the Knights of Labor contend that their Order embraced higher and grander principles. (Wright, 1887:155)

At this time, the KoL faced both a rapidly diversifying membership and industrializing American economy. Semi- and unskilled workers differed from the traditional “producers” that formed the initial core of the KoL instigated a re-evaluation of KoL tactics and goals, causing major tensions within the organization (Hattam, 1993). Fink (1985) documents several situations in which skilled trade union workers settled strikes before unskilled workers in the same or other Local Assemblies at terms that the unskilled considered unfavorable. The frequent calls by the less-skilled workers for sympathy actions and/or solidaristic financial support placed Local assemblies in conflict with national trade unions. The Knights, at least in Milwaukee, attempted to mitigate these problems during the 1886 eight-hour campaign by distancing themselves from actual bargaining and emphasizing that each industry should settle independently. Nevertheless, the whole organization was implicated in the Bay View massacre in which police fired on a crowd of striking metal workers who were continuing to agitate for the eight hour day after groups of skilled workers (also Knights) had already settled. Five strikers died.

### 3.2.2 *The American Federation of Labor*

The AFL began in 1881 as the Federation of Organized Trades and Labor Unions (FOTLU), changing its name to the AFL in 1886. While the KoL were disappearing from the scene in the last decade of the 19th century, the AFL made steady membership gains, even in the aftermath of brutal defeats like the broken Homestead strike of 1892. The AFL cited 150,000 members in 1887; they counted over 1.7 million by 1904 (American Federation of Labor, various years; Gompers, 1914). It is worth noting that previous labor organizations almost universally failed to survive adverse economic conditions. In contrast the AFL weathered the severe depression of the early 1890s. Though membership growth was flat from 1892-98, the AFL survived to take advantage of improved economic conditions later in the decade. The AFL has been in continuous existence since its founding.

The AFL's stated objectives differed dramatically from those of the KoL. In particular, the AFL (1886) restricted itself to four activities:

- “encouragement and formation of local Trades and Labor Unions and the closer Federation of such societies through the organization of Central Trades and Labor Unions in every city, and the further combination of such bodies into state, territorial, or provincial organizations to secure legislation in the interests of the working masses.
- “the establishment of National and International Trades Unions based upon a strict recognition of the autonomy of each trade”
- “to aid and assist eachother; and...to secure National Legislation in the interests of the working people and influence public opinion by peaceful and legal methods in favor of Organized Labor”
- “encourage the labor press of America”

These activities can be reduced to two: organizing and lobbying.<sup>9</sup> All other concerns are left to the national trade unions. Note that a primary objective of the Federation is the

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<sup>9</sup>Conflict within the AFL often seemed to stem from disputes over the weights to place on these two activities. Witness the recent schism with the Change to Win coalition.

recognition (and, by implication, preservation) of jurisdictional boundaries, something the KoL repeatedly repudiated.<sup>10</sup> Ulman notes that there were no performance criteria for the maintenance of jurisdictional guarantees. “The [national] union’s control over jurisdiction was based less upon stewardship than upon property right, which included the right to abuse as well as to use.” (Ulman, 1955:410)

*Organizational structure and collective choice in the AFL*

The AFL modeled itself on the confederal structure of the British Trade Union Council. As emphasized in the AFL constitution and reiterated by Samuel Gompers on many occasions, the national union is the constituent unit. Membership in the AFL was extended only to “organizations composed of wage earners”, typically unions of skilled craft workers. In the event that a group of workers wanted to affiliate with the AFL in an industry for which no trade union yet existed or there were insufficient numbers to sustain individual craft locals, the AFL would admit “federated trade unions”. These locals were explicit organizational half-way houses; once craft-based trade union(s) became viable the workers were expected to affiliate with the appropriate trade. Workers could not join a federated local if there existed a craft union in that worker’s trade and region. Though the AFL encouraged the organization of women and black workers, it had no real power to enjoin affiliates to act accordingly. Thus the inclusion of women and black workers fell to the national unions who were notoriously reticent to build a more inclusive labor movement. Several major craft unions remained unaffiliated with the AFL for years after its founding (e.g., the bricklayers) or seceded (e.g., the Western Federation of Miners in 1896).

The convention, though the ultimate decision making body, has very circumscribed powers relative to the national unions. The Federation possessed no central strike funds, though Gompers tried to institute a modest strike fund on several occasions. The only punitive measures available to the Federation were penalties in convention representation and expulsion. These powers are typically invoked in cases of misrepresenting membership for the purposes of reducing per capita dues, encroaching on the jurisdiction of other affiliates, and

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<sup>10</sup>The AFL formalized this role in 1899 when resolutions passed guaranteeing affiliates jurisdictional monopolies.

sheltering “unfair” workers (scabs). Expulsion requires a two-thirds supermajority. The right of secession is explicitly retained by affiliates. Individual workers have no ability to appeal to any federal-level body or officer.

National unions and regional labor councils send delegates to the annual AFL convention. In its initial years as the FOTLU, representation was quite favorable to local trade unions, with national unions and regional labor councils both receiving one delegate while local unions received votes on the basis of membership.<sup>11</sup> One of the major constitutional changes initiated when the FOTLU remade itself into the AFL, however, was to drastically increase the power of national unions at the expense of both local craft unions and labor councils. Initially vote allocation was highly malapportioned with one delegate for membership less than 4000; two delegates for membership between 4000 and 8000; three for membership between 8000 and 16,000, etc., adding a delegate for every doubling of membership with no allowances for fractions of the multiple (American Federation of Labor, 1886).<sup>12</sup> In 1887 the formula changed remarkably with the introduction of a roll call provision. The allocation of delegates stayed the same, but delegates received one vote for every 100 members they represented. State and local labor councils, however, received only one delegate and one vote, regardless of size. This clear subjugation of regional, cross-craft organizations to the interests of the national trade unions differs from the KoL, whose entire structure was a confederation of such bodies.

The AFL, though without any direct power over strikes and other industrial actions, supported the use of the strike and boycott as weapons in the hands of the national unions. The Federation collected *ad hoc* strike assessments to aid striking unions and passed several resolutions approving various boycotts (American Federation of Labor, various years). The AFL’s primary efforts were, unsurprisingly dedicated to lobbying and organizing. Here, however, there are marked contrasts with similar activities of the KoL. The AFL never ran

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<sup>11</sup>Note that regional labor councils represented groups of workers across craft lines similar to the KoL District Assembly.

<sup>12</sup>Smaller unions clearly had a much lower ratio of members to convention delegates. For example, a union with 50,000 members (the currently accepted threshold for a “small” union) would have a ratio of 10,000 members for every convention vote while a union of 2,000 members has a 2000:1 ratio, five times the voting power of a member in the former.

candidates nor did it engage in explicit political alliances with any political party. In the pre-World War I period, there were significant internal debates within the AFL as to the appropriate scope of political activity (Johnson, 1990; Marks, 1989). Craft unions able to win concessions from employers via industrial actions consistently defeated the efforts of general industrial unions for more formal, offensive political actions including the founding of a labor party (Marks, 1989:ch.6).

AFL organizing activities were also explicitly geared to aid the national trade unions. Workers were either organized into locals of existing unions or into the holding pattern of the federated local. The AFL made efforts to target less skilled workers for organizing, but the bulk of the membership remained in craft unions until the merger with the CIO. In the Guilded Age period, no more than one fourth of the AFL membership resided in the major industrial unions (Marks, 1989).<sup>13</sup>

### *3.2.3 Discussion*

After numerous defeats and setbacks, workers in 19th Century America recognized the need to coordinate their activities if they hoped to build durable organizations capable of representing their interests and improving their collective lot. Workers at the time recognized clear benefits to cooperation in organizing the unorganized, pressuring government at all levels, and sustaining industrial action in the face of employer opposition and repression. The KoL and AFL presented very different organizational profiles and provided different services to its affiliates. Though both can be usefully considered confederal organizations, the AFL federated along craft lines while KoL federated along geographic lines. The Knights emphasized radical organizational democracy and embraced a multitude of activities while the AFL concentrated on vouchsafing the autonomy of national craft unions but limiting scope of “citizenship” in the Federation. The KoL grew and died rapidly, unable to mitigate the demands of numerous weak Assemblies on the larger, stronger craft-based unions while the AFL has proven to be a quite flexible and durable organization. Table 3.1 summarizes some of the critical differences in the KoL and AFL discussed above.

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<sup>13</sup>Marks identifies the general/industrial unions of the period as the United Mine Workers, Brewery Workers, Amalgamated Clothing Workers, Western Federation of Miners, and Ladies Garment Workers.



Table 3.1: Comparing the AFL and KoL along several attributes

	<b>KoL</b>	<b>AFL</b>
Workers viewed as:	aligned	heterogeneous
Unit of membership	“knight”	national union
Basis for organization	sympathetic solidarity	trade power
Activities	many	organizing, lobbying
Voting rights	regional, cross craft	national, craft
Craft jurisdiction	bad	critical
Political activity	critical, offensive	suspect, defensive
Worker appeals to confederation?	yes	no
Local dues	capped and low	set by national unions; high

The model presented earlier generated several claims that provide some insight into these divergent paths. First, when workers’ interests are heterogeneous, the confederal contract must allocate voting rights to enable a balance between tolerance and stable collective decision making. The KoL extended citizenship directly to workers in an organization with quite broad goals. Workers, however, were coming from very different backgrounds and were inserted into the economy in more or less advantageous ways. There is a limit to the willingness of the better-positioned workers to contribute to the confederal project. As the membership of the KoL expanded rapidly in the 1880s, the heterogeneity in worker interests also grew, straining the organization. Trade unions of skilled workers were being asked to engage in sympathy actions at a level beyond that from which they would benefit. In the AFL, however, there is evidence that the early confederal contract was adjusted to favor the interests of the larger, more powerful unions. The lines of voting demarcation respected the skill heterogeneity of workers. As a major example, the biggest and most powerful unions in the AFL repeatedly blocked attempts to institute an AFL-controlled strike fund, even though the fund was supported by Gompers and a majority of the unions (Johnson, 1990; Ulman, 1955). That these more powerful unions were able to block these increased demands on their resources precluded their secession.

Second, when there is significant heterogeneity in interests, the confederal contract will

need to limit the number of tasks assigned to the federation to those on which preferences are better aligned and offer the greatest returns to scale. The Knights of Labor engaged in a multitude of activities; available evidence suggests that the scope of the Knights activities expanded, especially in politics, as more local assemblies sprouted around the country, (Fink, 1985). As Hattam (1993:128-9) notes, partisan loyalties were extremely divisive in the post-Civil War decades and were partially responsible for the earlier collapse of the National Labor Union.<sup>14</sup> The AFL, however, consciously and consistently avoided involvement in partisan politics. A key mechanism enabling them to do this was the restriction of citizenship to labor *organizations* only.<sup>15</sup> Any attempt to broaden the scope of action in the AFL had to emerge from a coalition of unions that included some of the biggest and most powerful, not from a simple majority of rank-and-file members. This is important as many craft-based unions contained minorities of workers who would be classified as semi- or unskilled.<sup>16</sup> As noted above, craft unions were also the ones benefiting least from centralized political activity. The allocation of decision rights in the AFL enabled them to defeat attempts by less secure general/industrial unions to expand the AFL's activities into partisan politics.

As the membership expanded to include a more heterogeneous population of workers the Knights were also forced into managing strikes and the increasing calls for sympathetic actions. National unions rejected the growing calls for sympathy. Moreover, in the area where there was the greatest potential for cooperation—organizing—there were frequent jurisdictional disputes, especially between the mixed assemblies and trade unions (Fink, 1985; Ulman, 1955). There is evidence that some Knights mixed districts tried to undermine the trade unions in their jurisdictions by charging lower dues, working longer hours at lower wages, and even providing scab labor (Ulman, 1955:359-61), (Taft, 1957:ch.2). Trade unions

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<sup>14</sup> “[T]he NLU is best viewed as an unsuccessful attempt to unify the heterogeneous and fragmented labor movement after the Civil War.” (Hattam, 1993:122)

<sup>15</sup> Both Johnson and Marks note that the AFL also precluded the affiliation of political organizations. The AFL's 1888 exclusion of the New York Central Labor Federation due to its links with the Socialist Labor Party is a case in point.

<sup>16</sup> Due to data limitations, it is not possible to determine if there would have been a sufficient number of rank-and-file votes for centralized political action had these less-skilled workers been enfranchised directly, rather than having their interests mediated by their organizational linkages with their more skilled colleagues.

expected the mixed districts to organize workers of their respective crafts into trade-based groups once a sufficient number joined the KoL. Ulman (1955:369-71) cites evidence that mixed districts often declined to do so “for the economic power of the mixed district lay in recourse to sympathetic action, while the strength of the national trade district was measured by the degree of craft autonomy which it possessed.” Trade unions viewed this (rightly) as a threat their jurisdictions.

This conflict contrasts starkly with the enormous value that AFL affiliates placed on the AFL’s organizing activities (Ulman, 1955), which respected craft boundaries. Thus the organizational form of the KoL, particularly the mixed assembly and direct worker “citizenship” at the confederal level, undermined the confederation’s aims even where they offered the greatest possibility of cooperation.

This breadth of activities and open decision-making apparatus had clear costs. The KoL was poorly focused and often internally divided. Fink refers to the KoL as “that uncertain behemoth” (Fink, 1985:211). Kaufman (2001:564) calls the Knights “a fraternity without a beneficiary plan and a labor union without tenacity or direction.” Engels observed at the time that the Knights were

An immense association spread over an immense extent of the country in innumerable assemblies, representing all shades of individual and local opinion within the working class; the whole of them sheltered under a platform of corresponding indistinctness and held together much less by their impracticable constitution than by the instinctive feeling that the very fact of clubbing together for their common cause makes them a very great power in the country (Lapides, 1987:141-2)

As an example of the membership costs these numerous activities had, consider the secession on the Milwaukee brewery workers from the KoL in 1887. Over the years, the KoL had taken a mild pro-temperance stand, the so-called “Powderly pledge”, named for Terence Powderly, the long-time Grand Master Workman. Splits occurred between temperance groups and other workers, especially (and obviously) the brewery workers. After Powderly issued an edict banning beer at KoL picnics, the Milwaukee brewery workers left the KoL

for the local AFL affiliate (Fink, 1985:199).

Ultimately, the Knights were unable to consistently “deliver the goods” on the shop floor nor provide the benevolent services available through other organizations. The trade unions, who formed the Knights’ initial basis for growth and the backbone of the organization, were unable to defend their interests within the Knights decision-making apparatus, particularly in mixed districts. The demands placed on them by the rapid influx of new workers, unorganized in their own industries and in need of the support of an organization like the Knights, conflicted with the goals and very source of strength of the craft unions.

At its institutional core, the KoL was designed with the idea that all workers as fundamentally homogenous; the AFL emphasized the divergent interests and capabilities of different workers. An implication of this difference<sup>17</sup> is that had the structure of the American economy been different, i.e., had all workers been effective substitutes, organization into “one big union” would have been not only desirable but possibly sustainable. Put in other terms, if workers were effective substitutes and cross-industry worker mobility were sufficiently high, workers’ interests would be similar enough to support a more concentrated labor movement undertaking more tasks. In the Gilded Age, however, industrial production was only just beginning, barriers to entry based on skill were quite high, and geographic markets for labor and goods were still imperfectly connected.

### **3.3 Conclusion**

More centralized organizations with competency over a larger number of issues will tend to be smaller whereas broad based unions will only be sustainable in equilibrium if they have competency along dimensions in which unions tend to agree. More critically, since member unions will differ in their size and strength, strong unions will not accede to a federation in which their interests will not be protected. To the extent there exist economies of scale for some of the federation’s possible activities, there are incentives to form larger federations. Potential members, however, will require institutional mechanisms that make credible the federation’s promise to respect its domains of competency. These guarantees will take the

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<sup>17</sup>recognized by Ulman fifty years ago and subsequently formalized Horn and Wolinsky (1988)

form of allocations of decision rights that favor the stronger unions and generally respect the organizational integrity of affiliates. Direct worker suffrage in the confederation is often not consistent with these requirements, especially when there are significant divisions among workers in their economic position (e.g., skill level) and their degree of organization (i.e., exclusive craft unions vs. general industrial unions). If workers, especially those outside pre-existing unions, voted directly on federal policies already organized unions would face demands for contributions beyond that which they are willing to supply. These stronger unions would be better off outside the federation. To mitigate these centrifugal forces and defend the jurisdictional boundaries of the unions, a sustainable confederal “contract” will allocate decision authority in such ways as to protect member unions’ interests.

I provide *prima facie* evidence that the model has empirical legs through comparative study of the Knights of Labor and American Federation of Labor. I illustrated the trade-off between scope and size, while also showing how the allocation of decision authority can affect how heterogeneity is managed. The Knights attempted to marry broad organizational competency with radical rank-and-file democracy while the AFL had narrow organizational goals, rigid institutional protections for affiliate autonomy, and weak rank-and-file influence on confederal policy. The Knights’ organizational structure empowered the less-skilled and previously unorganized workers to make consistent sympathy demands of the stronger craft unions. Ultimately these unions found the demands too onerous and the Knights’ activities threatening to their organizational integrity. They left to stand alone or affiliate with the AFL. The AFL explicitly precluded rank-and-file participation at the federal level and developed voting procedures and secession rules that permitted bigger and stronger affiliates to protect their interests while making the AFL’s promises credible.

We may also have some insight into the recent AFL-CIO schism. The model predicts that as the relative strength of unions becomes more unequal, greater strains will emerge. In today’s American labor landscape, there are a handful of successful organizers and numerous small unions attempting to survive in a hostile environment. Several of the unions who seceded from the AFL-CIO were among the most rapidly growing. Much of the rhetoric leading up to the split centered on the relative importance of organizing and political action. What was lost in the rhetoric and press coverage, however, was the substance of the

proposals. The breakaway unions were proposing a *rebate* of 50 % of AFL-CIO dues to unions who have a “strategic plan and commitment” to organizing (all of the four major seceding unions claim to have such plans) whereas the AFL-CIO plan involved raising *more confederal funds* to be earmarked and redistributed for organizing drives (AFL-CIO, 2004). The Teamsters were pushing for an across-the-board reduction in AFL-CIO per capita taxes (International Brotherhood of Teamsters, 2004). What’s more, the seceders were actively campaigning to have the smaller unions rolled up into a smaller number of large industrial unions. Both of the seceders’ proposals are consonant with the spirit of the model. The stronger affiliates were simultaneously attempting to limit the power of the confederal organization, here in the form of centralized organizing funds, while also attempting to create a union movement whose constituent members would have interests more aligned with their own. These larger and relatively successful unions argued that their interests and resources were being drawn upon by smaller, weaker unions; the AFL-CIO proposal to further centralize organizing funds only exacerbated the state of affairs. As noted in the introduction to this chapter, these larger unions lacked sufficient votes in the AFL-CIO convention to pass their proposals or block the AFL’s counter proposal. The AFL-CIO was unwilling to reallocate votes in favor of these stronger unions, so they left.

This analysis does not bode well for the future of American union cooperation. The secessionist unions do not seem to have as their overriding interest the organizing potential of all American unions; rather they seem more interested in their own organizing capacities. Their unwillingness to delegate organizing power to the AFL-CIO shows further fragmentation and weakness at the national level. For their part, the numerous small unions are loathe to be absorbed by larger organizations even if doing so has strong scale benefits. Left in the lurch are the unorganized.

## Chapter 4

**THE CENTRALIZATION OF LABOR MOVEMENTS**

Given the theoretical importance of union centralization, there has been shockingly little quantitative empirical work examining the subject. This is in marked contrast the with large and sophisticated empirical and theoretical literatures examining the determinants of union membership in rich democracies (Acemoglu, Aghion and Violante, 2001; Checchi and Lucifora, 2002; Lee and Roemer, 2005; Wallerstein, 1989; Wallerstein and Western, 2000; Western, 1997). In this chapter, I take a first cut at remedying this situation.

The majority of what has been done has been qualitative/historical in nature, typically looking at a handful of cases<sup>1</sup> (Ingham, 1974; Iversen, 1996; Swenson, 1989, 1991; Thelen, 1991, 1993; Windmuller, 1975). This work varies in both its theoretical concerns what is meant by centralization. In general, however, bargaining centralization is of paramount interest. While this work has used rigorous historiography to generate important insights, these insights have not been examined in a broader spatio-temporal context. This dearth of empirical study cannot be due to the lack of data, since several panel time series measures of union centralization and wage bargaining coordination have since emerged.<sup>2</sup> Nevertheless, these measures of centralization and coordination almost always appear on the right hand side of regression equations (Alvarez, Garrett and Lange, 1991; Bradley et al., 2003; Garrett, 1998; Iversen, 1999; Layard, Nickell and Jackman, 1991; Nickell and Layard, 1999; Traxler, 2003; Wallerstein, 1999).<sup>3</sup> Little sustained work has been done save for reporting of cross-sectional rank correlations (Marks, 1986).<sup>4</sup> To my knowledge, the only places where

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<sup>1</sup>Especially Denmark, Germany, Sweden, and the UK.

<sup>2</sup>Golden, Wallerstein and Lange (2002); Traxler, Kittel and Blaschke (2001) are the major datasets. See Kenworthy (2001, 2003) for surveys of the many datasets floating around purporting to offer empirical measures “corporatism”, bargaining centralization, union structure, and associated concepts.

<sup>3</sup>The same can be said for the centralization of employers’, measures of which appear rarely. Mares (2003) and Martin and Swank (2004) are exceptions.

<sup>4</sup>Important work documenting the variation in union centralization and bargaining coordination has been

something akin to union centralization or wage bargaining coordination have been analyzed in any depth are Western (1997) and Wallerstein and Western (2000), and even in these instances union and employer centralization are used to explain bargaining coordination.

But what do we mean by a centralized labor movement? This has been the major question of the dissertation and is intimately related to the more theoretical notion of strategic capacity. Centralization, therefore, is only meaningful when discussed in reference to some domain of activity and therefore some organizational attribute. On a more nuts-and-bolts empirical level, the answer is clearly “it depends”. Centralization for what? Unions can be “centralized” into one confederation yet also decentralized for the purposes of wage bargaining. Consider the example of unions in the USA: “centralized” in the AFL-CIO from 1956-2004 yet without any confederal influence over bargaining and with little in the way of a coordinated national political presence beyond lobbying and routine endorsements of Democratic candidates. One can imagine a number of ways to measure centralization: the number of independent labor unions (and their relative sizes), the number of federations (and their relative sizes), or the dispersion of bargaining power at different levels. It can refer to the powers allocated to the confederation, like the ability to control strike funds or veto contracts. It can also refer to less frequently discussed attributes such as the size and expertise of peak associations’ staffs, the confederal budget relative to the affiliates’ budgets, the extent to which unions’ positions on policy issues correlate, or the number and variation in unions’ (and peak associations’) political party affiliations. Based on the both the implications of the model from chapter 2 and data availability this chapter focuses on the concentration of membership and confederal involvement in strikes and bargaining. Specifically, I analyze each of the following in turn: interconfederal fragmentation of union membership, confederal strike funds, and bargaining centralization/coordination.

In the next section, I identifying hypotheses generated by the model of confederation and from the literature, using them to justify the inclusion of covariates. I briefly discuss the data and modeling framework and then work through each measure of centralization in

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done (Ebbinghaus and Visser, 2000; Golden, Wallerstein and Lange, 1999; Traxler, Kittel and Blaschke, 2001; Wallerstein, Golden and Lange, 1997), but these studies typically report the trends in newly gathered data rather than analyze the covariance between measures of union centralization and other variables across space and time.



turn. The last section summarizes findings and discusses limitations of the analysis.

## **4.1 Extant work and empirical hypotheses**

### *4.1.1 Structural factors*

Observers of economic institutions and labor markets have long traced specific national experiences and cross-national variation to major structural factors like the timing of industrialization, size and complexity of the economy, exposure to world markets, relative factor endowments, and racial and ethnic heterogeneity. Among these, the size of the economy has played an important role. Bigger countries are generally more complex, economically diversified, and less reliant on trade. Several arguments have been proffered linking country size and the organization of labor unions. Scholars focusing on the United States have argued that the weak and decentralized character of American unions is due in part to the country's geographic size (Commons, 1926*a,b*; Laslett and Lipset, 1974; Ulman, 1955). Elsewhere, Wallerstein (1989) argues theoretically that the gains from organizing into a union is a function of the proportion of the labor force organized while the costs of organizing are driven by the actual number to be recruited into unions, implying that economies with bigger labor forces will be less unionized. He finds that union density varies inversely with the size of the labor force. In terms of union centralization it is not obvious that his theoretical argument applies. However it does stand to reason that bigger economies will be more complex and more diversified. Workers are correspondingly more likely to be complements than substitutes in production. Recalling the argument that complementary workers will be organized into different bargaining units (Horn and Wolinsky, 1988; Wallerstein, 1990), a bigger economy implies a more fragmented membership across unions. This *may* reduce the likelihood of sustained bargaining coordination across unions, as some have argued (Wallerstein, 1990).

Ethnic heterogeneity is another structural factor much discussed by scholars of the labor movements. While the exact mechanisms through which it operates have been debated, the argument that linguistic, racial, and religious cleavages impede the organization of a unified working class is at least as old as Marx. There are those who trace union fragmentation

back to primordial cleavages of religion and language or the historical development of social democratic parties (Agell, 2002; Ebbinghaus and Visser, 2000). There is some direct evidence of this: in the Netherlands and Italy, union federations split along confessional lines. Belgium has seen its long-running Flemish-Walloon cleavages reproduced in its labor movement. Scholars of the American labor movement have looked to racial divisions and immigration to explain its weakness and fragmentation (Commons, 1926*b*; Laslett and Lipset, 1974; Mink, 1986). Implicating the organizational features discussed below, Mink (1986) argues that racial heterogeneity is what impelled the American unions to organize along craft rather than industrial lines.

Trade dependence (which tends to be higher in smaller countries), is a third structural characteristic that has played an pivotal role in explaining the emergence of corporatist institutions in Scandinavia (Iversen, 1999; Katzenstein, 1985; Swenson, 1989, 1991). These authors argue that export-oriented employers support centralized bargaining so as to rein in the wage demands of workers in the non-tradable sectors. With product prices set on world markets, firms in the tradable sector cannot pass along increased wage costs to consumers, squeezing profits. If domestic wage demands cannot be restrained, the wage gains of non-exposed workers can be passed along in domestic prices, fueling inflation and the wage demands of workers in the tradable sector, both of which undermine the international price competitiveness of the export sector. The greater an economy's trade exposure, the more likely there will emerge a "cross-class alliance" between exposed-sector and low wage workers and exposed sector employers in support of centralized bargaining. In chapter 2 I identify increased trade dependence as a factor likely to increase the value of wage restraint and centralized bargaining to unions.

We therefore have the following expectations:

- *Larger countries will have lower levels of bargaining coordination and fewer powers ceded to the confederal organization(s).*
- *Countries with more ethnically heterogenous populations will have lower levels of labor movement centralization*

- *Countries more dependent on trade will have more centralized bargaining and more power ceded to the confederal organizations.*

#### 4.1.2 Organizational factors

The organizational model in chapter 2 makes three predictions. First, where unions vary widely in their resources, confederations will be weaker and/or more unions will remain outside the confederal organization. Second, there is a trade-off between size and scope. Where confederations have more authority, we expect there to be greater fragmentation of membership across federations and/or more unions remaining outside the confederal organization. Third, the presence and interests of third parties, especially organized employers, can induce more centralization in the labor movement. The key variables here are the distribution of “power” or resources across unions and federations. Membership is the primary union resource, though a union’s power and importance is also affected by the industrial and sectoral composition of the economy. Unfortunately there is little in the way of cross-national data on unionization by sector, much less industry. Nor is it clear that a pivotal sector in one country or time would be just as pivotal at another.<sup>5</sup> As a result, I rely on membership shares as a proxy measure of relative union power within countries.

The first claim implies that

- *Greater inequality in membership across unions will lead to more fragmented membership across confederations and/or to reduced scale of confederal activity.*

The trade-off between confederal size and scope says that where confederations possess more centralized powers they will tend to organize a smaller portion of the relevant population, all else equal. This relationship can manifest itself in at least two different ways: 1) a federation that is large in size is prevented from expanding the scope of its activities; or 2) via the secession of some affiliates after the adoption of centralized powers. Call the first mechanism the veto mechanism and the second the secession mechanism. The model is silent on which is more likely. From an empirical perspective, this implies that

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<sup>5</sup>It is hard to imagine that dockworkers in Austria would be as important as those in the USA or Denmark. Even the ILWU, which has long been industrially powerful, has greater leverage now than in the 1970s with the rapid increase of US-Asian trade in the intervening 30 years.

- *Where membership is more concentrated in a small number of confederations we expect a narrower scope of confederal activity and/or the broader the scope of confederal activity the more fragmented will be union membership across confederations.*

In terms of mechanisms, if I find evidence for only the first clause then this supports the veto mechanism. If only the second has empirical support, then we have evidence favoring the secession mechanism. If they both hold then we have evidence for both (as well as endogeneity).

The third claim implies that

- *The more centralized are the employers, the greater will be the centralization of labor.*

#### 4.1.3 *Political institutions*

Completely separate from the wage bargaining literature, there is a venerable series of arguments from political science and sociology that explicitly link the organization of interest groups and other “voluntary associations” with political institutions, specifically the centralization or dispersion of political authority. Most of this literature has focused on the USA. To the extent it has any comparative or international angle, it is to explain American “exceptionalism”, viz the “conservative” US labor movement, the lack of a Labor party in the USA, etc. The status quo bias inherent in the American system of checks and balances has long been held to have retarded labor’s political mobilization. Hattam (1993) argues that the strong and independent judiciary created a politically weak labor movement; the AFL turns away from political unionism because hard-won legislative gains were repeatedly overturned in court. Others point to the multiple venues in which interest groups can make policy demands: state and national legislatures as well as courts and the administrative bureaucracy at both the national and state levels. With a decentralized political system, there are strong reasons to maintain a decentralized confederal structure for interest groups (Skocpol, Ganz and Munson, 2000; Wilson, 1973).<sup>6</sup>

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<sup>6</sup>While, to my knowledge, this argument has been explored in the American context, the emergence of the EU as a major arena of economic policy since the Maastricht treaty provides an avenue to look at this argument in a more comparative light.

- *Countries with federal systems will have fewer and weaker confederations*

*political parties and party systems*

Union peak bodies and political parties have close relationships the world over. Garnering benefits from the political system is one of the chief incentives for unions to confederate in the first place; indeed Wallerstein (1985) assumes in his model that it is the *only* reason. There are several conflicting arguments linking union peak associations and political parties. Headey (1970) argues explicitly that frequent Socialist government is required to sustain the confederal authority of union organizations and concomitant incomes policies. Similarly Hartmann and Lau (1980:370) argue that “confederations seem to be ‘sponsored’ by their environment: employers, political parties, and the government lend their support to confederate status by treating confederations as quasi-autonomous and cooperating parties.” Korpi (1983) and others following in the power resources tradition claim that causality works the other way around: strong, centralized union movements produced frequent Left governments. Empirically speaking, there is evidence of both occurring: unions founding political parties and parties founding affiliated union organizations (Ebbinghaus and Visser, 2000). Some point to fragmented party systems as explaining the existence of multiple, party-aligned confederations as seen in Italy, Spain, and Portugal (Headey, 1970; Marks, 1989).

If we consider a political party as possible third party agent, the model in chapter 2 provides a different justification for the same Left party and party fragmentation arguments. Left parties have their electoral fortunes bound more tightly to the ability of the labor movement to coordinate in both their political *and* economic (i.e., wage bargaining) behavior than those of the center or Right. Where unions can coordinate effectively, Left parties are more likely to hold office and when the Left is more frequently in office, they have both the incentive and ability to use the spoils of office to induce further union centralization. A fragmented party system mitigates this, however. Countries with fragmented party systems tend to have coalition governments requiring consensus to make major policy changes. Governments of this sort are less likely to produce the coherent and powerful third party

bargainer that can induce further centralization in the confederal union organizations, all else equal.

In any event, the literature on parties and party systems has demonstrated that proportional electoral institutions are strongly associated with more frequent Left government but also with more fragmented party systems (Cox, 1997; Cusak, Iversen and Soskice, 2007; Sartori, 1976), confounding attempts to parse these. In sum, there are conflicting claims about the causal direction linking parties and party systems to the organizational structure of interest groups, especially union federations. Nevertheless, there does seem to be a consensus that electoral institutions and political party systems should be related to the centralization of labor movements, implying the following empirical hypotheses, all of which are subject to the standard *ceteris paribus* clause:

- *Frequent Left government and more centralized labor movements will covary positively*
- *Fragmented party systems and union centralization will covary negatively*

## **4.2 Data and modeling framework**

The basic structure of the dataset is an (unbalanced) panel time series of annual observations covering 1948-2003 for 20 OECD countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, and the USA. Appendix C collects definitions and sources for all variables. I draw on the dataset constructed by Golden, Wallerstein and Lange (2002) as the primary source for the key variables on union confederations. These variables have more restricted coverage, with the last observation in the 1993-5 range and typically not including any observations for Ireland, New Zealand, Portugal, and Spain. There is also substantial missingness over time, particularly prior to 1960. To mitigate this problem, I interpolate the missing values using cubic splines for variables measured irregularly over time, though I do not extrapolate past a country's last observed value or before its first. For the remaining missing observations, I employ case-wise deletion. While this is not ideal, I use this strategy for several reasons. First, I do not impute means for the missing values since the vast majority of missing values are missing for an

entire case, preventing the imputation of country-means. Cross-country variation swamps temporal fluctuations in these data. I do not analyze multiply imputed datasets for two reasons. First, most of the remaining missing data are categorical and the imputation algorithm (AMELIA II (Honaker, Blackwell and King, 2006)) imputes a constant value for all country-years across countries—clearly dissatisfying. Second, as noted, other data are missing for entire countries (e.g., Portugal) or are not obviously comparable across countries (e.g., public sector union share). I am more comfortable excluding these cases or variables rather than attempt an heroic imputation exercise.

#### 4.2.1 *Herfindahl indices and inequality*

In the model from chapter 2, inter-union inequality in effectiveness, endowments and resources affects affiliates' preferences over confederal structure, holding other parameters constant. If we also consider the extension of the model incorporating union leaders' ego rents, then the greater the *number* of unions the less likely we will see a highly centralized labor movement. Both the number of units and the inequality of resources across them are of theoretical and empirical interest. Unfortunately Herfindahl indices of membership concentration (both across federations and across unions within federations) are the only cross-nationally comparable data available on union concentration.

Herfindahl indices, as with all major measures of inequality, imply a trade-off between sensitivity to  $n$ , the number of units, and  $I$ , the inequalities across them (Davies, 1979, 1980). While Herfindahl indices can be interpreted as a generic indicator of concentration, we cannot use them to make statements about inequality without knowing either the number of agents or the variance in their shares of resources. To see this, consider the following examples with a hypothetical group of 100 workers. Imagine a very unequal distribution of members: nine unions with two workers each and one union with 82 workers. The Herfindahl index ( $H$ ) would be  $H = 9 \cdot 0.02^2 + 0.82^2 = 0.68$ . Membership is very concentrated, but very unequally distributed. A situation in which there are ten unions, each with 10 members results in  $H = 0.1$  while two unions with 50 workers each implies  $H = 0.5$  even though resources are completely equally distributed in both. In general, an equal distribution of

resources across agents yields  $H = 1/n$ .

The key missing piece of information is the number of unions. Hart (1975) shows that, under the assumption of log-normally distributed members across unions,  $H = n^{-1} \exp \eta^2$ , where  $\eta^2$  is the variance in log membership. Holding inequality (i.e., the variance in membership share) constant, a bigger Herfindahl index implies fewer unions. But the reverse can also be true: holding the Herfindahl index constant but adding in more unions implies greater inequality.<sup>7</sup> Given the Herfindahl index and the number of unions we can recover the variance in (log) union membership. We could then fit a model including both  $n$  and  $\eta^2$  by, e.g., using the  $U$  index (Davies, 1980).<sup>8</sup>

All this implies that we cannot fully evaluate the theoretical model's implications with the data at hand. Nevertheless, we can take a first cut using the Herfindahl indices on the understanding that these results describe a relationship for some weighted combination of the number of unions and cross-union membership inequality *for each country year*. We also have explicit guidance on the specific variable that must be collected: the number of unions.

#### 4.2.2 Models

In political science, the now-standard approach to modeling TSCS data is OLS regression of the form

$$\begin{aligned} y_{it} &\sim N(\theta_{it}, \sigma_i^2) \\ \theta_{it} &= \beta' X_{it} \end{aligned}$$

where  $i = 1, \dots, N$  indexes observational units (countries in this application) and  $t = 1, \dots, T$  indexes (discrete) time. The subscript for  $i$  on the error variance represents the assumption that TSCS data will exhibit unit-based heteroscedasticity, leading to biased esti-

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<sup>7</sup>Davies (1979) shows that the Herfindahl index's elasticity of substitution between  $\eta^2$  and  $n$  is  $1/\eta^2$ .

<sup>8</sup>In this case,  $U = (\eta^2)^a n^{-1}$ . Fitting the models in logs then permits recovery of  $a$ , the weighting on the membership variance, as well as regression parameters.



mates of the standard errors of the regression parameters  $\beta$ .<sup>9</sup> The typical way of addressing this is by using a sandwich estimator, usually the so-called “panel corrected standard errors” (Beck and Katz, 1995), to correct the variance-covariance matrix after the OLS fit. Concern about temporal dependence in the errors can be addressed by including  $y_{i,t-1}$  on the RHS or by fitting an autoregressive error model. Unit fixed effects are frequently included in these models, implicitly recognizing the hierarchical nature of the data (Wilson and Butler, 2004). The OLS-PCSE approach tries to correct for rather than models the dependence across observations, hamstringing our ability to make more informed inference about cross-sectional and temporal heterogeneity. The OLS-PCSE approach has not been extended to accommodate discrete response data. Neither does it account for other forms of dependence in the data (e.g., spatial dependence) that might affect our ability to draw inferences.

The most complete solution to this problem would be to specify a fully hierarchical model, accounting for unit-specific variation and spatio-temporal dependence. Unfortunately, these data create significant computational problems in this regard. Though the data contain repeated measures for each country along several dimensions, the within-country, over-time variation is negligible relative to the cross-country variation. For example, when attempting to fit both classical and Bayesian hierarchical models to the cross-confederation Herfindahl index, the country-level random effect variance accounted for roughly 90% of the total variance in the response, leaving precious little for time-varying covariates. Indeed one fifth of the countries in the sample take on the highest possible value for this variable (100) and show no longitudinal variation whatever. In trying to estimate models fully specifying the correlation structure within countries and over time, Gibbs sampling schemes regularly became stuck attempting to sample from posterior distributions with unit-level variances of 0 (i.e., infinite precision in the BUGS parameterization) and values arbitrarily close to unity for autocorrelation parameters<sup>10</sup>

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<sup>9</sup>Note the change in notation:  $\beta$  here represents regression parameters, following near universal usage. When I refer to the  $\beta$  parameter in the model from chapter 2, I make note.

<sup>10</sup>Specifically, several implementations in WinBUGS showed Markov chains that were inadequately mixing, especially for the slope parameters, even after several hundred thousand iterations. This was even more pronounced when trying to fit models to binomial and ordered categorical responses, a chief reason for

From a theoretical perspective, my interest is in accounting for cross-country diversity in centralization rather than explaining within-country variation over time. Furthermore, the sample of countries here can reasonably be considered close to a census of the population (rich industrial democracies), as opposed to a sample from some larger population of interest. While the strong within-country dependence across observations reduces the amount of information available for estimating quantities of interest, modeling this dependence is not substantively meaningful here. As a result, I take a population-averaged (or marginal) rather than a country-specific (or conditional) approach (Diggle, Liang and Zeger, 2002; Zorn, 2001). I turn to generalized estimating equation (GEE) and non-parametric window subseries empirical variance (WSEV) estimators.

The GEE approach is a generalization of the quasi-likelihood approach to the generalized linear model (GLM). The intuition behind the procedure is to iterate between choosing regression parameters  $\beta$  such that the predicted values are, on average, close to the actual values of the response given a “working” covariance matrix and then to use the residual variance to estimate the scale and correlation parameters of the covariance matrix. This procedure is iterated until convergence (Liang and Zeger, 1986). The variance of the GEE estimator easily admits empirical corrections based on the observed covariance of the model residuals.

The WSEV approach extends the GEE model. Rather than positing a working covariance matrix, WSEV takes advantage of the (asymptotic) consistency and normality of the GEE estimates for  $\beta$ . It estimates the variance of  $\hat{\beta}$ , accounting for temporal- and spatial dependence in the error process, by iteratively evaluating the sandwich variance estimate over moving windows of observations. The WSEV is the mean of these empirically generated variance estimates, weighted by the size of the window relative to the entire sample. See Heagerty, Ward and Gleditsch (2002); Heagerty and Lumley (2000) for details.<sup>11</sup>

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using a Bayesian hierarchical set-up in the first place.

<sup>11</sup>All models were fit in  $\mathcal{R}$  2.6.2 using the `geepack`, `arm`, and `WhatIf` libraries. WSEV are only reported for logit models. I am working to extend the WSEV approach to the Gaussian and ordered logit GLMs. On the GEE side, where possible I use AR1 working correlation matrices to estimate GEE standard errors.

### 4.3 *Confederal fragmentation*

The first three measures of labor movement centralization involve the distribution of unionists across confederal organizations. First, I examine the number of confederal organizations in existence. I then turn to the share of the unionized workforce organized into confederations, henceforth “confederal share”. The third measure is a Herfindahl index of cross-confederal concentration. We can interpret this variable as the probability that any two randomly selected union members *whose unions are confederal affiliates* are organized into the same confederation. All three are taken from Golden, Wallerstein and Lange (2002), GWL henceforth. The latter two variables take on values in the [0,100] interval and bigger values represent greater concentration of union membership in confederal organizations.

I include several covariates. On the structural side, I include the (log) population<sup>12</sup>, Fearon (2003)’s measure of cultural fragmentation<sup>13</sup>, and trade dependence (exports + imports/GDP). I expect the first two to negatively influence confederal centralization and the third to have a positive sign. On the political-institutional side, I include the (log of) the effective number of parliamentary parties as a measure the degree to which the electoral system supports more parties<sup>14</sup>, the proportion of government-held seats in the lower house controlled by Left parties (henceforth “Left government seats”), and a dummy variable for federalism. An electoral system supporting more political parties will enable the political benefits of confederal organization to fragment among parties but also provide an incentive for more federations to form. I therefore expect that more fragmented party systems will have a negative effect on the cross-confederation Herfindahl index but a positive relationship with the share of unionists organized into confederations. The greater the Left participation in government, the greater the benefits to coordinated political for unions. Left government seats should positively influence both the Herfindahl index and confederal share. Federalism should negatively influence the Herfindahl index but I have no expectation

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<sup>12</sup>Theoretically, it is the size of the labor force and not population that drives fragmentation, however labor force and population are nearly perfectly correlated for these country-years and population has marginally better longitudinal coverage. Results are also qualitatively similar if I substitute log GDP for population.

<sup>13</sup>Note that this measure is time-invariant.

<sup>14</sup>I also experimented by including the (log) district magnitude (Cox, 1997). Results were quite similar.

about its relationship with confederal share.

On the organizational side, I include two indicator variables designating whether the biggest union federation possesses central strike funds and whether the employer federation can veto affiliates' wage agreements. I expect the first to have a negative coefficient and the second to have a positive one. I also include the within-confederation Herfindahl index of union members, i.e., the probability the two randomly selected union members belong to the same union. This variable is the closest available proxy for measuring cross-union dispersion of resources and power. As union members become more concentrated, cross-union disparities of power *may* decline (so long as the number of unions also declines).

#### 4.3.1 *Number of confederations*

The number of union confederations varies between one and five, with a median of three. For this response, I fit a Poisson GEE model with AR1 working correlation matrix. I find the Poisson mean-variance relationship attractive for these data, i.e., countries with more federations tend to have more variance in the number of federations. It also seems reasonable to maintain the assumption that the existence of one confederation does not raise or lower the probability of the emergence of another, at least as we move away from the empirical minimum and maximum values. In any event, fitting a Gaussian model yields nearly identical inferences. Parameter estimates are displayed in table 4.1. As expected, the estimated autocorrelation parameter is very close to 1, emphasizing the temporal dependence present in these data within countries.

To interpret these values, figure 4.1 displays the predicted change in the expected number of confederations generated by moving each covariate across its interquartile range or toggling indicators, all other covariates held at mean values (modes for indicators).<sup>15</sup> Among the structural variables, only cultural fragmentation appears relevant. Population and trade parameters are signed in the expected direction but their effects cannot be distinguished from zero. Increasing cultural heterogeneity, however, implies a positive and substantial increase in the number of confederations. On the political/institutional side, countries with

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<sup>15</sup>All these simulated values are inside the convex hull of the data.

Table 4.1: Poisson GEE model for the number of union federations. Countries with federal systems and centralized employers have fewer confederations while more concentrated union membership, Left government, and cultural heterogeneity imply more federations.

	$\hat{\beta}$	$\hat{\sigma}_{GEE}^2$
population	0.0931	0.1293
trade	-0.0011	0.0018
cultural fractionalization	0.0226	0.0079
Left government	0.0003	0.0001
number of parties	0.0396	0.0803
federal	-0.7182	0.4341
union concentration	0.0326	0.0110
employer contract veto	-0.1289	0.3444
confederal strike fund	-0.0294	0.0465
$\rho =$	0.96	0.02
$N =$	471 (13)	
Correlation	AR1	

federal systems have significantly fewer confederations, on average. The effect of the party system is difficult to discern. More frequent Left government is associated with a tiny but “significant” increase in the number of federations while an increase in the number of parties seems to have no relationship. The organizational variables show an interesting pattern. A greater number of federations and more concentrated membership *within* confederations tend to occur in tandem, contrary to expectations. Centralized employers and centralized control over strike funds have an ambiguous relationship with the number of confederations.

#### 4.3.2 Inter-confederal membership concentration

I fit GEE Gaussian models using the same covariates in the model from table 4.1 and AR1 correlations for the membership fragmentation variables. Results are reported graphically in 4.2. They present conflicting perspectives on the hypotheses.

In general, the variables included in these models are much more successful at predicting cross-confederal concentration than in predicting confederal share. Indeed, the only variable achieving traditional levels of significance for the confederal share model is Left government seat share, and this effect is tiny. Structural variables once again contribute

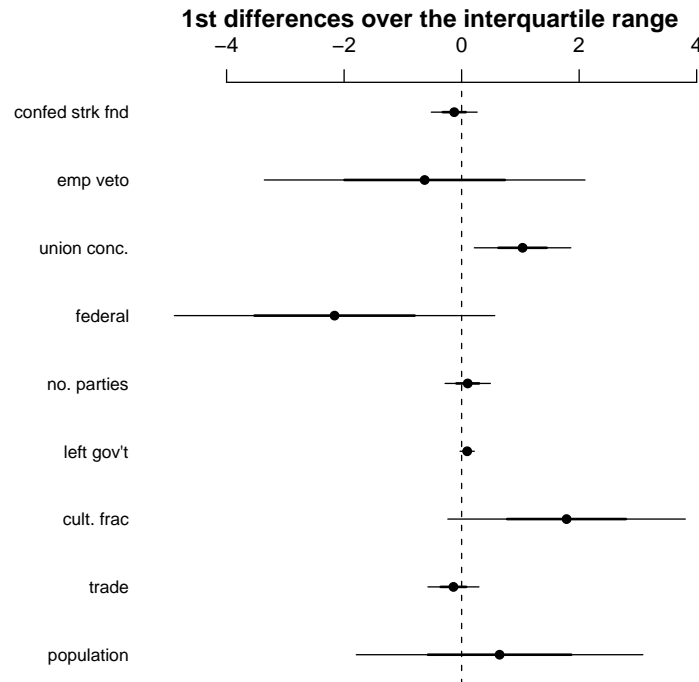


Figure 4.1: The predicted change in the number of confederations for a shift in the interquartile range of each covariate holding others at their central tendencies. Thicker bars represent  $\pm 1$  SE and thinner bars are  $\pm 2$  SEs.

little. Both trade and the size of the economy have tiny coefficients not discernable from zero. The parameter for cultural fractionalization is negative and discernable from zero for the confederal fragmentation variable, but with a very modest effect: a country with a fractionalization score one standard deviation higher than another will have about a third of a standard deviation lower level of confederal concentration. On the political-institutional side, we again find a strong effect for the federalism parameter but little relationship with the party system

There are conflicting findings for the organizational hypotheses. Contrary to expectations, as the distribution of members across unions becomes more concentrated confederal membership centralization declines. A country with one standard deviation greater member-

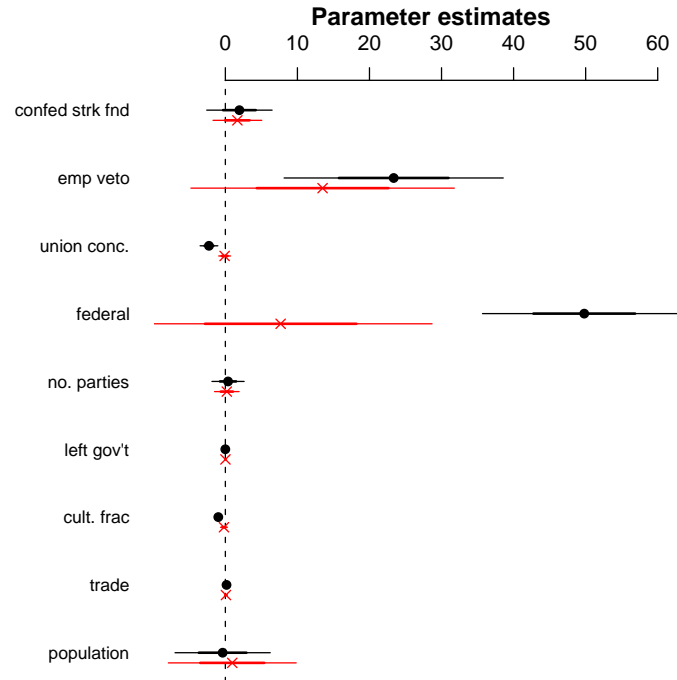


Figure 4.2: GEE estimates for inter-confederal membership Herfindahl index (black, top) and confederal share (red, bottom). Thicker bars represent  $\pm 1$  SE and thinner bars are  $\pm 2$  SEs. Constant estimated but not reported.  $N = 471$  over 13 countries with an AR1 working correlation matrices. Autocorrelation parameters estimated at 0.94(0.04) and 0.97(0.01) respectively.

ship concentration is predicted to have a one half standard deviation lower cross-confederal concentration. The degree to which employers' have centralized veto power over wage agreements has a strong relationship with both response variables. There is no evidence for the secession mechanism for the size-scope trade-off; central control of strike funds has no appreciable impact on cross-confederal concentration of union members.

## 4.4 *Bargaining Coordination*

### 4.4.1 *Confederal strike funds*

Arguably the key function of a union is collective bargaining. A union's bargaining power is driven by its ability to effectively impose costs on employers, ultimately through strikes. Yielding strike powers to a confederal organization is a key extension of the confederation's scope of activity.

I model the probability that the largest union federation controls a central strike fund. As covariates, I include, as before, population, trade exposure, Left government, number of parliamentary political parties, a federalism dummy, the inter-confederation Herfindahl index of membership concentration and an indicator of whether the employers possess wage agreement veto powers. I do not include the within-confederation Herfindahl index of membership concentration because doing so excludes three countries and over 100 observations; if included, the variable has no discernable relationship with strike powers and other findings are qualitatively similar. I note that this finding is possibly contrary to the theoretical expectation that greater equality in membership may be linked to expanded scope of confederal activities.

Results are displayed in table 4.2. I report both WSEV and GEE standard errors for comparison. In this instance, WSEV standard errors are slightly smaller than those from the GEE but substantially larger than the naïve maximum likelihood SEs.<sup>16</sup>

I again present a graphical depiction of first differences to interpret the model's substantive implications.<sup>17</sup> Figure 4.3 displays these changes in the expected probability of a strike fund. The directionality of findings save for the employer contract veto variable are largely in line with expectations. Bigger, more diverse economies and countries with federal governments are substantially less likely to have union federations with centralized strike powers whereas trade exposure and Left government are associated with a modest increase

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<sup>16</sup>As an interesting side note, these GEE SEs are generated under an independence working correlation matrix; using an AR1 or exchangeable matrix produced non-sensical results and/or would not converge. The WSEV approach avoids this problem entirely.

<sup>17</sup>Once again, all hypothetical data points for the simulations are inside the convex hull of the data.



Table 4.2: Logit model for whether the biggest union federation possesses strike funds, reporting GEE and WSEV standard errors. Countries with more political parties, federal systems, and centralized employers have fewer confederations while more concentrated union membership, Left government, and cultural heterogeneity are associated with more federations.

	$\hat{\beta}$	$\hat{\sigma}_{GLM}^2$	$\hat{\sigma}_{GEE}^2$	$\hat{\sigma}_{WSEV}^2$
population	-3.75	0.47	1.60	1.16
trade	0.07	0.01	0.02	0.02
Left government	0.01	0.00	0.01	0.01
no. parties	-6.79	0.85	2.58	2.21
federal	-4.26	0.73	1.98	1.78
confederal concentration	-0.04	0.01	0.03	0.02
employer contract veto	-2.86	0.76	2.58	2.10
Correlation	Ind.			
$N =$	645 (16)			

in this probability. We see a negative relationship between the fragmentation of the party system and possession of strike funds. Providing the strongest evidence yet of a tradeoff between size and scope, inter-confederal membership concentration is a negative predictor of confederal strike powers. Where members are concentrated into one federation they are less likely to cede strike powers to a central organization. This finding is consistent with the veto mechanism discussed above. The strong negative relationship between centralized employer contract veto powers and centralized strike funds for unions runs counter to theoretical expectation but may belie the literature's obsession with Scandinavia. Sweden, the Netherlands, Norway, and Finland are the only countries in the sample in which both unions centralize strike funds and employers centralize the contract veto. What's more the only longitudinal variation comes when the Dutch employers decentralized bargaining power in 1968 while the unions retained their strike fund and Finnish unions dissolved their fund in 1970 but the employers retained their centralized contract veto. Theoretical expectations built upon the experiences of a couple of cases may not travel so well.

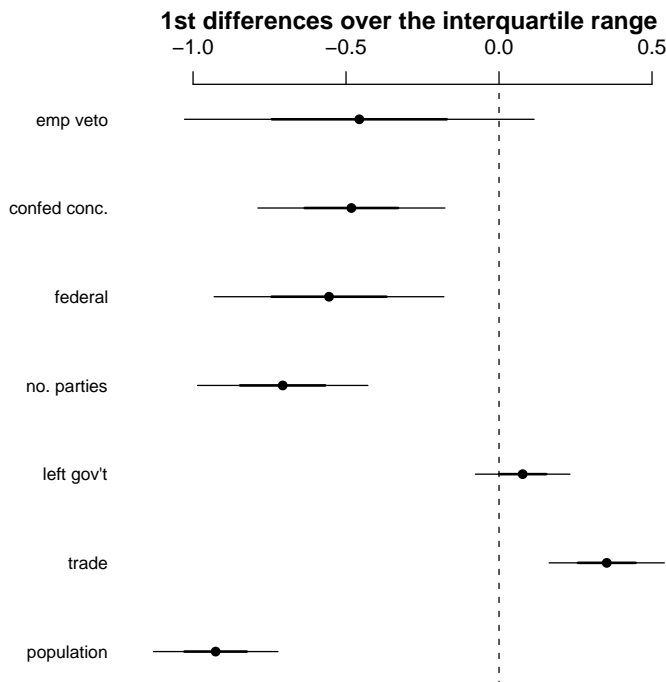


Figure 4.3: Predicted change in the probability of that the biggest confederation controls a strike fund. Indicator variables are toggled and continuous variables move across their interquartile ranges. Thicker bars represent  $\pm 1$  WSEV SEs and thinner bars are  $\pm 2$  WSEV SEs.

#### 4.4.2 Bargaining coordination

Finally, I turn toward the determinants of bargaining coordination.<sup>18</sup> The response variable here is Kenworthy's scale of coordination (Kenworthy, 2001).<sup>19</sup> As an ordered categorical variable, it is substantially more difficult to use the GEE approach to account for the dependence structure and WSEV methods for ordered logit/probit/complementary log-log

<sup>18</sup>Golden (1993); Soskice (1990) argue convincingly that the degree of cross-union coordination in wage setting is more important than the level at which wages are bargained (plant, firm, industry, sector, or economy-wide).

<sup>19</sup>I collapse Kenworthy's 5-point scale into a four-point scale by combining categories one and two. If I retain the five-point scale, I cannot estimate the model for  $Y_{i,2}$  in the sequential logit models discussed below due to perfect separation with the employer contract veto and confederal strike fund dummies. Results for the other categories are identical to what I report below, however.

models have yet to be developed.<sup>20</sup> As a result, I present two sets of results. First I fit a standard ordered logit model. Second, I break the response variable into a sequence of binary variables,  $Y_{i,c}$ ,  $c = 2, 3, 4$ , which takes on a value of 1 if  $Y_i < c$  and 0 otherwise. Results for these models describe the (log odds) of not achieving a certain level of bargaining coordination. While this sounds awkward at first, this method of breaking an ordered variable into a series of binomially distributed variables is one way to motivate the standard GLM for ordered responses and is essentially the procedure underlying the GEE formulation (Diggle, Liang and Zeger, 2002). Breaking the variable apart in this way retains the ordering information and avoids imposing the strong interval assumptions of a Gaussian model while also enabling the use of the WSEV estimator. There is an efficiency cost to not estimating the models simultaneously. I defer this extension for later work.

In these models I include (log) population, trade, and cultural fractionalization as structural covariates; (log) parliamentary parties, Left government, and the federalism dummy for political/institutional regressors; and cross-confederal membership concentration and employer contract veto and confederal strike fund indicator variables on the organizational side. Wallerstein and Western (2000) also model bargaining coordination using a version of the GWL bargaining level indicator as the response.<sup>21</sup> They include (lagged) inflation and unemployment, under the hypothesis that bargaining coordination is one possible policy approach to addressing economic challenges. They also include a time dummy for the 1982-92 period. I include all three as well.

Table 4.3 report results. I interpret these findings using the first differences plot displayed in figure 4.4. For each variable,  $c$  decreases from top to bottom. For  $c = 4$ , we use solid dots/black lines. Open triangles/red lines represent  $c = 3$ . Vertical dashes/blue lines represent  $c = 2$ . As before, indicator variables are toggled and continuous variables move across their interquartile ranges. Recall that negative parameter estimates reflect *increases*

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<sup>20</sup>I attempted to fit models with the `ordgee` function from  $\mathcal{R}$ 's `geepack` library. This function only succeeded in fitting intercept-only models for these data. Including any covariates whatever caused the function to generate nonsensical results, i.e., enormous coefficients and infinite variances.

<sup>21</sup>The Kenworthy and GWL measures of bargaining coordination track each other quite closely except for the cases of Japan and Italy; the Kenworthy data show substantially more variation in the Italian case, conforming better with my reading of the case literature.

Table 4.3: Ordered logit and sequentially ordered binary logit results for bargaining coordination

	Ord. logit	Coordination <		
		4	3	2
Constant		0.28 (3.50)	6.15 (3.18)	-10.16 (6.63)
population	-0.44 (0.15)	-0.10 (0.1)	-0.53 (0.14)	0.20 (0.53)
trade	0.02 (0.01)	-0.01 (0.03)	-0.04 (0.02)	-0.15 (0.06)
cultural fractionalization	-0.10 (0.01)	0.07 (0.03)	0.04 (0.01)	0.22 (0.03)
Left government	0.01 (0.002)	-0.00 (0.004)	-0.02 (0.005)	-0.02 (0.009)
number of parties	0.34 (0.57)	0.96 (3.25)	-1.13 (2.56)	4.10 (1.61)
federal	0.53 (0.33)	0.99 (0.53)	-1.79 (0.37)	-6.64 (1.21)
confederal concentration	-0.02 (0.006)	-0.02 (0.02)	0.02 (0.02)	0.05 (0.02)
employer contract veto	-0.40 (0.38)	-0.90 (1.77)	-0.84 (1.64)	-24.13 (1.70)
confederal strike fund	1.08 (0.36)	-1.74 (0.96)	-0.89 (0.65)	-26.19 (3.21)
inflation*	0.01 (0.02)	0.01 (0.03)	-0.07 (0.06)	-0.18 (0.10)
unemployment*	-0.35 (0.04)	0.16 (0.08)	0.48 (0.11)	1.13 (0.23)
post-1982	0.21 (0.26)	0.55 (0.51)	-0.90 (0.39)	-1.24 (1.16)
cut <sub>1-2</sub>	-3.77 (2.20)			
cut <sub>2-3</sub>	-2.73 (2.20)			
cut <sub>3-4</sub>	-1.12 (2.2)			
$N =$	496 (16)			
Covariance est.	naïve	WSEV	WSEV	WSEV

Note: Standard errors in parentheses. Variables marked with an “\*” are lagged.

in bargaining coordination and vice versa.

Looking at the structural variables, we see mixed results. Cultural fractionalization and trade work in the expected direction whereas population works contrary to expectations. For each level of the Kenworthy index, greater cultural fractionalization has a negative association with bargaining coordination, while trade has a positive relationship. This latter result is most pronounced at the low-middle levels of coordination; it has little influence once we get to the highest level of coordination. Population has no discernable effect save for *increasing* the likelihood of being in at least category three.

For political variables, we see a strong influence of Left government and federalism, the latter opposite the expected direction. Increases in Left participation in government noticeably increases bargaining coordination, especially at middle levels of coordination. This is consistent with both the “counterparty” argument made in the model and with the historical observation that Left parties are more likely to negotiate with unions than parties of the center or Right. The fragmentation of the party system has an ambiguous relationship with bargaining coordination.

On the organizational side, we have several interesting findings. First, there is further evidence for a size/scope trade off; where cross-confederal membership is highly concentrated bargaining is less coordinated; this relationship is most pronounced at the bottom of the scale. Second, as expected, the centralization of strike funds is associated with more coordinated bargaining. Third, the relationship between bargaining coordination and the employer centralization (measured by centralization of contract veto power) is modest and uncertain compared with that for confederal centralization of strike funds. This finding, taken together with the strong impact of political variables—especially government partisanship—casts some doubt on the employer-centered theories of bargaining centralization while pointing to union-party relationships as an important determinant of bargaining coordination.

Finally, on the economic outcome variables, unemployment seems to have a negative relationship with bargaining coordination, exactly opposite to what Wallerstein and Western

find in their model.<sup>22</sup> Inflation and the time dummy have little noticeable effect.

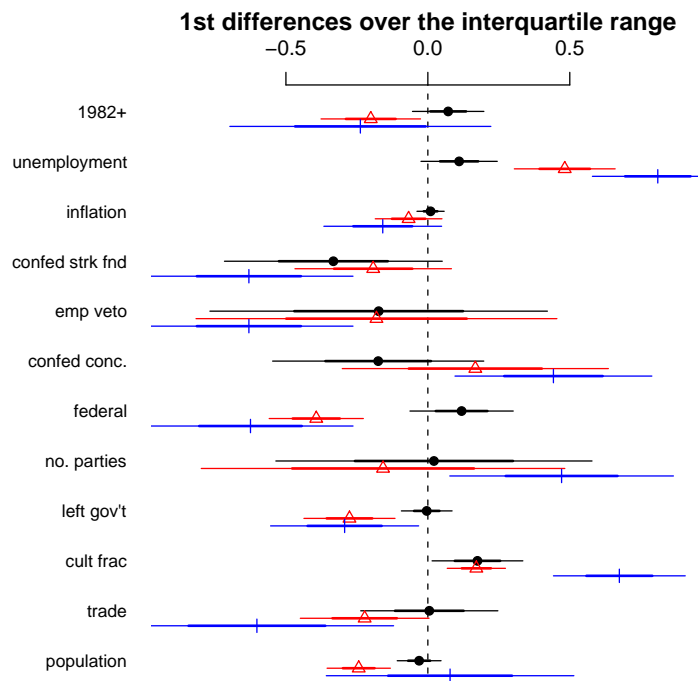


Figure 4.4: Predicted change in the probability that the level of bargaining coordination is  $< c$ , where  $c = 2, 3, 4$ , the values of Kenworthy's coordination scale. For each variable,  $c$  decreases from top to bottom. For  $c = 4$ , we use solid dots/black lines. Open triangles/red lines represent  $c = 3$ . Vertical dashes/blue lines represent  $c = 2$ . Indicator variables are toggled and continuous variables move across their interquartile ranges. Thicker bars represent  $\pm 1$  WSEV SE and thinner bars are  $\pm 2$  WSEV SEs.

It is worth mentioning that the Kenworthy coordination index has broader cross-national coverage than the GWL dataset.<sup>23</sup> Fitting the models above but excluding the inter-confederal concentration variable and the confederal strike fund and employer contract veto indicators lets us take advantage of this broader coverage. These models (not reported) yield

<sup>22</sup>Refitting the model using the GWL index of bargaining centralization as response (results not reported here), reverses the unemployment relationship. Other parameter estimates are similar to those reported in table 4.3.

<sup>23</sup>The Kenworthy variable has data for Ireland and New Zealand, both of which are missing from the GWL data.

nearly identical parameter estimates for the remaining variables *except* that the parameter for party system fragmentation becomes much larger. This finding (which also holds if the model is fit to the smaller dataset from table 4.3), is congruent with the earlier finding that confederal strike powers are strongly related to the number of political parties in a country. Once we account for confederal strike powers, the party fragmentation effect on bargaining coordination disappears and only the partisanship result remains.

#### **4.5 Summary of findings and limitations of the analysis**

The analysis above represents what is, to my knowledge, the first attempt at a systematic, quantitative description of labor movement centralization in rich democracies. I examined several dimensions of centralization: the number of confederations and the concentration of members among them; the share of the unionized workforce organized into confederations; the likelihood that the confederation will control strike funds; and the degree of bargaining coordination. I find that no single variable has a consistent relationship with these different aspects of centralization.

Findings for the structural variables (population, trade, and cultural fractionalization) were mixed, though largely in line with expectations. There was little discernable relationship between population or trade on either the number of union federations, the concentration of membership across them, or the proportion of unionized workers in confederations. I do find bigger economies significantly less likely to have union federations with centralized strike funds. Congruent with both models of bargaining centralization and my model of confederation, more trade exposure implies greater likelihood of centralizing strike funds and more coordinated bargaining. Cultural fractionalization showed a positive relationship with the number of confederations and negative relationship with bargaining coordination, underscoring the persistent effects of historical divisions.

For the political variables, findings for federalism are the clearest and most consistent. Congruent with theories arguing that interest groups will organize so as to follow the contours of government authority, federally organized countries have fewer federations, more concentrated membership among the ones that do exist, and union confederations that are unlikely to have significant authority over affiliates strike behavior. Federalism does

appear to have a positive relationship with bargaining coordination, contrary to expectations. Findings for the fragmentation of the party system are not so consistent. Contrary to expectations, the number of effective parties has no discernable relationship with either the number of union confederations or the distribution of members across them. More parties are associated with a decreased likelihood of central control over strike funds but otherwise with no relationship with bargaining coordination. Government partisanship has a consistent effect across models in the expected direction: more profound Left involvement in government is associated with more union federations, greater concentration across federations, and more coordinated bargaining. Nevertheless, these relationships are consistently tiny in size. Taken together, it seems clear that political structure and the actions of politicians “matter” for the organization of union interests.

The organizational variables provide the clearest test of the model’s usefulness. Findings are mixed. Consistent with the predicted size-scope trade-off, confederal control of strike funds and highly coordinated wage bargaining are much less likely where unionists are concentrated in one or a small number of confederations. If we reverse the relationship, however, controlling strike funds does not seem to have any predictive value for cross-confederal membership concentration. I interpret this as evidence for a particular mechanism for the size-scope conflict: in general, confederations are internally prevented from adopting centralized strike funds rather than adopting them and witnessing secession by displeased affiliates. I note that this is also consistent with the notion that in equilibrium, confederations will develop decision rules that prevent unravelling.

Evaluating hypotheses about the effects of relative union endowments on confederal size and competence have proven more difficult. To the extent that within-confederation, across-union membership concentration is a proxy for equality of resources, findings run contrary to expectations: more concentrated union membership across unions is associated with a more rather than fewer confederations and greater membership fragmentation across federations. Rather than evidence against the model, however, another way to interpret this finding is that confederations are serving different purposes where union membership is more or less concentrated. Where union membership is highly fragmented unions also tend to be organized along craft lines. Confederally supervised jurisdictional guarantees



and cooperation in organizing may be more correspondingly more important, providing an incentive to concentrate in a smaller number of federations. Where membership is more concentrated across unions, workers also tend to be organized along industrial lines. Other confederal services, especially bargaining coordination, may therefore be more important. Discriminating between these interpretations is not possible with these data. To do so, I require data on the number of unions, as discussed above as well as more granular descriptions of confederal activities.

Finally, the effects of employer organization, as measured by whether the employer federation can veto affiliates' wage agreements, are not as strong as the case-based literature would have us believe. Employer veto power has no relationship with the number of confederations but is positively associated with greater cross-confederation membership concentration. Contrary to the "counterparty" argument in which employers might induce greater breadth of scope, it has a negative effect on the likelihood that the union peak association controls strike funds and an ambiguous relationship with bargaining coordination.

While I have made some progress, there are several limitations both in the analysis itself and in its relationship to theory. First, several of the models presented contain the same covariates, implying possible stochastic dependence across models via correlation in the error terms. In a classical regression framework, some form of simultaneous equation (e.g., Seemingly Unrelated Regression) or structural equation modeling set up might be appropriate. In modeling these data, however, I am working with response variables of differing distributions (e.g., Poisson and Gaussian), making the modeling of this cross-equation error dependence non-obvious. For now, I note this shortcoming but find it to be of third-order importance compared to properly accounting for the extreme within-country dependence and cross-country heterogeneity.

It might also be argued that several of the covariates are endogenous, violating the standard regression assumption that the covariates be independent of the disturbance.<sup>24</sup> On

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<sup>24</sup>At minimum one might argue that Left Government might be endogenous to party fragmentation; employer veto power, confederal strike powers, and confederal concentration might be endogenous. I include lagged values of unemployment and inflation in the model for bargaining centralization. While the lag partially mitigates the problem, unemployment, inflation, and bargaining centralization are linked, posing another endogeneity problem.

technical grounds, in the GEE framework, consistent parameter estimation only requires a properly specified model for the mean; residuals remain correlated (Diggle, Liang and Zeger, 2002; Zeger, Liang and Albert, 1988). Bias in variance estimation is accounted for via the iterated GEE fitting. Similarly, the WSEV approach, as non-parametric extension of the GEE logic, requires only a properly specified mean model. Given the known problem of strong temporal dependence, possible linkages between the other variables, several of which have yet to be discovered, is once again of second order importance. That said, to the extent these dynamic processes are present, it is preferable to model them. In a perfect world the models would be estimated jointly.

Nevertheless, this preliminary exercise, combined with the model, provide some baseline results and point to the types of data needed to better evaluate the model. First, there are no data that describe the *scale* of confederal activity in its various dimensions. The strike fund variable is binary only; it does not provide any information on how much the confederation is extracting. Ideally, confederal per-capita tax rates and budget relative to affiliates would be available. Second, as already noted, a consistent measure of cross-union inequality in resources is not presently available. At minimum, the number of independent unions would be useful. Finally, the composition of membership by sector would be useful. As others have observed (Garrett and Way, 1999; Iversen, 1996, 1999), sheltered public sector workers account for a much larger share of the unionized workforce now than in the 1960-70s, perhaps attenuating the affects of trade dependence on unions' willingness to coordinate in wage bargaining and certainly altering the distribution of membership across an important sectoral cleavage in the labor movement. Currently, however, public sector unionization data are only available for a limited cross-section of countries for the early 1990s, thwarting any attempt to investigate the effects of change. More thorough investigation awaits more complete cross-national longitudinal data on public sector unionism.

In sum, this first cut at systematically analyzing available data on labor movement centralization has turned up several things. The data show strong within country dependence and little longitudinal variation. Combining this with the lack of overwhelmingly convincing findings for all but the most blunt explanations (e.g., trade, federalism) implies that the organization of labor movements has deep roots in the historical economic and political

developments within countries. While there is some evidence supporting the notion of a trade off between the size of membership and the scope confederal activity, more complete evaluation of the model will require more data and close attention to major changes in particular cases.

## Chapter 5

**PART II: SOCIAL PACTS**

Part I explored how and why union centralization varied both within and across countries. In Part II, I examine how political parties and unions interact while implementing economic policy in ways that can enhance the strategic capacity of unions (and perhaps employers) or undermine it. Part II shifts the focus away from the immediate internal organization of labor union federations and focuses on how confederations of unions come to deploy their strategic capacity in dealing with governments. More concretely, Part II examines social pacts—formal agreements with governments (and possibly employers) trading union concessions in wage bargaining or work organization for policy favors from government. While pacts have been a regular part of policy making in several OECD countries in recent decades, they still occupy a stepchild position in the larger comparative political economy literature. I argue that social pacts are worth understanding for two reasons. First, they can, under some circumstances, be shown to influence important macroeconomic outcomes. Second, I use pacts as an empirical lever to pry apart important theoretical issues: electoral cycles in economic policymaking, the origins and evolution of union centralization, and, ultimately, institutional formation and change.<sup>1</sup> I argue that pacts come about when governments are forced to address serious shortcomings in their economic institutional arrangements, particularly those dealing with labor markets and wage bargaining. When these issues are salient to the electorate, pacts with unions are a way for governments, especially of the Left, to make policy promises aimed to deal with the crisis credible to voters.

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<sup>1</sup>The most interesting work on pacts has a similar goals. For example, Culpepper (2008) uses pacts in Ireland and Italy to explore the development of common knowledge among key players as wage bargaining institutions change. Baccaro (2000) uses the Italian case to make larger points about deliberative democracy.

### 5.1 *Economics, elections, and social pacts*

Beginning with the stagflation of the 1970s and continuing through the subsequent process of increased economic integration, rich democracies confronted economic challenges that traditional Keynesian demand management is not well-prepared to address.<sup>2</sup> Early work argues that the best outcomes occur in countries with either highly centralized wage bargaining institutions and Left government or quite decentralized systems and Right governments (Alvarez, Garrett and Lange, 1991; Bruno and Sachs, 1985).<sup>3</sup> While this is an important insight, few cases actually conform to the centralized-Left or decentralized-Right stereotype for extended periods.

A parallel literature on the “political business cycle” also emerged, though it took scant interest in unions or wage bargaining (Alesina, Roubini and Cohen, 1997; Clark, 2003; Clark and Hallerberg, 2000; Franzese, 2002*b*; Hibbs, 1977). Based on the simple premise that office-seeking politicians have every incentive to manipulate fiscal and/or monetary policy to improve their electoral chances, a series of theoretical arguments emerged, each more complex than the last in an effort to explain the persistent lack of empirical support for the simpler arguments. Suffice to say the empirical literature has identified an electoral cycle in policies, but none for economic outcomes; the search for partisan cycles in which Left parties inflate and spend more than Right parties in an effort to achieve full employment has been even more elusive (Franzese, 2002*a*). I follow Clark (2003) in arguing that without specifying the mechanisms through which parties can influence policy and voter expectations it will be impossible to link these two literatures. But rather than concentrate on the Mundell-Fleming conditions<sup>4</sup>, my approach is to focus on parties’ abilities to work with

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<sup>2</sup>While the scope of this study is restricted to rich democracies, developing countries face similar if not more daunting challenges. Pacts have not been unique to the OECD. A Lexis-Nexis search turned up evidence of pacts having been attempted in, at minimum, Brazil, the Philippines, and South Africa. Extension of both the data and theoretical arguments surrounding social pacts are clearly areas for future research.

<sup>3</sup>Centralized bargaining is argued to restrain wage growth, allowing Left governments to pursue full employment and welfare-heavy policies without high inflation and reduced competitiveness. Right governments and weak unions are argued to make the Right’s preference for low inflation less costly in terms of unemployment than with strong unions.

<sup>4</sup>The Mundell-Fleming conditions (the so-called “iron triangle” of open economy macroeconomics) stipulate that a country can simultaneously maintain at most two of the following three policy options: an

peak associations of economic actors to implement policy, particularly relating to wage/price bargaining. I argue that pacts are a way in which political parties, typically of the Left, can credibly promise low inflation and unemployment outcomes to voters. In so doing, I cast some doubt on Clark's neo-Downsian model in which all survival-maximizing parties pursue the same policies in equilibrium, conditional on the policy levers at their disposal.

### 5.1.1 *Background*

In addressing the economic challenges since the 1970s, policy approaches have varied widely. Policy makers have, at times, turned to interest rate policies to dampen inflation at the cost of high unemployment and severe economic downturns. Governments have legislated directly over wages and prices. Others have drastically overhauled their entire political-economic institutional structure. Some attempted negotiated agreements with peak associations in an attempt to gain control of wage demands, prices, and government budgets. Understanding the conditions under which governments and economic actors can come to an agreement undergirding good economic performance is critical. These latter agreements are therefore of special interest.

While bi- and tripartite policy agreements have differed substantially in their content, timing, and durability, they most commonly embody some form of exchange in which unions pull their punches in wage negotiation or assent to changes in labor market regulations in exchange for social spending, taxation, or other policies they prefer. Pacts in some countries (e.g., Ireland) have proven so resilient that some consider the pacts to be institutionalized. Other agreements, such as the 1979 National Accord in the USA or the 1990 Growth Agreement in New Zealand, were still born.

The literature on social pacts largely consists of case studies. While this has generated a substantial body of highly detailed work, it has drawbacks as well. The reliance on case studies combined with pacts' many idiosyncratic features has precluded the development of a consensus definition for social pacts. To facilitate systematic quantitative work, I propose the following definition: a *social pact* is a written, formally articulated, policy contract

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independent monetary policy, fixed exchange rates, and fully mobile capital.

in which specific policy domains are identified, policy targets set, and the responsibilities of the signatories enumerated. A pact is time-bound, either explicitly or implicitly.<sup>5</sup> A pact is signed by a labor peak association and at least one of {employer peak association, government/executive, opposition party}. To be considered a pact, the government or prospective government must either be a pact signatory *or* the pact must have clauses which require government action *and* the government publicly declares its support for the agreement and its intention to take the required actions.

Pacts can, in principle, involve employers at their inception. Since the key provision in most pacts is a policy-wages tradeoff, union participation is critical. Employer participation may occur subsequently or not at all. While the timing and degree of employer support plausibly has implications for the duration and effectiveness of social pacts (Baccaro, 2006; Baccaro and Simoni, 2006; Baccaro and Lim, forthcoming; Culpepper, 2008), for the sake of simplicity and to make the model more directly applicable to the empirical context of Australia and New Zealand, I will be modeling pacts formally as if unions and governments are the only parties involved. I will have additional comments on employers below.

Note that pacts, as discussed here, are distinct from collectively bargained employment contracts, whether private or public sector. While governments (or agencies thereof) routinely act in the role of employer and negotiate contracts with unionized public sector workers, these are narrow in scope and restricted only to a subset of unions. Social pacts, however, are agreements with union peak associations that affect public policy goals while also setting bargaining parameters across the entire economy. In a pact, the government negotiates in its role as policy maker, not as public employer.

I do not view social pacts as merely some intermediate point on a wage-bargaining continuum with completely centralized bargaining at one extreme and atomistic workers and firms on the other. Rather, I consider pacts as a tactic useful for both governments and unions. Pacts are, at best, a path leading from one institutional arrangement to another; at worst they are cheap talk. For this reason, I did not include the existence of a pact as

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<sup>5</sup>For example, a pact may be with a particular political party, implying that it is void once the party loses office.

such in chapter 4 when I empirically analyzed the strategic capacity of union federations.<sup>6</sup> Although pacts often induce centralized bargaining for a time, they differ from codified institutional arrangements in several important ways. First, the agreements are time-bound, with definite dates of inception and termination. Second, they are explicit agreements over specific policy domains. Third, they almost always have specific policy targets (inflation levels, wage increases, etc.). Fourth, they must be self-enforcing as they are not legally binding in any meaningful sense. Pacts are remarkable in that they occur during moments where old institutions are clearly failing and new ones have yet to emerge (Culpepper, 2008; Regini, 1995). They represent one way in which government can use its leverage in other policy domains to affect the interests and capabilities of major social actors in market economies.

While pacts are related to the more generic notion of “policy concertation”, they differ in an important way. If concertation is taken to mean governments threatening, cajoling, or paying off various social groups to induce them to implement the government’s preferred policies then pacts are, at best, a subset of the tools at the government’s, unions’ and employers’ disposal. Alternatively, if concertation is taken to mean collaborative design of regulatory (as opposed to redistributive) policy (Iversen, 2005; Iversen and Soskice, 2007; Iversen and Stephens, 2008), then pacts straddle a boundary. They clearly appear to be collaborative in the sense of unions, governments and employers agreeing on the basic parameters of effective economic management. But they also frequently implicate highly redistributive policies such as taxation, retirement and pensions, healthcare, and unemployment while also affecting labor market regulations and the structure of union representation.

Pacts are also something different from simple lobbying.<sup>7</sup> Unions and employers frequently lobby governments about issues they care about. Labor federations maintain significant political alliances even where they are weak and fragmented. I argue that pacts differ from lobbying and implicit contracts between economic interest groups and parties in that

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<sup>6</sup>However, the increased bargaining coordination and/or organizational changes in union federations *induced* by pacts (e.g., as in Australia or Ireland) did appear in the measures of bargaining coordination, union concentration and the like.

<sup>7</sup>Interestingly, virtually all economic models of interest groups assume their fundamental purpose is to lobby (Dixit, 1996; Dixit and Londregan, 1998; Grossman and Helpman, 2001; Sloof, 1998).



pacts are very *policy-specific* and very *public*. Indeed, pacts are trumpeted loudly within unions and in the press more broadly. While, on some level, pacts might be viewed through the lens of common agency and lobbying, I argue that the public nature of pacts begs for an explanation not captured in these standard models.<sup>8</sup> It is the public, contractual nature of pacts that makes them distinct from all the other ways government and major interest groups pressure one another. The public nature of pacts is the link between pacts, policy, and elections.

In sum, pacts occupy an uncomfortable theoretical purgatory in the existing thinking about economic policy making, wage-price bargaining, concertation, and interest group influence. Pacts are therefore a useful tool for understanding how political agents and opportunities can affect the strategic capacity of union confederations, at least at the margins. They also provide a direct linkage from organizational structure and strategic capacity into economic policymaking.

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<sup>8</sup>It is also worth mentioning that the literature on concertation generally ignores the highly public nature of pacts.

## Chapter 6

### MODELING SOCIAL PACTS

Since the mid 1970s, governments and peak-level labor federations in several countries<sup>1</sup> have been able to jointly formulate national-level policies on wages, working conditions, training regimes, industrial policy, taxation, and government welfare spending. This is all the more remarkable since these agreements occurred in countries not historically enjoying centralized labor movements and bargaining institutions. What's more, these "social pacts" began emerging at the same time that the neo-corporatist institutional arrangements of northern Europe came under pressure, most notably in Sweden. The academic literature on these pacts, however, is largely a collection of case studies with little to connect one to another besides appearing together in the same edited volumes. There is precious little in the way of general theoretical propositions and even fewer instances of work that considers cases outside the EU15.

In this chapter, I address some of these shortcomings in the literature by developing a general theoretical model of social pacts working in the tradition of the transactions approach to policy (Dixit, 1996; Spiller and Tommasi, 2003, 2007). I model pacts as equilibrium outcomes of an infinitely repeated game between unions, a political party, the central bank, and the decisive voter. Pacts emerge because they provide economic benefits to both unions and citizens and electoral success to the political party. Pacts are credible because they are supported by a multi-lateral trigger strategy in which the voter refuses to elect the party if overall fiscal and economic outcomes are not as good the expected outcome under a challenger, the political party fails to compensate unions if any of the unions do not deliver wage restraint and the unions fail to coordinate on wage restraint if either the government fails to deliver policy benefits to unions or other unions violate wage restraint. As is stan-

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<sup>1</sup>The most frequently discussed are Finland, Ireland, Italy, the Netherlands, Portugal, Spain and the UK. See, *inter alia*, Fajertag and Pochet (2000); Regini (1995, 2003); Rhodes (2001); Visser (1998)

dard in the theory of repeated games, the model predicts that self-enforcing intertemporal agreements are more easily sustained when discount rates are low, incentives for cooperation are high (or immediate payoffs to one-time deviations are low), and the number of actors is small. A key feature of the game, however, is the coordination potential offered in the initial contracting stage.

### **6.1 *Pacts and Elections: a Model***

The model here builds on Iversen (1999:ch.2) and Adolph (2006:ch.7). Levi and Schott (1986) first propose viewing pacts as repeated games. In Adolph's extension of Iversen's wage-price bargaining model, the government can trade policy favors for wage restraint from the unions. My model differs from Adolph's in several important respects. Adolph's model is geared toward understanding the *effects* of policy-wage restraint bargains on unemployment for different levels of union centralization and central bank conservativeness, not on explaining the emergence and viability of these contracts. In the Adolph model, voters are only present implicitly (through the government's utility function) and all bargains between unions and governments are assumed to be implemented. As I am interested in the emergence of these bargains I emphasize concerns with credibility and self-enforcement rather than the effects on outcomes. Extensions of the model discussed in section 6.2 significantly complicate both the dynamics of the game and the information structure.

#### *6.1.1 Players*

In the model, there are four classes of strategic players:

1. a set of  $n$  equally sized unions,  $L^i$  ( $i = 1 \dots n$ ), who choose nominal wage increases for their bargaining areas;
2. an incumbent party,  $P$ , who controls tax and transfer at some cost;
3. a representative citizen,  $C$ , who chooses either the incumbent or the challenger in periodic elections.  $C$  is assumed not to be a union member (or at least does not vote as if she were);

4. a monetary authority,  $M$ , with control over the inflation rate.

Each union is assumed to value real wages, employment, and the “social wage”. Specifically, each union’s utility at time  $t$  is

$$\begin{aligned} V_t^{L^i} &= S_t + \alpha(w_t^i - \pi_t) - (1 - \alpha)\bar{U}_t U_t^i \\ &= S_t + W_t^{L^i}(w_t^i) \end{aligned} \quad (6.1)$$

where  $\pi$  is the inflation rate;  $w^i$  is the nominal wage increase set by union  $i$ ;  $U^i$  is the unemployment rate amongst members of union  $i$  and  $\bar{U}$  is the average unemployment rate in the economy;  $\alpha \in [0, 1]$  is a parameter governing the relative importance of wages and unemployment; and  $S$  is the “social wage” or, alternatively, the government policies that benefit unions. I combine all non-policy terms of the unions’ objective function into  $W_t^{L^i}(w_t^i)$

The decisive citizen also cares about wages and unemployment. Her utility at  $t$  is given by

$$\begin{aligned} V_t^C &= -\frac{1}{2}\beta\pi_t^2 - \frac{1}{2}(1 - \beta)\bar{U}_t^2 - \tau_t \\ &= W_t^C(w_t^i) - \tau_t \end{aligned} \quad (6.2)$$

where  $\beta \in [0, 1]$  describes her relative aversion to unemployment and  $\tau$  is a non-negative tax that can be used to finance the social wage. For simplicity, funding for the social wage enters the citizen’s utility function negatively. One way to interpret  $S$ , then, is as a transfer from  $C$  to  $L$  by way of  $P$ ;  $C$  is buying wage restraint from the unions. Some may object to this formulation of the fiscal effect of the social wage since “social wage” policies are frequently universalist in nature. Nevertheless, even universalist policies are redistributive. A more complicated version of the model might include a full continuum of voters ordered by income in which taxes and transfers are lump sum, a la Meltzer and Richard (1981). In this richer formulation, so long as the income for the median union member is below that of the decisive voter,  $\tau$  can be thought of as the additional transfers that the unionized workers are able to extract beyond what the median voter prefers, even if the median voter

prefers some positive tax rate based on her position in the income distribution.

The incumbent party cares only about gaining and remaining in office, so its objective function will be induced by the citizen's voting decision rule. The party does control taxation and transfers. Specifically, the party can set  $\tau$  and  $S$  subject to the budget constraint

$$S_t \leq \tau_t - \epsilon \quad (6.3)$$

where  $\epsilon$  describes the slippage between the amount of taxes collected and the delivery of transfers to union members. This slippage can take on many interpretations, several of which I discuss below. At the most generic level,  $\epsilon$  reflects transaction costs in government-union interactions.

The monetary authority is assumed to care about aggregate price levels and unemployment.  $M$  chooses the inflation rate to maximize

$$V_t^M = -\frac{1}{2}\iota(\pi_t)^2 - (1 - \iota)(\bar{U}_t)^2 \quad (6.4)$$

The parameter  $\iota$  describes the relative weight the monetary authority places on price stability versus unemployment.

### 6.1.2 *Economic Assumptions*

Rather than posit a full model of the economy, I import Iversen's specification of the labor market and expectations-augmented Phillips curve. Specifically, I assume that unions set nominal wage increases.<sup>2</sup> The effect of nominal wages on prices and unemployment flows through two channels: a relative price effect and an aggregate price effect.<sup>3</sup> The relative effect for union  $i$  is given by  $cw^i$ , where  $c = 1/n$  is a measure of the centralization of unions. The relative effect for all other unions is given by  $cw^o$ . The aggregate effect for  $i$  is  $c^2w^i$  while for all other unions it is  $c(1 - c)w^o$ . If  $M$  were to set inflation below the

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<sup>2</sup>Obviously wage increases are the result of union-employer bargaining. This simplification is equivalent to models in which the union sets the wage rate and the employer sets employment levels, given the union wage.

<sup>3</sup>See Iversen (1999:38-46) for a detailed discussion and derivation of the relative and aggregate effects.

price increases implied by the nominal wage demands  $w^i$  and  $w^o$ , there would be an effect on unemployment. These disequilibrium conditions simplify to

$$\Delta U^i = w^i(c^2 - c + 1) + w^o c(1 - c) - \pi \quad (6.5)$$

$$\Delta \bar{U} = cw^i + (1 - c)w^o - \pi \quad (6.6)$$

### 6.1.3 Sequence of play and information

The game is played in discrete time from  $t = 0, \dots, \infty$ . The value of  $\epsilon$  is common knowledge and assumed constant for all periods. At  $t = 0$ ,  $P$  and  $L$  can bargain over a contract of the form  $\langle S'_\infty, w^{i'}_\infty \rangle$ , where the subscript denotes an infinite sequence of vectors  $(S'_t, w^{i'}_t)$ . I assume that, if possible,  $P$  and  $L$  reach a Nash bargaining solution in setting contract terms. If a contract is signed, then the contract's existence is announced to  $C$ , along with the values  $\langle S'_\infty, w^{i'}_\infty \rangle$ .  $C$  then either appoints  $P$  or some challenger as policy maker. If the challenger is selected then  $\tau_t = 0 \forall t$  and  $L^i$  sets nominal wages accordingly. If  $P$  is installed in office,  $P$  and  $L^i$  implement  $\tau_t$ ,  $S_t$ , and  $w^i_t$ , which need not be those announced under a pact.  $M$  sets  $\pi_t$  and the stage ends. In subsequent periods, play proceeds identically only there is no possibility for a pact.

### 6.1.4 Equilibria

#### *A one period game*

I first consider the equilibria for a single period of the game. Given equations 6.1, 6.5, and 6.6 and supressing subscripts for time, I can reformulate  $M$ 's optimization problem as

$$\begin{aligned} & \max_{\pi} -\iota \pi^2 - (1 - \iota)(\bar{U} + \Delta \bar{U})^2 \\ & = \max_{\pi} -\iota \pi^2 - (1 - \iota)(\bar{U} + cw^i + (1 - c)w^o - \pi)^2 \end{aligned}$$

yielding exactly Iversen's sufficient condition for a maximum

$$\pi^*(w^i) = (1 - \iota)[\bar{U} + cw^i + (1 - c)w^o] = (1 - \iota)[\bar{U} + w] \quad (6.7)$$

with the far right equation resulting from the fact that  $w^i = w^o$  in equilibrium. Note that  $\frac{\partial \pi^*}{\partial w^i} \rightarrow 0$  as  $c \rightarrow 0$ , that is as bargaining units become smaller or, equivalently, less coordinated, each unit's wage settlement has a smaller impact on the monetary authority's decision.

Let us now consider what the unions will demand in the absence of any pact. Given  $M$ 's best response,  $L^i$  faces the following maximization problem:

$$\max_{w^i} \alpha(w^i - \pi^*(w^i)) - (1 - \alpha)(U^i + \Delta U^i)(\bar{U} + \Delta \bar{U})$$

Using the fact that  $w_o = w_i$  and  $U^i = \bar{U}$  in equilibrium, the unions' optimal wage demand is given by

$$\hat{w} = \hat{w}^i = \frac{\alpha(1 - c + c\iota) - (1 - \alpha)\iota\bar{U}(c^2 + 2c(\iota - 1) + 1)}{(1 - \alpha)(c^2 + 2c(\iota - 1) + 1)\iota} \quad (6.8)$$

once again, equivalent to Iversen's expression. We can also now specify  $\frac{\partial W^{L^i}}{\partial w^i}$  and  $\frac{\partial W^C}{\partial w^i}$ , two expressions that will be useful later:

$$\frac{\partial W^{L^i}}{\partial w^i} = \alpha(1 - c + c\iota) - (1 - \alpha)\iota(\bar{U} + w^i)[(c - 1)^2 + 2c\iota] \quad (6.9)$$

$$\frac{\partial W^C}{\partial w^i} = 2c(-\iota^2 + 2\beta\iota - \beta)(\bar{U} + w) \quad (6.10)$$

A bunch of tedious algebra shows that  $\frac{\partial W^{L^i}}{\partial w^i} > 0$  for  $w^i < \hat{w}$  and that  $\frac{\partial W^C}{\partial w^i} < 0 \forall \beta, \iota \in [0, 1]$ . In words, the non-policy portion of the unions' utility is increasing in its wage up to  $\hat{w}$  whereas the citizen's utility is decreasing in the unions' wage demands. This relationship is fundamental to a pact; unions and voters make an agreement whereby unions are compensated for giving up wages and the gain for the citizen is worth the policy price.

Having established the monetary authority's and union's best responses to one another in the absence of a pact we can now consider equilibrium in the one shot game. Working backwards, it is clear that  $M$  will set inflation to minimize its loss, as expressed above. Next, consider the case in which some pact was signed prior to the election and  $C$  installed  $P$ . Suppose further that  $S'$  and  $w'$  are such that both  $C$  and  $L^i$  are better off under the pact than without one (the conditions for this will be elaborated below). In this case, the unions have an incentive to deviate from whatever the pact demanded and set  $w^i = \hat{w}$ . Similarly,  $P$  has no incentive to implement  $\tau$  and  $S'$ . In the one shot game no contract signed by  $L^i$  and  $P$  is credible. As a result,  $C$  will disregard any pact and install  $P$  with probability 1/2 since  $P$  and the challenger are indistinguishable in terms of expected policy. This discussion yields the equilibrium result:

**Proposition 6.1 (equilibrium in the one shot game)** *The subgame perfect Nash equilibria in the one shot game are as follows:*

- $M$  sets  $\pi = \pi^*(\hat{w}^i)$
- $L^i$  signs any pact offered with probability 1/2;  $L^i$  sets  $w^i = \hat{w}^i \forall i$ .
- $P$ 's set of contract offers is unrestricted  $P$ ;  $P$  sets  $\tau = 0$
- $C$  votes for  $P$  with probability 1/2.

While pacts are possible in the equilibrium they are not worth the paper they are printed on; they are not credible. In addition, the citizen's decision to randomize over votes is unattractive. Should  $P$  "tremble" and implement some  $\tau > 0$  while the unions play their equilibrium strategy, the citizen bears all the costs.

Substantively, this result formalizes an intuition about pacts held by many: pacts are just cheap talk with no bearing on policy. There are some examples of pacts that appear to correspond to this characterization. The 1979 National Accord signed by the Carter Administration and the AFL-CIO was an attempt to deflect criticism of the Democrats' handling of inflation in the run up to the 1980 Presidential election (Flanagan, 1980).



Clearly voters found the agreement less than convincing which may be a function of the pact's vague language.<sup>4</sup> The missing piece in this game is any way for the unions or party to punish one another for not living up to the pacts terms.

### *The repeated game*

For a pact to be politically useful it must be credible in the eyes of the electorate. Since no agent can coerce the government into compliance *ex post*, a pact must be self-enforcing which requires repeated play. As the game is played through time I assume that all players hold the common discount factor  $\delta$ .

As with all repeated games, there are an infinite number of equilibria including an infinite repetition of the equilibria described in proposition 6.1 (Fudenberg and Maskin, 1986). I am interested in characterizing equilibria in which pacts that are proposed are signed, both  $L^i$  and  $P$  implement the pact's provisions, and  $C$  appoints  $P$  in every period after having seen a pact. Put another way, the pact is both credible and self-enforcing. To construct the equilibrium, I posit a trigger strategy. Specifically I consider the conditions under which the following strategy profile constitutes an equilibrium:

- $M$  sets monetary policy in each period as above
- $L^i$  sign a pact and set  $w_t^i = w_t^{i'} \forall i$ , provided that 1)  $P$  is in office at  $t$ ; 2)  $P$  has set  $S_r = S_r' \forall r < t$ ; 3)  $w_r^o = w_r^{o'} \forall o \neq i \forall r < t$ . Otherwise  $w_t^i = \hat{w}$ .
- $P$  signs a pact and sets  $\tau = S_t' + \epsilon$  and  $S_t = S_t'$  provided that 1)  $P$  is in office at  $t$ ; 2)  $w_r^i = w_r^{i'} \forall i \forall r < t$ . Otherwise  $\tau_t = S_t = 0$ .
- $C$  installs  $P$  in office in every period provided that 1) a pact was signed at  $t = 0$ ; 2)  $P$  was in office at  $t - 1$  or  $t = 0$ ; and 3)  $W_r^C > W^C(\hat{w}) \forall r < t$ . Otherwise install the challenger.
- $P$  and  $L^i$  set  $w^{i'}$  and  $S'$  according to Nash bargaining.

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<sup>4</sup>This brings up the issue of variations in pact content which is beyond the scope of this model.

Let  $\sigma$  denote this strategy profile. Note that  $\sigma$  requires both vertical and horizontal accountability: All unions defect if  $P$  fails to deliver or if one of the other unions fails to cooperate in wage restraint.

#### STATIONARITY

In the model the state of the economy is fully determined and realized every period. This has implications for the strategies I must consider. First, the monetary authority has no need to take into account future (or past) wage demands when setting the inflation rate. In the multi-period game,  $M$ 's best response correspondence remains the same as in (6.7). Similarly, the unions have no incentive to take the future into account in the absence of a pact so  $\hat{w}_t^i$  is given by (6.8), with the  $\bar{U}$  and  $U^i$  parameters subscripted for  $t$ . Finally, I can restrict my attention to contracts in which  $S'_t = S'_{t+1}$  and  $w_t^{i'} = w_{t+1}^{i'}$  for all  $t$  without loss of generality.

#### PARTICIPATION CONSTRAINTS

In a self-enforcing pact, participation by  $P$ ,  $L^i$ , and  $C$  must be incentive compatible. For  $P$  this is not a problem. All  $P$  values is holding office and neither proposing nor signing a pact is costly so  $P$  will propose, sign, and implement any pact provided it believes  $L^i$ ,  $M$ , and  $C$  are playing  $\sigma$ .

Given the strategies of  $L^i$  and  $P$ , it is in  $C$ 's interest to appoint  $P$  iff

$$\frac{\delta}{1-\delta}V^C(w', \tau') \geq \frac{\delta}{1-\delta}V^C(\hat{w}, \tau = 0) \quad (6.11)$$

where  $\tau' = S' + \epsilon$ . Note that since  $C$  acts every period to select the government, the discount factors cancel and condition 6.11 is equivalent to ensuring that the value to  $C$  of a pact is at least as good as having no pact in every period.

For a pact to be in the interest of the unions in the repeated game, it must be the case that the (discounted) benefits of the pact exceed the forgone wages. Formally, for a pact to be an equilibrium outcome the value to the unions of a one-time deviation cannot outweigh the the punishment inflicted by  $P$  and  $C$ , i.e., reverting to the no-pact state for the rest of

the game:

$$\begin{aligned}
\sum_{t=r}^{\infty} [W_t^{L^i}(w') + \tau_t - \epsilon_t] &\geq W_r^{L^i}(\hat{w}) + \tau - \epsilon + \sum_{t=r+1}^{\infty} W_t^{L^i}(\hat{w}) \\
&\Downarrow \\
\frac{\delta}{1-\delta} [W^{L^i}(w') + \tau - \epsilon] &\geq \tau - \epsilon + \frac{\delta}{1-\delta} W^{L^i}(\hat{w})
\end{aligned} \tag{6.12}$$

Condition 6.12 emphasizes the standard result in the theory of repeated games: equilibria supported by trigger strategies require that the players do not discount the future too heavily. Note, however, that so long as voters find the pact credible only the unions' discount rate matters. The other players' payoffs are determined within a single election cycle. Formally,  $\delta$  must be greater than  $\delta^*$  where

$$\delta^* \equiv \frac{\epsilon - \tau}{W^{L^i}(\hat{w}) - W^{L^i}(w') + 2\epsilon - 2\tau}$$

#### VOTERS

While I assume that the actual values of  $w'$  and  $S'$  are the result of a Nash bargaining process, to characterize equilibria we need to find the values that will make the players exactly indifferent between a pact and no pact. First, consider the  $C$ 's decision. The best contract the decisive voter can hope for is the one that makes  $L^i$  indifferent between signing and not, assuming that the pact is implemented in equilibrium.<sup>5</sup> The values for this contract are given by the solution to

$$\begin{aligned}
&\max_{\tau, w} && W^C(w) - \tau \\
&s.t. && \\
&\tau &\geq & \frac{\delta}{2\delta - 1} [W^{L^i}(\hat{w}) - W^{L^i}(w)] + \epsilon \\
&\tau, w &\geq & 0
\end{aligned}$$

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<sup>5</sup>In the language of contract theory, this is the pact in which  $C$  retains all the surplus from trade;  $C$  is the residual claimant. Note that this is formally equivalent to an NBS in which all the bargaining power resides with the party.

where the first inequality is the unions' participation constraint derived by solving (6.12) for  $\tau$ . The constraint will bind, giving the first order condition that implicitly defines  $\underline{w}^i = \underline{w}^o = \underline{w}$ , the smallest wage increase a pact can induce or, equivalently, the maximum amount of wage restraint that any pact can secure:

$$\frac{\delta}{2\delta - 1} \frac{\partial W^{L^i}(w)}{\partial w} + \frac{\partial W^C(w)}{\partial w} = 0 \quad (6.13)$$

Substituting in the appropriate derivatives and simplifying yields

$$\underline{w} = \frac{\delta}{2\delta - 1} \frac{\alpha(-\iota c + c - 1)}{2\beta c(2\iota - 1) + \iota((\alpha - 1)(c - 1)^2 + 2(\alpha - 2)c\iota)} - \bar{U} \quad (6.14)$$

Note that this is strictly decreasing in the average unemployment rate, i.e., best-case pact for the citizen gets better the higher the unemployment rate. Let  $\underline{\tau}$  and  $\underline{S}$  be the values of  $\tau$  and  $S$  defined by  $\underline{w}$  and the union's participation constraint.

For some values of  $\epsilon$ , condition 6.11 will not hold, making a pact impossible. Specifically, substituting  $\underline{w}$  into (6.11), canceling the discounting terms, and using the derivation of  $\underline{w}$  and the unions' participation constraint yields the following claim:

**Claim 6.1** *A pact can emerge in equilibrium only if*

$$\epsilon \leq [W^C(\underline{w}) - W^C(\hat{w})] + \frac{\delta}{2\delta - 1} [W^{L^i}(\underline{w}) - W^{L^i}(\hat{w})] \quad (6.15)$$

Let  $\bar{\epsilon}$  denote the value of  $\epsilon$  for which the expression 6.15 holds with equality. The claim says that if the slippage between taxes and transfers is too high, then no amount of wage restraint can be purchased from the unions. One way to interpret  $\epsilon$  is as a the transaction costs of negotiations or transfers to unions. A more substantive spin on the same concept would interpret  $\epsilon$  as a partisan indicator in which parties opposed to working with unions have  $\epsilon$  sufficiently large. In other versions of this model, I considered  $\epsilon$  as representing "competency". In that version, a pact is a signal that a party has at least minimal competency. Below I briefly consider extensions of the model in which  $\epsilon$  varies both through time and across parties.

### THE INCUMBENT PARTY, UNIONS, & NASH BARGAINING

The incumbent in this model only values holding office. As such it has no incentive to deviate from the posited equilibrium, given that all other players are playing  $\sigma$ . Specifically, given that  $\epsilon \leq \bar{\epsilon}$ ,  $P$  can discontinuously increase its chances of holding office by signing a pact so long as  $\underline{w} \leq w' \leq \hat{w}$ . Once in office under a pact, if  $P$  fails to deliver the agreed  $S'$  it will lose office next period. Overtaxing  $C$  beyond what is needed to fund  $S'$  yields  $P$  no gain whatever.

Unions bargain with government to maximize their wage/employment/trasfer payoff. Given a bargaining outcome that is at least as good as the outcome from  $\hat{w}$ , the unions cannot gain by unilateral defection, provided  $\delta \geq \delta^*$ .

To fix the actual value of  $w'$  and  $S'$  in equilibrium, I assume that  $P$  and  $C$  engage in Nash bargaining in which  $P$ 's bargaining objective is exactly  $C$ 's objective function. The surplus is split between the two based on their relative bargaining power. This is an attractive solution as there is no *a priori* reason to believe that one party will be able to dictate terms to the other. Note, however, that while  $C$ 's preferences partially determine the division of the surplus, the *size* of the total surplus is dictated by  $\epsilon$ . As  $\epsilon \uparrow \bar{\epsilon}$ , the surplus goes to 0. I do not further characterize the Nash bargaining solution here.

The discussion above yields the main result:

**Proposition 6.2 (pacts-as-equilibrium in the infinitely repeated game)** *There exists a set of Nash equilibria in the infinitely repeated pacting game under strategy profile  $\sigma$  provided that  $\epsilon < \bar{\epsilon}$  and  $\delta \geq \delta^*$*

Substantively, this proposition describes the conditions under which a pact can in fact deliver on the promised policies. In so doing, the pact in effect serves to induce some degree of centralization in wage bargaining, but rather than being a function of either internal union political events or the interests of employers (Swenson, 1991), elections and the interests of voters induce this centralization.

### 6.1.5 *Implications*

I wish to call attention to several implications of the model that I use in the empirical work. First, the entire structure of the game is driven by the electoral concerns of parties. Ultimately, elections are both the reason for policy promises and contracts and the mechanism that induces compliance by the unions and the incumbent. As such, we should expect pacts to occur near elections. The signaling model extensions discussed below only serve to reinforce this connection. Second, transaction costs affect the emergence and potential benefit of a pact. Third, the fragmentation of the union movement has implications. As  $c \rightarrow 1$  the unions bear an increasing portion of the costs of their wage demands in unemployment *of their members*. When  $c = 1$ , the unions are fully internalizing the costs of their wage demands and therefore have nothing to gain from further wage restraint. This implies that pacts are unlikely in highly centralized environments. When unions are highly fragmented, a similar dynamic develops in that bargainers are unable to gain monopoly rents in wages. If we consider the extension below in which there are costs for monitoring compliance, fewer players increases the likelihood that the trigger strategy can be sustained. Pacts, therefore, are most likely to emerge in places where unions are moderately centralized. Pacts can be thought of as using elections to at least temporarily induce centralization in the union movement. Finally, Adolph (2006) shows that the unemployment reductions from a pact are greatest where the central bank is an inflation hawk and unions are moderately centralized. His results carry through to the equilibrium described for this model.

## 6.2 *Limitations and extensions of the model*

In order to focus on the electoral linkage between pacts and policy, the model relies on several strong assumptions that make it less than realistic. In addition, the trigger strategy has the undesirable property of being only a subset of an infinite number of possible equilibria. While it is an interesting one and one I argue is closely related to events we observe in the real world, extensions of the basic model should serve to reduce the number of equilibria.

### 6.2.1 Signaling competence

Parties with strong links to labor unions often face the charge that these links make them beholden to the wishes of union bosses and incapable of acting to address salient issues. A pact can, in addition to making electoral promises credible, signal to the electorate that a party is in fact capable of dealing with the unions for the benefit of all. We can model this with a relatively simple extension in which  $\epsilon$  can take on more than one value.

#### *Constant $\epsilon^j$*

Suppose that there are two possible values of  $\epsilon$ ,  $\epsilon^l$  and  $\epsilon^h$  with  $\epsilon^h > \bar{\epsilon} > \epsilon^l \geq 0$ . The citizen is initially uncertain about which type of party she is facing.  $C$  clearly prefers that the  $\epsilon^l$ -type hold office, provided this party is able to strike a bargain with the unions.  $C$  holds prior beliefs that  $\epsilon$  is distributed as Bernoulli with  $Pr(\epsilon = \epsilon^l) = \theta$

At  $t = 0$  Nature reveals the value of  $\epsilon$  to  $P$  and the  $L^i$ .<sup>6</sup>  $P$  and  $L^i$  can then strike a pact, the Citizen updates her beliefs and votes, policy is implemented and the outcomes realized. Under the same equilibrium conditions as described for the complete information version, pacts can emerge and be self-enforcing in equilibrium. In this equilibrium, however, the pact also serves as a signal of party type to the electorate. By construction, only  $\epsilon^l$ -types can sign pacts that will be implemented in equilibrium, yielding a separating equilibrium. The self-interested actions of unions serve to inform the electorate.

#### *$\epsilon$ varying through time*

A more complicated extension would relax the assumption that  $\epsilon$  is fixed and immutable for all time. In the spirit of Rogoff and Sibert (1988) and Rogoff (1990), suppose elections are held every other period and  $\epsilon$  follows an MA(1) process, i.e.  $\epsilon_t = \kappa_{t-1} + \kappa_t$ , with  $\kappa$  i.i.d. according to some distribution function,  $G$ . A model of this sort would enable us to capture the fact that competence likely varies over time as events and conditions change.

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<sup>6</sup>That  $L^i$  knows  $P$ 's type with certainty is not strictly necessary. All that is needed is that  $L$  have better information than  $C$ .  $L$ 's acquisition of this information could occur in a variety of ways. For example,  $L$  could learn about  $P$  during the process of bargaining over a pact.

This model might then also reflect three features of pacts that we observe in the world: frequent renegotiation, collapse, and defeat of the incumbent.

### *6.2.2 Costly monitoring*

Any trigger strategy relies on the ability of the other players to monitor one another and detect noncompliance. The basic model assumes that monitoring of all parties is essentially costless. All unions will know if any of their brethren defect, as will the incumbent party. This is clearly unrealistic, all the more so as the the number of unions increases ( $c$  decreases). I conjecture that introducing monitoring costs, whether funded by the government out of transfers or by unions, shrinks set of parameter values in which a pact can be sustained but otherwise does not fundamentally alter the gist of the model. If the costs of monitoring and detection were correlated with  $n$ , we would expect pacts to be more difficult to induce where the labor movement is more fragmented.

### *6.2.3 Electoral competition*

The model also abstracts away from partisan competition, instead positing an incumbent and and a reversion point that I have called a challenger. A more realistic model might include two or more parties in which unions have a stake in one party winning. Combining this with the time-varying  $\epsilon$  extension described above could yield a much richer set of predictions. Nevertheless, there are several ways competition could be implemented, depending on the assumptions made about the policy preferences of parties and the information structure. I defer these for future work.

### *6.2.4 Heterogeneity amongst unions*

In much the same way that electoral competition induces heterogeneity across parties, heterogeneity across unions is a feature of the real world not captured in the basic model. Unions could plausibly differ in their discount rates, impact on the overall economy, and the degree to which they care about unemployment relative to wage gains, amongst other things. Each of these has implications for the internal politics of union federations as they



negotiate with government. How these might affect pacts is left for later work.

### **6.3 Conclusion**

I have shown that pacts are a way for parties to make policy promises credible and binding in equilibrium. Both political parties and unions rely on the the electorate to punish deviations from the promised policy, thereby inducing compliance and making the policies credible ex ante and a strong connection between pacts and the electoral calendar. The degree to which this occurs depends on the discount rate of the unions and the size of transaction costs. Extensions of the basic logic identify the possible signaling value of pacts for parties and point to the importance of monitoring in sustaining equilibrium and in making pacts less sustainable in places where unions are fragmented. Other possible extensions involve complicating the information structure, vote timing, and temporal evolution of transaction costs.

## Chapter 7

**THE DETERMINANTS OF SOCIAL PACTS, 1974-2000**

Early work on government partisanship and labor market institutions finds a systematic relationship between Left-Labor parties, wage bargaining centralization, and economic performance (Alvarez, Garrett and Lange, 1991; Garrett, 1995, 1998). These findings seem to conflict with the paucity of evidence for partisan cycles in economic outcomes (Clark, 2003; Franzese, 2002*a*). I argue that there is little reason to expect a correlation between the partisanship of the executive and economic policy outcomes without a better understanding of how parties interact with their activist bases to generate policies. In an effort to provide a more nuanced understanding of how elections, parties, and interest groups interact to produce policies, I examine “social pacts”—formal policy-for-wage-restraint bargains between governments, union federations, and employers.

While there are strong theoretical reasons to expect macroeconomic policy to follow the electoral calendar, the evidence for a relationship between electoral cycles and real economic outcomes is much less conclusive. The emerging consensus is that the sharpness of the “political business cycle” in both policies and outcomes is conditioned by a variety of institutional and structural factors (Franzese, 2002*a*). To better understand the relationship between political cycles, economic policy, and outcomes, scholars are taking a more detailed look at specific economic policies and political actors (Adolph, 2006) as well as the policy levers available to them (Clark, 2003). In this tradition, I examine the emergence of broad, publicly announced deals in which governments negotiate economic policy with important non-governmental actors. Consistent with the model in chapter 6, I find that, conditional on the economic situation, the emergence of these social pacts is strongly related to the electoral cycle.

This chapter makes several contributions. First, I use social pacts as a window into understanding how the electoral concerns of partisan actors interact with the interests of

their core constituencies to affect both economic policy and the organizational capacity of constituency groups. In so doing, I situate the research on social pacts within the larger literature on the political control of the economy. Second, I introduce an original data set that codes social pacts and several of their attributes in 20 OECD countries from 1974-2006. Third, I use these data to conduct the first systematic, quantitative study of the determinants of social pacts. Fourth, my findings provide evidence that the emergence of pacts is strongly affected by both electoral institutions and cycles.

The chapter is organized into four parts. The next section summarizes the various hypotheses in the literature on social pacts. Section two describes the data collected to evaluate these hypotheses. Section three presents statistical models of pact onset and discusses the models' findings and limitations. Section four concludes. Appendix C provides additional detail on the pacts data set and the covariates in the models.

## 7.1 *Explaining social pacts*

Social pacts pose several puzzles: why would the government negotiate policy rather than just legislate as it sees fit? Why would unions ever agree to go along with a pact? Why do some pacts persist while others collapse? In looking at what causes social pacts in some cases but not in others, we gain insight into why governments of different partisan stripes might choose negotiate policy in some instances and act unilaterally in others.

The literature to date offers up a series of hypotheses, some with theoretical justification grounded in the incentives facing union leaders, employers, and politicians but many that are arrived at inductively or are simply *ad hoc*. In figure 7.1 I summarize the various relationships that scholars have put forward as affecting pacts. Below I identify the major hypotheses that are testable with the data at hand.<sup>1</sup>

Figure 7.1 identifies two challenges. First, there has been much more work on the emergence of pacts and consideration of their purported effects than on the variables that affect their longevity. Second, the variables that plausibly affect pact duration are endogenous to

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<sup>1</sup>Even this complicated figure leaves out some plausible causal relationships. For example, there is some case study evidence that pact duration negatively affects the organizing and bargaining capacity of local unions. Pizzorno (1978) made a similar argument many years ago when he claims that the decision of unions to enter in to political bargains necessarily weakens their relationship with rank-and-file workers.

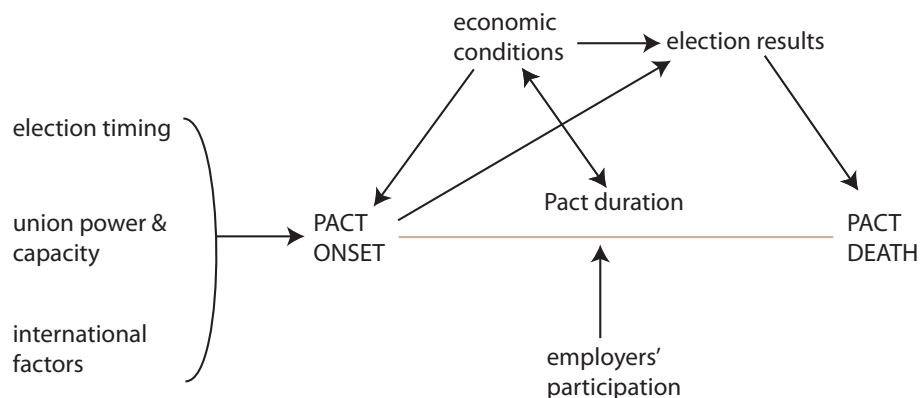


Figure 7.1: The various factors hypothesized to affect the life cycle of social pacts

both pact emergence and other variables argued to affect pact duration. These endogeneity problems in pact duration substantially complicates empirical analysis. As a result, this paper focuses exclusively on pact onset; it is not currently possible to estimate a model for the entire pact lifecycle without serious violations of independence assumptions.

### 7.1.1 elections and parties

In this paper I argue that much of the action driving social pacts emanates from the electoral concerns of politicians. I am hardly the first to posit that pacts have a political component. Early work (Regini, 1995) conjectures that pacts are a way for governments to share the blame as they alter welfare spending regimes. Virtually every case study of a pact makes some connection between pacts and politicians' concerns with elections. More recent works (Baccaro, 2006; Baccaro and Simoni, 2006; Baccaro and Lim, forthcoming; Hamann and Kelly, 2007) have made explicit statements linking pacts to political concerns. Specifically, Baccaro and co-authors argue that pacts emerge when minority or caretaker governments face a "crisis". Hamann and Kelly (2007) make a claim about "electoral pressure".

My argument differs from these previous ones, however. In chapter 6 I developed a formal model of union-government pacts. In the model, pacts are equilibrium outcomes of an infinitely repeated game between unions, a political party, the central bank, and

the decisive voter. Pacts emerge because they provide economic benefits to both unions and citizens and electoral success to the political party. In equilibrium, the party's policy promises are credible. This credibility is induced by the self-interested action of unions and voters and supported by a multi-lateral trigger strategy: the pivotal voter punishes the incumbent by electing the challenger if fiscal and economic outcomes under the pact are not as good those expected under a challenger; the political party will refuse to compensate unions if any of the unions do not deliver the agreed wage restraint; and each union will renege on its promised wage restraint if either the government fails to deliver the promised union-favored policies or any of the other unions free ride on its wage discipline. This equilibrium is only sustainable if transaction costs are not too high and the unions have long time horizons. I also discuss an extension of the model in which citizens are uncertain about a party's ability to produce effective policy. In that scenario, a pact can not only make the party's policy promises credible, but it also sends a signal to the voter that the governing party is able to deliver policy that the voters prefer.

Importantly, the entire structure of the game is driven by the electoral concerns of parties. Ultimately, elections are both the reason for policy promises and the mechanism that induces compliance by the unions and the incumbent. As such, we should expect pacts to occur near elections. When combined with models of electoral systems and partisan electioneering (Alt, 1985), the model has implications as to whether pacts will be pre- or post-electoral. Specifically, in a two-party system, we would expect pacts to occur prior to elections since either one party or the other will control the executive with certainty. In contrast, in a multi-party system there is little incentive for a union or employer federation to sign a public pact with any particular party prior to an election since the exact composition of the government will not be known until after the election. In either case, a pact can be viewed as an attempt to signal not just to citizens qua voters, but also to citizens in their roles as consumers and investors. In other words, pacts are an attempt to affect individuals expectations about the future course of economic policy.

The above discussion yields a central hypothesis:

*H1: Pacts will be more likely to occur close to elections*

H1a: *Pre-electoral pacts will be more likely in 2-party systems*

H1b: *Post-electoral pacts will be more likely in multi-party systems*

As mentioned above, Bacarro and his co-authors have also hypothesized a relationship between the power of government and pact. Specifically they argue the following:

H2: *Pacts are more likely during minority governments.*

There is a long research tradition linking the presence of Left parties in government to policies favored by the working class (Garrett, 1998; Hicks and Swank, 1984; Korpi, 1983). In the specific instance of social pacts, several authors claim that pacts are more likely when Left governments are in power. Baccaro (2006), Harcourt and Wood (2003), and Rhodes (2001) all argue that Left parties are more likely to negotiate policy with unions since wage. I argue that strong party-union linkages make pacts more likely for three reasons: 1) unions are able to block policy proposals they dislike within the party apparatus preventing Left parties with strong union ties from campaigning on monetarist or pro-employer platforms; 2) party-union linkages decrease the transaction costs of bargaining with and delivering policy to unions; 3) party-union linkages increase the electorate's uncertainty about the party's ability to enact the appropriate policies if these policies might hurt unions; and 4) following Spiller and Tommasi (2003), long term, repeated interaction between elites makes intertemporal political bargains more likely to be sustained. This yields

H3: *The greater the Left party participation in government, the more likely is a pact.*

#### *economic conditions and "crisis"*

The most common idea running through the literature on social pacts is the notion of a "crisis", frequently framed as exogenous, as inducing a publicly negotiated policy response. The debate has largely centered around what constitutes a meaningful or sufficient "crisis". Several possibilities have been proposed. I mention each in turn.

Poor economic conditions, especially high unemployment and inflation, are the most commonly cited sources of crisis. This makes intuitive sense since unions' wage bargaining

activities lie at the nexus of the two in highly unionized economies. In the model, the set of parameter values in which a pact can be sustained increases in unemployment. Unions are more willing to turn to politics when their ability to win gains is attenuated by economic conditions. From an empirical point of view, virtually every case study of pacts mentions both unemployment and inflation as highly salient problems.

*H4: Pacts are more likely to emerge during times of economic distress, in particular high inflation and/or unemployment.*

The literature on social pacts has a strong European focus, so it is unsurprising that several authors have argued that the EMU convergence criteria induce pacts (Fajertag and Pochet, 2000, 1997; Hancké and Rhodes, 2005; Hassel, 2003; Regini, 1995). Specifically, Maastricht signatory countries are required to address deficits and inflation simultaneously without recourse to devaluation, purportedly inducing them to enlist the cooperation of non-governmental actors. Baccaro and Simoni (2006) invokes Kitschelt (2001)'s "problem load" terminology, arguing that some countries faced greater struggles to comply with convergence criteria than others. They go on to hypothesize an interactive relationship between government "strength" and EMU pressures. From these arguments we have the following hypotheses:

*H5: Pacts are more likely to emerge in Maastricht-signatory countries.<sup>2</sup>*

Rhodes (2001) argues that pacts are a response to the pressures of "globalization", specifically the need to ensure export competitiveness and macroeconomic stability. He argues that

*H6: Pacts are more likely as countries become more exposed to the international economy, especially through trade.*

*H7: Pacts are more likely in countries with poor current account balances.*

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<sup>2</sup>Note that this hypothesis, if true, has an immediate corollary: Pacts should be less likely to occur after admittance to the Euro area. Due to data availability, I do not examine this hypothesis here, but it is testable.

*central banking and wage bargaining institutions*

Scholars of industrial relations systems have also focused on the institutional prerequisites and incentives for pacts, in particular the degree of union centralization. Within the literature there is some debate. Most agree that pacts are only attractive when unions are powerful enough in aggregate to affect the evolution of nominal wages in the economy but there is disagreement as to whether highly or moderately centralized labor movements are most conducive. Hancké (2002) and Harcourt and Wood (2003) argue that pacts emerge where wage bargaining is highly centralized because bargains allegedly depend on the ability of peak associations to enforce wage restraint on affiliates.

H8: *The greater the union density, the greater the likelihood of a pact.*

H9: *The greater the centralization of unions, the more likely is a pact*

On the other hand, I argue in chapter 6 and Hassel (2003) claims that pacts emerge where unions are moderately centralized. The intuition for these argument is that fully centralized bargaining already internalizes all the costs of wage demands, implying there is little to be gained from an agreement, while decentralized bargaining and fragmented unions make labor an unattractive partner for achieving social policy goals. In the model from chapter 6, pacts are a way to use elections to induce bargaining centralization in the union movement, at least temporarily. On a parallel track, Adolph (2006:ch.7) presents an extension of the Iversen (1999) model of wage-price bargaining, directly addressing wage-policy trades between unions and governments. The model predicts that wage moderation-social spending trade offs will be most effective at reducing unemployment when unions are moderately centralized and the central bank is an inflation hawk.<sup>3</sup> If we assume that greater expected efficacy in addressing unemployment has some positive impact on government's and unions' willingness to sign pacts, we have the final set of hypotheses for pact onset:

H10: *Pacts are more likely where unions are intermediately centralized*

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<sup>3</sup>Note that Adolph finds empirical support here, though without an explicitly examining the presence or absence of pacts as defined here.



H11: *More independent central banks make pacts more likely.*

## 7.2 Data

This section outlines the data used in subsequent analyses, especially the outcome variable of social pacts. To date, the study of pacts has been through means of case studies of particular countries or pacts. The lack of cross-nationally comparable data on pacts has precluded more systematic approaches. One of the major contributions of this paper is the introduction of a comprehensive data set encoding the signing of pacts in twenty developed democracies for the periods 1974-2000. The countries in the sample are: Australia, Canada, the EU15 (without Luxembourg), Norway, New Zealand, Switzerland, and the USA.<sup>4</sup> The overall structure of the dataset is an unbalanced panel time series. Detailed definitions and sources for all variables are described in the appendix.

### 7.2.1 Social pacts

The response variable in the analysis below relies on coding the timing of pacts.<sup>5</sup> I coded the occurrence and death of pacts at the quarterly level. For pact onset, I model only “new pacts”, as opposed to renegotiated versions of previously existing pacts due to the endogeneity problems discussed above. All findings are therefore restricted in scope; it may be that variables I find to be unrelated to pact onset in fact affect pact longevity or renegotiation.<sup>6</sup> To determine what is new versus renegotiated, I rely on an empirical coding rule: a new pact occurs in a quarter when there is no pact in effect in any of the last three quarters. Further details on the pact codings and sources are in the appendix.

I should note one consequence of my coding and analysis decisions. By my definition and coding scheme the 1982 Wassenaar and 1994 “New Course” agreements in the Netherlands

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<sup>4</sup>Greece, Portugal, and Spain do not enter the risk set until the first election after the reintroduction of democracy.

<sup>5</sup>Recall that pacts are publicly announced formal agreements that must be signed or publicly supported by government.

<sup>6</sup>Re-running the basic models on the datasets including both new and renegotiated pacts as “failures” (see fn 16) does not alter the findings for either the electoral cycle or partisanship. Nevertheless, both my model and the literature have fewer claims to make about pact renegotiation, so I keep with the restricted version of the response variable.

fail to qualify as pacts, even though there are several observers who treat both as important social pacts (Hamann and Kelly, 2007; Hemerijck, Van der Meer and Visser, 2000; International Labour Organization, 2005*b*; Pochet and Fajertag, 2000; Visser, 1998). I justify this decision on the grounds that there was no evidence that government made public statements of support for either accord; indeed, both agreements were concluded under government *threats* of unilateral legislation (EIRR, various; International Labour Organization, 2005*b*; Visser, 1998).<sup>7</sup> Neither accord made demands on the government. Although there is a consensus that the government was deeply involved in brokering these Dutch deals, this is distinct from the logic of publicly contracting over policy that I argue is the *sine qua non* of a social pact. In any event, re-running the analysis below including both of these cases does not alter the substantive interpretation of the statistical findings below, though the magnitude of some coefficients alters.<sup>8</sup>

### 7.2.2 *Covariates*

#### *elections and parties*

Addressing the central concern of electoral cycles is nontrivial. I employ several variables to model this relationship. First, we must account for cross-national differences in election cycles. Following Kayser (2005), I use the time since the last election as proportion of the constitutional interelection period TSLE/CIEP as a cross-country measure of both the proximity to previous elections and latent pressure to hold elections. As this value increases we are both more distant in time from the last election and closer to the next.

As a check on the appropriateness of TSLE/CIEP and to account for the fact that elections can be set endogenously in several countries, I also use two dummy variables. The first takes on the value of 1 if an election will be held in any of the subsequent six quarters and 0 otherwise. The second takes on the value 1 only if an election has been held in any of the previous six quarters.

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<sup>7</sup>If we were to code all the union-employer deals brokered in the shadow of threatened government involvement, then it becomes nearly impossible to tell what is *not* a pact.

<sup>8</sup>The direction of this alteration was not consistent across model specifications.

Hypothesis 2 claims that governments in the minority are important, so I include a dummy variable taking on value of 1 for all periods in which the government controls a majority of the lower house and 0 otherwise.

I measure the party system using the (log) effective number of parliamentary parties.<sup>9</sup> Partisanship of government is measured using the proportion of government seats controlled by Left parties.<sup>10</sup>

#### *economic conditions and crisis*

Major economic variables are unemployment, inflation, and per capita GDP growth. Other variables hypothesized to matter are the government deficit and the current account balance. All these variables, save unemployment, are available only at annual levels, so I interpolate quarterly values using cubic splines.

I also use several variables to address hypotheses surrounding international pressures. To account for Euro convergence pressures, I code a dummy variable as 1 for all Maastricht signatories for each quarter after 1991 or the first quarter of Maastricht adoption. Accounting for increased trade exposure is more difficult since smaller countries tend to be more trade exposed on average and also tend to have more highly centralized wage bargaining (Katzenstein, 1985). As a result, I use the Hiscox and Kastner (2006) measure of trade distortion rather than rely on the standard openness variable. Smaller values of this variable represent more trade openness.

#### *central banking and wage bargaining institutions*

In measuring the hawkishness of the central bank, I follow Iversen (1999) and Adolph (2006) and construct an index that averages the highly invariant coding of bank constitutions with an extremely volatile behavioral measure derived from movement in a country's nominal effective exchange rate. I refer to this variable as CBI.

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<sup>9</sup>results below are unchanged if I substitute median district magnitude for effective parties.

<sup>10</sup>If I use Left party cabinet portfolios as percent of all portfolios rather than parliamentary seats the left partisanship effect fails to achieve significance in the models below. This is curious in light of Gamson's law.

Sufficient data on unions and wage bargaining are much more difficult to come by. Several countries (Greece, Ireland, New Zealand, Portugal, and Spain) are poorly covered in the standard data sets on wage bargaining institutions and union structure.<sup>11</sup> We observe pacts in all of these countries at some point. Additionally, several covariates from the Golden-Wallerstein-Lange dataset (henceforth GWL) that are of obvious interest (e.g., confederal concentration) are not available past 1993 for any country. In general, not including these cases or time periods would induce serious selection bias. As a result, I initially estimate stripped down models that exclude union structure variables. I then fit models which include Kenworthy (2003)'s wage coordination indicator as a proxy for both the centralization of bargaining and the strategic capacity of union confederations. I use this variable as it has the best cross-national and longitudinal coverage of any of the major corporatism indicators and correlates highly with other measures.<sup>12</sup> It turns out that there are no pacts in cases for which Kenworthy's five-point scale takes on a value of three, preventing the algorithm from converging as it tries to estimate a parameter value of  $-\infty$ . I therefore combine categories two and three together and include the compressed scale as an ordered categorical regressor using successive differences contrasts.<sup>13</sup> Successive differences contrasts imply that parameter estimates describe the marginal effect of being in one category versus the prior one; see Venables and Ripley (2002:147-8). I also use net union density, as taken from GWL and supplemented by data from Visser (2006).

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<sup>11</sup>The datasets in the field generally concentrate on 15-18 major OECD economies. New Zealand, Portugal, and Greece are frequently left out. Ireland and Spain are also less likely to show up in these datasets with the same level of coverage as, say, Germany. The GWL data set is the standard, but it lacks coverage for the countries and time periods named above. The Iversen (1999) data on bargaining centralization and central bank stance suffer from the same problems. Ebbinghaus and Visser (2000)'s data on union density and contract coverage, generally considered the best at addressing issues of cross-country comparability of density data, also fail to cover important cases. See Kenworthy (2001, 2003) for detailed surveys of the state of data in the OECD wage bargaining literature.

<sup>12</sup>Kenworthy's index correlates at 0.78 with the Iversen centralization measure and at 0.6 with the GWL Herfindahl index for the largest labor peak association (`appherf1`) for the country-years for which both are available.

<sup>13</sup>I fold category two into three rather than three into four in order to have a more equal distribution of cases across categories. Interpretation of results are unchanged if I do the latter instead.

### 7.3 Models and results

I model pact milestones as an event history process.<sup>14</sup> In each quarter a country not currently under a pact is considered to be at risk.<sup>15</sup> The probability of “failure”, i.e., a pact, is governed by a baseline hazard rate which is then modified through time as a function of covariates.<sup>16</sup> Since countries can (and do) experience repeated spells under pacts and all covariates are time-varying, each country contributes numerous observations which are clearly not independent of one another. To address this dependence across observations, I employ a so-called frailty model in which different clusters are assumed to be more or less prone to failure due to some unobserved heterogeneity. This is achieved by including a random effects term in the linear predictor. Formally, in the Cox frailty model each individual  $i \in \{1, \dots, n\}$  is a member of one and only one group  $j = 1, \dots, q$ . In this application, each  $j$  represents one of the 20 countries in the sample. Each  $i$  is an observation of a country-quarter. The hazard for  $i$  at time  $t$  is

$$\lambda_i(t) = \lambda_o(t) \exp(X_i(t)\beta + Z_i\omega) \quad (7.1)$$

where  $\lambda_o(t)$  is the unspecified baseline hazard rate, a function of time, and  $X_i$  is vector of covariates with associated coefficient vector  $\beta$ .  $Z$  is matrix of dummy variables encoding whether  $i$  is a member of  $j$  and  $\omega$  is a vector of the to-be-estimated random effects. To identify the model we assume  $\exp(\omega_j)$  are distributed as i.i.d. Gamma or Gaussian, both with unit mean and estimated variance  $\theta$ . As  $\theta \rightarrow 0$  we approach the standard Cox model. While there is little empirical or theoretical reason to prefer one over the other, it is known

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<sup>14</sup>All analysis was conducted in  $\mathcal{R}$  2.4.0 (R Core Development Team, 2006) using the **MASS**, **splines**, and **survival** libraries.

<sup>15</sup>In the models below, I use elapsed time (quarters since 1974:I) to measure the counting process rather than gap time, i.e., each (start,stop] interval cumulates for the whole observation period rather than restarting at start=0 in the first period in which a country re-enters the risk set after a spell under a pact. I am unwilling to make the assumption that the baseline hazard rate,  $\lambda_o(t)$ , is independent of calendar time, as required if the counting process is structured as gap time. See Therneau and Grambsch (2000:ch. 8-9)

<sup>16</sup>Event history (or survival) modeling has been most fully developed in the biostatistics and engineering literatures, hence the terminology of “risk”, “failure”, “survival”, and “hazard”. These terms are purely artifacts of the models’ origins and do not reflect any normative judgement. I continue to use them to maintain consistency with the technical definitions of hazard rate, survival curves, etc.

that inference can be sensitive to the choice of distribution. I initially explore both and then report only models using Gaussian frailty unless findings differ across model specifications or convergence considerations so warrant.

### 7.3.1 *Pact onset*

#### *the Maastricht effect*

Exploratory data work turned up a strong association between time periods in which a country was committed to the Maastricht criteria and the hazard of a pact. In figure 7.2, I plot the survival curves generated by simple Cox models with no covariates. In the upper panel, all countries are included whereas in the lower panel the model is stratified by the Maastricht indicator variable. There is a clear increase in the risk of a pact among Maastricht signatories after 1991; the downward slope of the survival curve is precipitous, particularly when compared to the rate of pacts in non-Maastricht country-periods. This association is so strong (no pacts after 1990 were in non-Maastricht countries) that the (penalized partial) maximum likelihood estimator regularly fails to converge in models including the Maastricht indicator variable.

Substantively, this finding demonstrates that the Maastricht criteria are strongly associated with the emergence of social pacts, especially during an era of otherwise relatively stable international economic conditions. Put another way, complying with the Maastricht criteria appears to have provoked a “crisis” in which domestic political actors were effectively constrained by international treaty obligations. While this is an important finding in that it demonstrates an instance of international treaty obligations affecting domestic economic policy, Maastricht in itself is not sufficient for the emergence of a pact.

Methodologically, this relationship poses a conundrum: to find unbiased estimates for other parameters we would like a correctly specified model, i.e., one accounting for the Maastricht effect, however the (more) correctly specified model is preventing convergence of the estimator. To get around this problem I stratify the models below on the Maastricht indicator variable. In so doing, country-quarters subject to the Maastricht agreement have a different baseline hazard rate than for those not under treaty. While this strategy pre-

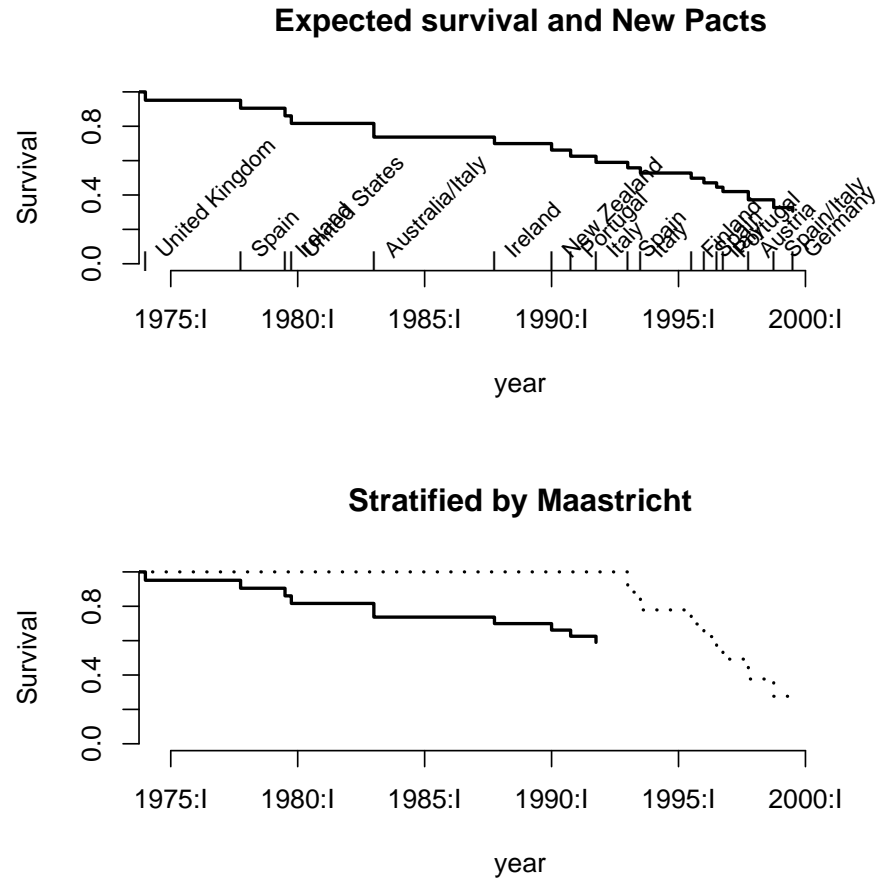


Figure 7.2: The Maastricht dummy variable is highly correlated with the baseline hazard

*Note:* The upper survival curve is the result of a simple Cox model with no covariates. The lower panel comes from the same model stratified by Maastricht.

vents us from directly recovering a coefficient estimate characterizing the magnitude of the Maastricht effect, that is not my primary goal with this analysis.

### *models*

In table 7.1, I display the results from a series of baseline models using different frailty distributions. In these models, the Gamma and Gaussian frailty models seem to provide comparable fits to the data, as evidenced by the likelihood ratios and the fact that the both

models recovered significant frailty variances.

Table 7.1: In Cox frailty models for pact onset stratified by Maastricht, unemployment, electoral cycles and Left government increase the hazard of a pact.

	1		2	
Covariate	exp $\hat{\beta}$ [95% CI]			
inflation	1.00	[0.82 , 1.23]	0.99	[0.81 , 1.22]
unemployment	<b>1.29</b>	[1.00 , 1.68]	<b>1.25</b>	[1.01 , 1.55]
deficit	1.16	[0.92 , 1.45]	1.15	[0.93 , 1.43]
currt. acct	0.92	[0.71 , 1.20]	0.91	[0.70 , 1.17]
growth	1.19	[0.80 , 1.77]	1.16	[0.79 , 1.71]
TSLE/CIEP	<b>1.02</b>	[1.00 , 1.05]	<b>1.02</b>	[1.00 , 1.05]
gov't majority	1.65	[0.35 , 7.60]	1.64	[0.39 , 6.89]
Left gov.	<b>1.03</b>	[1.00 , 1.06]	<b>1.02</b>	[0.99 , 1.06]
No. parties	0.26	[0.02 , 3.18]	0.31	[0.02 , 3.52]
trade distortion	1.03	[0.90 , 1.17]	1.03	[0.92 , 1.17]
$N =$	1737		1737	
No. of countries	20		20	
$\hat{\theta}$	0.64		0.56	
Frailty dist	Gamma		Gaussian	
Log likelihood	−33.8		−27.9	
LR $\chi^2$ (df)	<b>36</b> (12)		<b>34</b> (11)	

*Note:* All entries are exponentiated coefficients, i.e., they are hazard ratios. Values greater than one indicate an increase and those less than one indicate a decrease in the hazard of a pact. All economic variables are lagged one quarter. Entries in italics are significant at the 0.1 level while bolded values are significant at the 0.05 level or better using two-tailed tests. Models use the AIC maximization criterion to estimate  $\theta$ . See the appendix for details on all variables.

The coefficient estimates in the tables are in terms of hazard ratios and indicative of percentage increases (decreases) in the hazard rate for a pact for an instantaneous change in values of the covariates.<sup>17</sup> As an example, the estimated coefficient of 1.29 on unemployment implies that a 1% greater unemployment is linked with a 29% greater risk of a pact, all else constant.<sup>18</sup>

<sup>17</sup>Most software report the  $\hat{\beta}$ , but these are on the difficult-to-interpret log hazard scale. For ease of interpretation, I report the exponentiated coefficient estimates with 95% confidence intervals.

<sup>18</sup>It should be noted that a key part of the *ceteris paribus* clause in event history models is that any change in a covariate is relative to all the countries currently in the risk set, i.e., also holding constant the values of all other countries currently at risk for a pact at time  $t$ .



For the economic covariates, only unemployment consistently appears as a significant predictor of pact onset across specifications. Inflation, deficits, the current account balance, growth, and trade have no significant impact here.

Political variables are also important. The electoral cycle, in particular, shows a strong influence on pact onset. As the pressure to hold elections increases, so does the risk of pact onset. Left party government is also significant and in the expected direction. A government with a Left parties controlling 1% more of the government-held seats, will increase its risk of a pact by about 3%, all else equal. Neither the majority status of the government nor the partisan fragmentation of the legislature seem to have any consistent effect on pact onset.

To get a better idea for the magnitude of the estimated relationships, I focus on TSLE/CIEP, government partisanship, unemployment and inflation and use parameter estimates from model 2. For TSLE/CIEP, I estimate the effect of going one additional quarter without an election (or a pact); on average this constitutes 1/16 of an interelection period. For Left government I use the median change in the percentage of Left government seats across elections (4.3). For inflation and unemployment, I use the median quarter-on-quarter change. I plot the estimated percent change in the hazard of a pact for these changes in figure 7.3. It is immediately apparent that the electoral cycle and government partisanship are playing an important role in the onset of pacts.

To check the robustness of the electoral cycle finding and to gain more insight into the way elections affect pact onset, I fit a series of models replacing TSLE/CIEP with dummies indicating proximity to elections. In table 7.2 I report results. All models use Gaussian frailty. I omit variables not appearing as significant in the previous analysis. Including these variables or changing the frailty distribution does not alter interpretation.

Findings from these models largely confirm what we observed using TSLE/CIEP. Looking at models three and four, we see that pacts are markedly *more* likely in the quarters immediately prior to a pact but much *less* likely in the quarters afterwards, though this latter finding does not attain significance. These effects cancel each other out if they are not specified separately as in, e.g., a model using dummy indicating whether an election occurs within three quarters before or after the current one (findings not reported here). This finding is consistent with the notion that pacts are an attempt to make policy promises

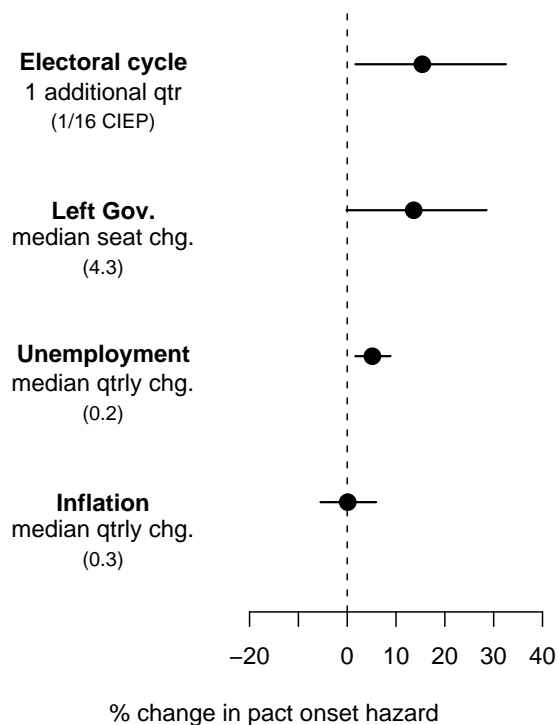


Figure 7.3: The effects of meaningful increases in key covariates on the hazard of a pact

credible to voters.

Models five and six explore the party system hypotheses. I find some support for the argument that a more fragmented party system affects the timing of pacts. Specifically, the coefficient on the number of parties  $\times$  forthcoming election term is significantly less than one; pre-electoral pacts are less likely in multi-party systems. There is little evidence that post-electoral pacts are more likely in multi-party systems. To get an idea of the magnitude and significance of these interaction effects, figure 7.4 plots the difference in the hazard rate between a country with 2.3 effective parliamentary parties and one with 4.3 (the sample interquartile range), given that the country is in the six quarters leading up to an election (top) or after an election (bottom). We can see that the greater the number of parties is associated with a decline in the hazard of a pact by about 75%, given that we are in the six quarters leading up to an election.

Table 7.2: Cox frailty models for pact onset (stratified by Maastricht) point to electoral signalling in pacts. This relationship is attenuated in multi-party systems.

Covariate	3	4	5	6
	exp $\hat{\beta}$ [95% CI]			
unemployment	<b>1.15</b> [ 1.00,1.32]	<i>1.14</i> [0.99 , 1.31 ]	<i>1.13</i> [0.97, 1.32 ]	1.12 [0.96 , 1.32]
deficit	1.13 [ 0.95,1.34]	1.14 [0.96 , 1.35 ]	<i>1.19</i> [0.98, 1.47 ]	1.16 [0.96 , 1.41]
currt. acct.	<i>0.86</i> [ 0.72,1.03]	0.87 [0.73 , 1.04 ]	0.86 [0.69, 1.08 ]	0.91 [0.73 , 1.13]
elec in next 6Q	<i>2.33</i> [ 0.85,6.42]		<b>62.73</b> [1.24, 3170.33]	
elec in prev 6Q		0.49 [0.16 , 1.47]		0.05 [0.00 , 2.08]
No. parties			2.16 [0.21, 21.89]	0.23 [0.02 , 2.50]
parties×elec in next 6Q			<i>0.06</i> [0.00,1.50]	
parties×elec in prev 6Q				6.25 [0.35 ,110.73]
Left gov.	1.01 [ 0.99,1.04]	1.01 [0.99 , 1.04]	<i>1.02</i> [0.99, 1.05 ]	1.01 [0.99 ,1.04 ]
$N =$	1747	1747	1743	1743
No. of countries	20	20	20	20
Frailty dist	Gaussian	Gaussian	Gaussian	Gaussian
$\hat{\theta}$	0.06	0.06	0.10	0.14
Log likelihood	-38.7	-39.1	-36.3	-37.0
LR $\chi^2$ (df)	<b>19.2</b> (5.4)	<i>17.3</i> (5.5)	<b>22.9</b> (7.7)	<b>21.4</b> (8.0)

*Note:* All entries are exponentiated coefficients, i.e., they are hazard ratios. Values greater than one indicate an increase and those less than one indicate a decrease in the hazard of a pact. All economic variables are lagged one quarter. Entries in italics are significant at the 0.1 level while bolded values are significant at the 0.05 level or better using two-tailed tests. All models with Gaussian frailty using the AIC maximization criterion to estimate  $\theta$ . See the appendix for details on all variables.

Overall, the results in this table are striking. Not only do we have additional evidence of an electoral cycle in pacts, but we can say more. Specifically, pacts are more likely *before* elections and when parties are most worried about the electorates perception of their policy making ability.

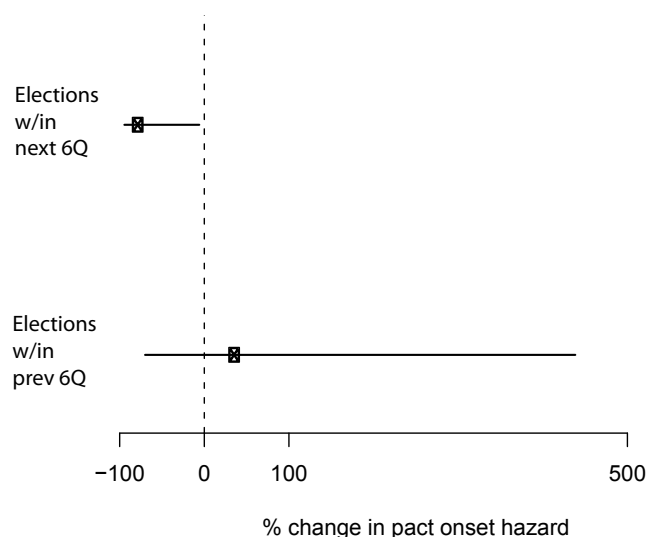


Figure 7.4: Interpreting interaction effects of party system and election timing. Pre-electoral pacts are less likely in multi-party systems.

*Note:* The effective number of parliamentary parties is increased from 2.3 to 4.3 (the sample interquartile range). Bars represent 90% confidence intervals; points represent  $100 \times (\text{median hazard ratio} - 1)$ . The plot is skewed because hazard ratios are distributed log normally.

I now turn to models that include covariates that drastically affect the countries and time periods in the data set. Before looking at results, consider table 7.3, a contingency table displaying the distribution of pacts over the four categories of bargaining coordination. Pacts are most likely in category three, in which there is some degree of centralized bargaining but without a peace obligation or there is a high degree of union concentration and extensive pattern setting. There are very few pacts in any of the other categories.<sup>19</sup> This would appear to support the argument that pacts tend to occur where labor unions are sufficiently centralized to bargain at the national level but not so centralized that they already internalize all of the costs of wage demands.

Table 7.4 displays the results of a series of models. Broadly speaking, the central findings of the chapter reappear in these models. Unemployment and the electoral cycle continue

<sup>19</sup>The three pacts in category 1 are the UK social contract of 1974, the 1979 National Accord in the USA and the 1990 Growth Agreement in New Zealand. The latter two were never implemented.

Table 7.3: A contingency table of pact onset by Kenworthy’s wage setting coordination types. Pacts occur most frequently in upper-middle levels of coordination

	no pact	pact
low coordination	337	3
some coordination	405	1
moderate coordination	559	8
high coordination	284	2

*Note:* I have collapsed Kenworthy’s original five-point scale into four. See the appendix for details on all variables.

to show a strong relationship to pact onset. In these models, increased deficits significantly increase the hazard of a pact and improved current account balances decrease it, but these findings have not been as robust in the models presented above. Neither a hawkish central bank nor real wage costs appear to influence the risk of a pact.

Looking at the union organizational variables, there appears to be support for the hypothesized nonlinear relationship between union centralization and pacts; pacts are most likely as we move from category two to three in Kenworthy’s scale as we saw in the contingency table; moving to category four makes pacts no more likely.<sup>20</sup> Union density, on the other hand, has a significant negative effect.

### 7.3.2 summary

Across specifications of models and despite including several covariates that I would expect to adversely affect the performance of the model, I find strong and consistent evidence for both economic and political determinants of pacts. On the economic side, pacts are more likely during times of high unemployment and in countries aspiring to comply with the Maastricht criteria. For political variables, there is consistent evidence that pacts are related to the electoral cycle. As the pressure for elections builds, pacts become more likely.

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<sup>20</sup>Results for bargaining coordination are similar if the contrast matrix is coded using Helmert contrasts rather than successive differences with the exception that the category four coefficient attains significance at the 0.08 level in model 10. This is unsurprising since in Helmert contrasts coefficients represent a comparison of mean of the  $j$ th level with an average of the means of the  $1...j - 1$  levels. The Helmert contrast version is picking up the small number of pacts in category two whereas the successive differences contrasts are not.

Table 7.4: Cox frailty models for pact onset stratified by Maastricht continue to link pacts to electoral cycles. Pacts are also more likely at moderate levels of union centralization. Union density and central bank hawkishness show the opposite effects from those anticipated.

Covariate	7		8	
	$\exp \hat{\beta}$ [95% CI]			
unemployment	<b>1.85</b>	[ 1.18 , 2.91]	<b>1.74</b>	[ 1.15, 2.63 ]
deficit	<i>1.35</i>	[ 0.96 , 1.90]	<i>1.37</i>	[ 0.96, 1.95 ]
currt. acct.	<i>0.69</i>	[ 0.46 , 1.04]	<i>0.61</i>	[ 0.38, 0.99 ]
TSLE/CIEP	<b>1.04</b>	[ 1.00 , 1.08]	<b>1.04</b>	[ 1.00, 1.08 ]
Left gov.	<b>1.08</b>	[ 1.00 , 1.16]	<b>1.08</b>	[ 1.00, 1.16 ]
union density	<i>0.92</i>	[ 0.84 , 1.02]	<b>0.88</b>	[ 0.79, 0.99 ]
CBI			<i>0.003</i>	[ 0.00, 3.09 ]
coordination:some-low	<i>0.01</i>	[ 0.00 , 1.07]	<b>0.009</b>	[ 0.00, 0.62 ]
coord.ken:mod-some	<b>9.06</b>	[ 1.62 , 2142]	<b>203</b>	[ 3.96, 10000]
coord.ken:hi-mod	3.09	[ 0.16 , 58.04]	1.39	[ 0.06, 33.8 ]
$N =$	1592		1592	
No. of countries	17		17	
Frailty dist	Gaussian		Gaussian	
$\hat{\theta}$	0.35		0.06	
Log likelihood	-12.7		-13.0	
LR $\chi^2$ (df)	<b>39</b> (9.7)		<b>38</b> (10)	

*Note:* All entries are exponentiated coefficients, i.e., they are hazard ratios. Values greater than one indicate an increase and those less than one indicate a decrease in the hazard of a pact. All economic variables are lagged one quarter. Entries in italics are significant at the 0.1 level while bolded values are significant at the 0.05 level or better using two-tailed tests. Gaussian frailty models use the AIC maximization criterion to estimate  $\theta$ .

There is also some evidence that differing party systems provide different incentives for pact timing. Pacts are more likely to occur before an election in two-party systems. Finally, there is a significant if modest partisan effect in pact emergence. Pacts are more likely when Left parties make up more of the governing coalition.

The organizational capacity of labor appears to coincide with arguments claiming that pacts are more likely at intermediate levels of union centralization. A relationship between pacts and union density is not discernable.

As important as the covariates associated with pacts are those found not to have an impact. On the economic side, inflation, growth, and trade exposure were not consistently

related to pact onset once other variables are taken into account. Neither were several of the political variables. The majority status of the government showed no influence whatever and was consistently signed in the opposite direction of what the literature expects. The fragmentation of the party system showed no direct influence on pact hazard.

Table 7.5 summarizes findings in terms of the hypotheses stated in the previous section.

Table 7.5: Hypotheses evaluated

Hypothesis	Result
H1: electoral cycle	strong support
H1a: 2-party, pre-electoral	some support
H1b: multi-party, post-electoral	no support
H2: minority government	no support
H3: Left government	strong support
H4a: unemployment	strong support
H4b: inflation	no support
H5: Maastricht	strong support
H6: trade	no support
H7: current account	some support
H8: union density	no support
H9: linear union centralization	weak support
H10: curvilinear union centralization	some support
H11: non-accommodating central bank	no support

Returning to the apparent conflict between the dearth of empirical support for the partisan cycles and evidence that links partisanship and bargaining centralization to economic performance, the findings here provide some insight: governments may not need or want to rely on inflationary policies or deficit spending when they can bargain over policy directly with interest groups and garner the same electoral benefits.

### 7.3.3 *Extensions of the empirical model*

The models fit so far, while encouraging, make several strong assumptions about the data generating process that are unlikely to hold here. In my mind the most glaring of these is

the assumption that, conditional on covariates, the risk of a pact in each country-quarter is independent of pacts elsewhere.

I have strong reason to believe that pact onset in one country is not independent of pacts in others. In Australia, for example, there is clear evidence that the Australian Council of Trade Unions and the Australian Labor Party consciously studied events surrounding the UK's Social Contract. The former minister for employment and industrial relations in the Hawke government told me "In 1978 I went to the UK to talk about incomes policies. The UK policy failed because [the British] Labour [Party] got too ambitious with its wage demands. Labour tried to keep wages too low with union agreement, but the unions blew out." (Willis, 2006) Indeed the Australian government and the ACTU sent a high-level delegation to Europe in 1985 to evaluate wage bargaining institutions and government-union relations in several countries (ACTU/TDC Mission to Western Europe, 1987). Beyond the Australian case, some authors (Bispinck and Schulten, 2000; Rhodes, 2001) have referred to pacts in terms of "competitive corporatism" in which governments use pacts to gain advantage over their trade competitors. This state of affairs clearly requires a revised modeling framework. The most promising tack so far is that taken by Darmofal (2007). I plan to explore these options in future work.

A second productive extension of the work here is using the model's findings to attempt to predict pact behavior out-of-sample, i.e., into the post-Maastricht period and, once data are available, into additional cases especially those in the new wave of EU expansion.

Another lacuna in the empirical model is pact duration and manner of break down. As mentioned above, we have much less guidance from the literature as to what affects the duration of a pact, once signed. Additionally, to the extent we do have theoretically-based expectations they point to severe problems of endogeneity. I have therefore concentrated on pact onset. Pact duration has only entered the analysis through a back door, the definition of the risk set. I have assumed that in periods in which a country is under a pact it is not at risk for a new pact. As such, countries in which pacts have been particularly successful, i.e., they last for extended periods of time, will be less likely to show up as at risk for a pact. While this is clearly unsatisfactory it is not obvious how to proceed in a principled fashion. I defer this problem for future research, both theoretical and methodological.



## 7.4 Conclusion

In this chapter I presented the first systematic, quantitative analysis of the onset of social pacts. Consistent with models in which governments use pacts to make policy promises credible to voters, I find evidence that pacts are politically driven. Unemployment, electoral cycles, government partisanship, and Maastricht are the most important predictors of pact onset amongst 20 OECD countries, 1974-2000. There is also preliminary evidence that pacts are most likely where wage bargaining is moderately centralized.

With these findings, I firmly situate the literature on social pacts in the larger literature on political business cycles and policy contracting. Parties with strong union ties and at times where labor issues are salient can use formal agreements with union federations to make policy promises to the voters credible without having to rely directly on manipulating short-term policy. What's more, if pacts are successfully implemented in equilibrium, which I argue they can be, we may avoid some undesirable macroeconomic outcomes that are assumed to go along with the Left's policy preferences (e.g., increased inflation). To the extent Left-Labor parties are not equal in their ability to manage union-driven wage demands, we should *not* expect to see partisan cycles in macroeconomic outcomes even if lower-level policy making still follows both a partisan and electoral logic.

I also find that there is little evidence supporting some other hypotheses in the literature. A host of plausible economic covariates do not appear to have the impact frequently attributed to them. Inflation and economic growth never shows a relationship distinguishable from zero; findings for current account balance and budget deficit are mixed and contradictory. The forces of "globalization", as measured by increased trade openness, show no direct relationship with pact onset. The government's majority status and the fragmentation of the party system also show no relationship. Interestingly, results for the organizational capacity of labor and central bank independence are the opposite what we expect. These findings, however, are only provisional as data for these variables are not as reliable and omit some important cases.

Having established the existence of a relationship between the electoral cycle and policy contract with unions, the big question now outstanding is the extent to which this trans-

lates into outcomes. But what are the important outcomes? If the pact-as-commitment-mechanism approach is correct, then it seems the appropriate outcome variable of immediate interest is an electoral one: to what extent do pacts affect voters' beliefs, and, ultimately, voting behavior? What conditions this relationship?

The other obvious area for work is gauging the extent to which pacts affect economic outcomes like unemployment, inflation, and labor costs. While there is some evidence that they have made a difference in particular cases (Beggs and Chapman, 1987; Chapman, 2000; Visser, 1998), more general statements await a model of pact onset *and* duration. Given the challenges I've identified in building an appropriate empirical model, it would appear that any attempt to evaluate the effectiveness of pacts will have to be done on a case-by-case basis. Perhaps a more immediately fruitful area for continued work is in extending the coverage of our data for both pacts and the necessary covariates into additional cases and time periods.

Finally, when pacts cannot be reached with unions, we can expect incumbents to turn to other forms of electioneering. The findings here thus provide additional guidance as to where we might look for partisan cycles as they have been defined in the literature: countries with two-party systems, strong-yet-fragmented labor movements, and politically dependent central banks. The UK prior to the John Major period and New Zealand prior to 1984 both fit this description.

## Chapter 8

**POLICY BY CONTRACT**  
**SOCIAL PACTS IN AUSTRALIA AND NEW ZEALAND**

“There would have to be an agreement. The government would rely on the union movement in the same way that the union movement would rely on the government.”—Laurie Carmichael, former Federal Secretary of the Australian Metal Workers’ Union

The model from chapter 6 emphasizes two factors that are not readily examined using cross-national quantitative data: transaction costs and the actors’ time horizons. Moreover, self-enforcing pacts must be implemented in equilibrium; given the varied nature of individual pacts, observing implementation and compliance across cases is not trivial. In this chapter I turn to a paired comparison of events in Australia and New Zealand during the 1980-96 period to explore all three issues. I document how the transaction costs and time horizons varied in the two countries and explore how the Australian Accord’s centralized bargaining was sustained for nearly a decade. In so doing, I also gain some insight into factors affecting both union leaders’ time horizons and transaction costs. I find that tight organizational linkages between union peak associations and political parties can both reduce the transaction costs of negotiating with government and lengthen union leaders’ time horizons, even if politicians themselves look no further than the next election.

### **8.1 *Australia and New Zealand: case selection***

Australia and New Zealand provide an outstanding opportunity to examine the conditions surrounding the emergence of social pacts. They are historically, culturally, and demographically about as similar as any two countries in the world.<sup>1</sup> Both faced quite similar economic

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<sup>1</sup>This is not to minimize important differences in, for example, indigenous populations, geographic size, or climate, but merely to assert that these differences are not here relevant.

and political crises in the early 1980s. They held elections within a year of one another, with the Labor winning in both. The newly elected governments made opposite choices, however. The New Zealand government embarked on a radical neoliberal restructuring program using interest rate policy to control inflation and unemployment to discipline wage demands. A bargain with the unions was never even considered until immediately before the 1990 electoral defeat of the NZLP. In Australia, the ALP and the ACTU signed a formal Accord, centralizing wage bargaining and imposing wage restraint in exchange for education, health, retirement, and industry policies benefiting unions. The Accord was renegotiated eight separate times and served to implement both a centralized incomes policy and the subsequent transition away from centralized wage setting. For 13 years the Accord functioned as the primary statement of domestic economic policy for the ALP governments.

In this section I first briefly describe the economic policies and wage bargaining institutions that existed in Australia and New Zealand for much of the 20th century. I then turn to a depiction of the political and economic crises of the early 1980s.

### *8.1.1 Economic policy since the Depression*

Australia and New Zealand are far removed from the economic centers of the North Atlantic and have less than 25 million inhabitants between them. At the core of their economies are commodity and agricultural exports. As such, both countries are simultaneously exposed to world markets, as changes in commodity prices produce boom-and-bust cycles familiar to students of developing nations, while also confronting a long-term secular decline in their terms of trade.

From the 1930s to the 1980s both pursued economic policies amounting to import substitution: high tariffs on manufactured imports, import licensing requirements, foreign exchange controls, fixed exchange rates, and export incentives for agricultural and mineral commodities. State ownership and control played a particularly large role in New Zealand, where the government took active roles in virtually every sector of the economy and routinely acted to control prices (Evans et al., 1996). In many ways, the economic structures of Australia and New Zealand in 1980 resembled those of resource-exporting developing coun-

tries more than those of industrialized nations. Export earnings were almost exclusively derived from resource and agricultural commodities. Manufacturing was inefficient, uncompetitive, and concentrated in relatively low-value-added industries like apparel, footwear, and the assembly of consumer durables. Domestic competition was weak, and trade deficits with the rest of the OECD were growing.

In the period since 1990, developments in both countries have paralleled OECD trends: increased openness to the world economy; increases in service sector employment and declines in manufacturing; decreases in union membership and militance; moderation in welfare spending; and increased inequality. Figure 8.1 depicts some of these trends. The figure also highlights several differences. First, during the Accord period (the grey shaded regions), New Zealand's unemployment rate climbed dramatically whereas it decreased in Australia up until the 1990 global recession. Second, New Zealand had much more volatile and generally higher inflation. Third, economic growth has been better in Australia than in New Zealand. Fourth, the growth in inequality has been much slower in Australia than in New Zealand. Last, the decline in union penetration of the labor force has been much less drastic in Australia.

### *8.1.2 Unions and wage bargaining in the Antipodes*

The laws governing union recognition in both Australia and New Zealand date back to the early part of the 20th century. A key feature of the system is the provision for union registration with government. Once registered, a union becomes the sole bargaining agent for a class of workers, usually defined along skill or occupation lines. Government recognition is crucial as wage bargaining in both countries was organized through a system of arbitration tribunals. Skill- and occupation-based unions enjoy property rights in representational monopolies. The union movements in both countries are extremely fragmented. Many small unions have succeeded in carving out occupational niches.<sup>2</sup> General and industrial unions are rare.

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<sup>2</sup>This fragmentation is even more pronounced in Australia, where industrial relations tribunals and union recognition exist at both the Commonwealth and the state levels. There is a complex interplay between state and federal wage cases and awards.

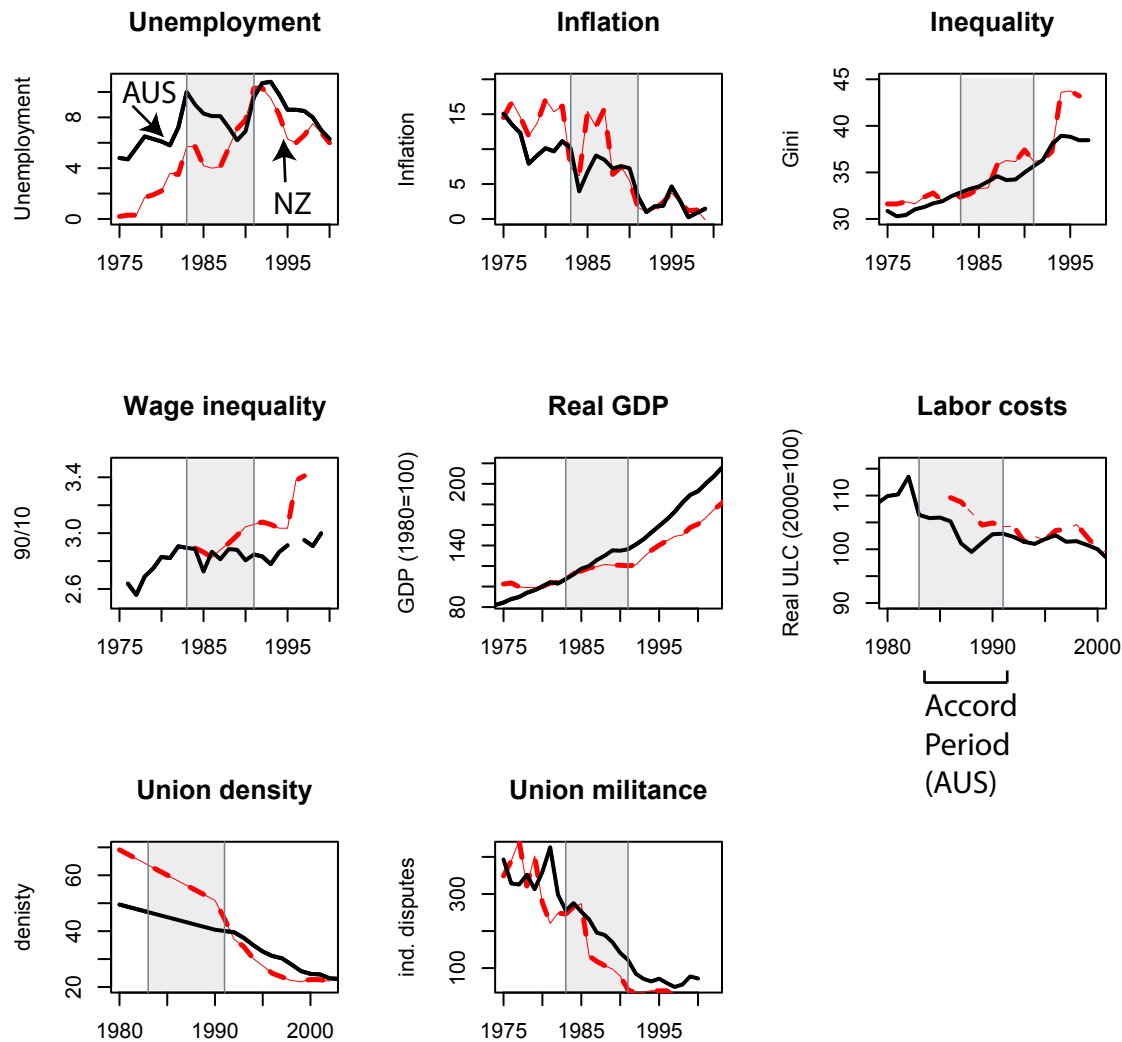


Figure 8.1: Comparing Australia and New Zealand

*Note:* Vertical grey bars represent the Accord period in Australia in which wage movements were centrally negotiated. Data sources are identified in the appendix.

There are also some differences in the two countries' wage bargaining systems worth noting up front. First, in New Zealand public and private sector unions had different bargaining systems. Private sector unions had occupational awards (see below) similar to

Australia whereas the public sector had “enterprise-level” contracts. Second, the public sector made up a much larger portion of the employment base in New Zealand than in Australia, reinforcing the differences in the wage setting mechanisms (Schwartz, 1994). Third, the government of New Zealand frequently intervened in private sector negotiations and awards in ways that were constitutionally impossible in Australia. For example, one interview subject described Prime Minister Muldoon’s intervention in the 1978 meat workers strike. To end the strike Muldoon offered to supplement the employers’ offer with state funds (James, 2006).

Under the arbitration system, wages and working conditions are set using a combination of three venues. First, there is the formal “award”: a statement of wages, conditions, overtime rates, etc., handed down by special industrial relations tribunals. In wage cases culminating in an award, unions, employers, and sometimes governments present cases describing in numbing detail the wage levels that should apply to a particular set of workers. Wage demands are justified on the basis of profitability, productivity changes, and overall price levels. The arbitration tribunals were not economic policy making bodies; they were there to prevent and settle industrial disputes (Isaac, 2006).

Second, there are so-called “over award” payments, in which unions negotiate additional payments above the award rates with specific firms or across industries. Third, unions and firms can elect not to file a wage case at all, preferring to negotiate in the absence of any arbitration.

The relative importance of each of these venues in union and employer negotiating tactics has varied through time and across firms and unions, depending on the stance of the Commission, the relative power of workers, and the state of the economy. Smaller and weaker unions (and employers) tend to seek the benefits and low transaction costs associated with simply implementing the wage decision as handed down. The tribunals, especially in Australia, have also varied in their goals for the scope of their awards. At times the major wage cases were viewed as defining the “basic wage”, i.e., the effective minimum workers would expect to get in different jobs. At other times, the major national wage cases attempted to impose a “total wage”, often with the goal of enforcing wage indexation to inflation. During the latter periods, unions with sufficient industrial power

tended to turn to over award payments and non wage-case bargaining.

Over time, relative wages across the economy ossified into a rigid set of “wage relativities.” These relativities—essentially highly organized and legally enabled pattern bargaining—took one or a combination of the major wage awards as a benchmark and then adjusted the others proportionally based on a predefined set of industrial classifications and functions. Bargaining tactics for national wage cases saw the union federation lead with the strongest affiliates, often the metal workers, and then use the gains won in that case to justify wage demands across the economy. Since wage “flow-ons” became nearly automatic, the award system allowed many of the small, weak unions to survive. Gains won by stronger unions were automatically extended to nearly everybody. Wage pressures percolated through the economy rapidly. One Australian contact remarked, “If the metal workers got a raise on Friday, I’d get one on Tuesday, as a professor!” (Gregory, 2006)

This fixed set of wage relativities, immediate flow-ons, and the never-ending wage cases effectively built cost push inflation pressures into the economy. For many years this was not a major problem in either country. Due to comprehensive protectionist policies, industrial producers were able to pass along any wage increases to consumers. The industrial relations tribunals kept wages, inflation, and unemployment more-or-less in sync.

Beginning in the late 1960s, the system began to show signs of strain. When the UK joined the EEC in 1968, both countries lost their privileged competitive position in their largest export market. With the first oil shocks, the arbitration system demonstrated an alarming tendency to generate “wage break outs”. Taking advantage of high commodity prices in the 1972-3 period, strong unions began negotiating outside the arbitration system. Seeking to maintain historical wage relativities, other unions would file competing wage cases, passing wage increases through the entire economy and stimulating yet another series of demands from the stronger unions. In New Zealand this provoked inflation rates above 10% for the 1974-84 period. The National Party government under Muldoon tried a series of unilateral policies to control inflation and stimulate growth, but was unsuccessful. Finally, Muldoon ordered a general freeze on all prices and incomes in 1982. The freeze lasted nearly two years.

In Australia the Labor government under Whitlam (the first since 1949) was confronting



the oil shocks and wage pressures just as it was implementing a large increase in public spending. “The oil shock came at worst possible time for the ALP because they were spending big; inflation was up to 17%.” (Willis, 2006) The government rejected calls from the Treasury to reduce spending and increase taxes and instead called for wage restraint on the part of the ACTU. Whitlam proposed a partial wage indexation scheme that would have demanded real wage reductions from higher-wage workers. The government offered the unions no other inducements for their restraint. Bob Hawke—the President of the ACTU and future Prime Minister responsible for the Accord—declared in 1974 that “we will not indulge in a trade-off in wages for some conjectural reduction in inflation...our people will not be sacrificial lambs to the system’s alter.” (Singleton, 1990:33). Ultimately, the Whitlam government was unable to secure union cooperation leading to Whitlam’s dramatic defeat in 1975. Whitlam’s successor, a conservative government under Fraser, followed a “fight inflation first” policy in which it attempted to use the Commission to force wage restraint via partial indexation. This policy proved unsuccessful as unions increasingly made demands directly on employers. By 1981, any pretext of wage indexation was jettisoned and another wage break out ensued; the metal workers secured an 18-month agreement providing for a 17% wage increase, a reduction in work hours, and several supplementary allowances (Deery and Plowman, 1991). The agreement flowed on to the rest of the economy immediately. The Fraser government responded by imposing a 12-month wage freeze for all federal workers and asking the Commission to do the same for the private sector. The Commission agreed.

### *8.1.3 Crisis and the contracting moment*

Entering the 1983-84 period, both Australia and New Zealand were in states of full-fledged crisis. Both were under wage/price restrictions which clearly could not be continued indefinitely. Emergence from the freeze, however, was a *political* problem. Policy makers in both countries were keen to avoid the wage-inflation spiral that had ensued in the wage break outs of the 1972-4 and 1981-2.

Double-digit inflation and wage break outs were but one of a host of problems facing both governments. Unemployment was at historically high levels and expected to grow. GDP

growth was negative in Australia and near zero in New Zealand. New Zealand faced an even more precarious situation than Australia, with extremely high debt load and deteriorating credit with international lenders (Evans et al., 1996). Table 8.1 provides a summary of the situation in both countries at the time of the wage freezes.

Table 8.1: The political economies of Australia and New Zealand (1982)

	Australia	New Zealand
Unemployment	7.2	3.5
Inflation	11.1	16.2
% $\Delta$ GDP	-1.1	0.8
% $\Delta$ GDPpc	-3.0	0.2
Current Acct (%GDP)	-5.0	-7.0
Deficit (%GDP)	2.57	7.45
Gov't Debt (%GDP)	17.3	59.8
Union density	49.5	69.1
GDP/hr worked (\$US)	19.4	19.2
Ind. disputes	298	248
ISI	86.8	76.5
Population (MM)	15.2	3.2
GDPpc (\$US,K)	17.5	16.0
CBI	0.36	0.24
Federalism	Yes	No
Electoral rule	SMD w/pref.	SMD
Legislature	bicameral	unicameral

*Note:* Union density values are for 1980; ISI is percent of manufacturing production not exported. CBI is central bank independence. For data sources and definitions see the appendix.

There were political crises ensuing as well. In Australia, the Fraser government was proposing legislation to limit union industrial activity. At the same time, there was dramatic upheaval in the ALP; Hawke replaced Hayden as opposition leader less than a year before the scheduled federal election (Singleton, 1990). As yet there was still no plan to lift the wage freeze.

In New Zealand, the political crisis was even more profound. Muldoon's long spell in office had won him many enemies; his management of the economy turned out to be

disastrous. In a fit of pique, Muldoon called snap elections for 1984. By this time, the NZLP had become, in the words of one union strategist, “an anti-Muldoon coalition” (Harris, 2006). A former Treasury economist quipped that “Muldoon went so far that [Labour] was the only game in town.” (Wilkinson, 2006) The expected change in government and accompanying devaluation provoked a foreign exchange crisis and prompted the Reserve Bank to halt conversion of the New Zealand dollar the day after the election (Evans et al., 1996).

To sum up, in the early 1980s both Australia and New Zealand faced profound economic problems characterized by double-digit inflation and high and growing unemployment. These problems were, in part, endogenous to the economic structure, wage bargaining institutions, and past policy choices of the two countries. Government action in the form of wage-price freezes had provoked a political-economic crises; there were no immediate plans for how to exit the freezes without exacerbating the economic problems. It was in this situation that elections were held. In Australia, the ACTU and ALP signed a pre-electoral Accord in which unions offered to return to centralized wage setting through the Commission and government offered social and tax policies to compensate. No such deal was considered in New Zealand. Once elected, the NZLP embarked on a rapid and radical reform plan lead by Treasury minister Roger Douglas. “Rogernomics”, as the reforms came to be known, included floating the exchange rate, removing compulsory arbitration for wage bargaining, reforming and shrinking the public sector, privatizing the many state-owned enterprises, removing exchange controls, tariffs and export subsidies, and increasing the independence of the central bank, including restricting its mandate to price stability.

## **8.2 *Policy responses to crisis***

Why did the ALP negotiate and sign the Accord whereas the NZLP felt no need to? The model gives four reasons. First, the electorate may be more dubious of the Labor party’s capability to act effectively in Australia than in New Zealand. Second, unions may have more leverage and/or capacity to bargain in Australia. Third, governments may be more institutionally constrained in Australia, requiring consent of the unions in order to implement policy. Fourth, the discount rates of the actors or the benefits of deviation may be

too high to make an agreement self enforcing. The historical record and interviews with key actors identified all these factors as relevant in making the decisions that they did.

### *8.2.1 Incentives for union negotiation*

The willingness of union federations to negotiate with governments does not hold much explanatory power in the cases of Australia and New Zealand. Unions were willing to work with government in both cases. The ALP and ACTU had been discussing various ways to address inflation since the sacking of the Whitlam government. The ACTU had even offered to hold discussions with the Fraser government (Singleton, 1990). In 1984 the New Zealand Federation of Labour (FoL)<sup>3</sup> offered to negotiate an exit to the wage freeze with the newly elected NZLP government. Nevertheless, some attention to the unions' decisions is critical if the argument is to travel outside these two cases.

The model predicts that unions' willingness to forego wage increases will depend on the scale of the social wage offered by the government, the extent to which unions discount the government's offer, and the marginal benefit of a wage gain traded against loss of employment and/or increased inflation. If the threat of unemployment is sufficiently great, unions will prefer to moderate wage demands on employers in exchange for a compensating social wage.

Relaxing the assumption of a completely unified federation, this incentive need not necessarily be symmetric across unions. In order to maintain wage restraint, the strongest unions, i.e., those best positioned to extract wage increases from their employers, will have to be willing to participate. We should therefore expect the strongest unions to be the linchpins of any social pact. Bill Kelty<sup>4</sup> expressed exactly these sentiments: "It was the industrially strong that led the Accord negotiations, not the industrially weak and not the public sector. People like Carmichael [Federal Secretary of the metal workers] and McDonald [Secretary of the building workers] were key." A former official from the ministry of employment

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<sup>3</sup>The FoL subsequently renamed itself the Council of Trade Unions (NZCTU) after it merged with the public sector federation, the Combined State Unions, in 1987.

<sup>4</sup>the ACTU Secretary and person most responsible for the Accord on the union side. I will identify interview subjects by the positions they held during the timeframe of interest, not by their current positions.

and industrial relations adds “Stronger unions were committed to a more centralized approach...They had seen effects of the Fraser government and unemployment,” (Belchamber, 2006).

It was not until unemployment really began to bite the strongest unions that the ACTU and ALP were able to cobble together a workable Accord. Prior to this period, the ACTU had, for several years, discussed returning to centralized wage negotiation, but only under the auspices of full wage indexation. The metal workers opposition to wage restraint provisions had torpedoed previous ALP attempts at an incomes policy (Singleton, 1990). In 1983, with unemployment exceeding 10% and the prospect of a Labor government, the ACTU began to seriously consider real wage restraint. Michael Keating<sup>5</sup> describes the metal workers’ plight: “The metal workers lost bargaining power with the recession and collapse of resource boom. They were willing to go along with recentralization because they were not really giving up much. They couldn’t really get much more along.” After all, the metal workers had just won a 38-hour work week and huge pay increases in the last round of negotiations. Laurie Carmichael<sup>6</sup> puts a slightly different spin the reasons for his supporting the Accord:

The things we were pursuing were quite fundamental. The concept of the social wage—you couldn’t do that industrially...I believed that there were some things that you couldn’t possibly achieve by industrial activity alone...we’d proven [in the last wage cases] that you could do certain things industrially but there were some things that you needed political strength to do and that you needed to have a government in office. So we went to the metal workers membership on the basis of going in to the Accord in order to gain those things that we could not gain by industrial strength alone.

When the Accord came before the ACTU, there were some divisions. Carmichael describes the division:

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<sup>5</sup>secretary of the Department of Employment and Industrial Relations during the ALP governments

<sup>6</sup>Federal secretary of the pivotal Australian Metal Workers’ Union and later Assistant General Secretary of the ACTU under Keltj.

The construction industry, the mining industry, the waterside workers—they opted for pure collective bargaining...They were critical of [those who would negotiate for a social wage]. They condemned it. They expected it to be given politically. They were not prepared to come to an agreement or make a deal or whatever. The union movement was divided...You had a substantial part of the Left that would support the Accord and all the Right was prepared to support the Accord. And you had this other group which were the Maoists [who argued that] it was a weakness to come to an agreement on social wage issues...You should pursue it by industrial means...So you had an unholy alliance among the Maoists and the male-dominated industrially strong sections of the union movement that reflected the dominance of the mining and construction industry. Now on the other side, those that depended on the social wage like the public servants and teachers, they became allies of mine. Those that had a foot in both fields, the metal workers, had a significant number who could make their way through industrial activity also had a significant number of people who could not make their own way...What right have we got to leave our members for dead who can't fight?...We've got the right to pursue social wage activities that they would benefit from...We could formulate a concept that fitted the Accord as it emerged.

Carmichael's support, as Federal Secretary of the metal workers' union, is widely viewed as pivotal in the ACTU's adoption of the Accord. After he and the secretary of the electrical workers' union came out in favor of the Accord at the 1983 ACTU congress, the anti-Accord delegates were, in Carmichael's words, "flattened".

Unions were generally willing to negotiate with parties in both Australia and New Zealand. Only when the strongest unions' marginal gains from additional wage increases were mitigated by high unemployment and inflation, however, was the ACTU able to effectively enter in to an agreement that would require wage restraint.

### 8.2.2 *Electoral signalling and party-union linkages*

#### *Australia*

Ever since the Whitlam Labor government's inability to address the inflation and unemployment problems, conservative governments had hammered Labor as economically irresponsible. Bill Kelty states "I took the view that Labor was in power from '72-'75 but in the end, lost power with no credibility on the economy. Couldn't have handled inflation worse if we'd tried," (Kelty, 2006).

Contributing to the ALP's credibility problems on inflation was the party's tight organizational linkages but sometimes conflictual relationship with the ACTU. The ALP relies heavily on union contributions for its finances. Unions could (and did) affiliate directly with the ALP, controlling bloc votes in the precincts. Many prominent union leaders, Bob Hawke chief among them, went on to careers in politics in the ALP. Kerry Schott<sup>7</sup> describes the relationship (likely with some hyperbole): "The Australian Labor Party is so embedded in the union movement...If a Labor party had introduced a policy of real wage cuts there would have been riots in the streets...The party would have been just ripped apart." Nevertheless, there were disputes within the ALP on the desirability and likely effectiveness of a wage restraint-policy bargain. "Not everybody in the ALP wanted the Accord," says Kelty; One of his former assistants adds that "Some in Treasury thought the Accord was flim-flam meant to conceal and ease introduction of other policies, especially the reduction of tariffs." Bill Hayden, the ALP leader during the entire post-Whitlam opposition period, was reticent to give the ACTU any formal role in policy making. Willis<sup>8</sup> echoes a sentiment expressed by several former ALP and union officials: "Bill Hayden was a barrier. He was concerned about Hawke." The Accord wasn't finalized until Hayden was forced out and Hawke took the reigns of the ALP, less than a year before the election.

After the experience with Whitlam and the patent reticence of Hayden to make specific policy promises in exchange for wage restraint, Hawke's ascendancy in the ALP proved

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<sup>7</sup>assistant secretary for prices and incomes policy, the division of the employment and industrial relations ministry responsible for monitoring and implementing the wages and prices part of the Accord

<sup>8</sup>Shadow treasurer during the Fraser years subsequent minister for employment and industrial relations. He is chiefly responsible for formulating and later implementing the Accord from the ALP side.

critical for unions. Hawke was known and well respected in the union movement for his work as the ACTU advocate and then general secretary. Laurie Carmichael believed that he could do business with the ALP under Hawke because Hawke understood the unions and knew that the government would have to rely on them. Personal relationships mattered as well: “We [Hawke and Carmichael] could talk to each other and talk bluntly, even when disagreed.”

Coming in to 1983, it was clear that, as in the 1980 election, Labor would be on the defensive about its capability to handle the economy and its relationship with the unions. The ALP looked to the UK for ideas, ironic since the British Social Contract had collapsed in 1979, bringing the British Labour government down with it. Willis claimed that the Australians learned from the British experience: “In 1978 I went to the UK to talk about incomes policies. The UK policy failed because Labour got too ambitious with its wage demands. Labour tried to keep wages too low with union agreement, but unions blew out.” Willis’ assessment of the British experience was echoed by several other respondents.

The conservative platform appeared to be more of the direct confrontation with the unions that had characterized the previous Fraser government. Willis, however, saw the ALP-ACTU connection as a potential strength that should be exploited: “There was no political interest for conservatives to sign an Accord. Kelty approached Fraser government with a deal and Fraser told them to get lost...The Accord was something the Labor Party generated. There was no compulsion on us. It was credibility for us that we can handle inflation. Which was really basic for us and something the [future] opposition couldn’t claim.” Bill Mansfield<sup>9</sup> summarizes the whole process well:

The origin [of the Accord] was really a political and economic issue. Politically it was important for the union movement and the Labor Party for effectively coming out of the wages pause... Being able to produce a consensus, particularly with the union movement, was an important part of a campaign strategy. A political campaign strategy to win an election...Hawke had a reputation among

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<sup>9</sup>former head of the telecommunications union and later a commissioner on the industrial relations commission



the electorate more generally as a problem-solver and consensus builder.

What about the scope of the Accord? Why were only wages, taxes, and social spending addressed? Clearly there were other issues of concern to unions that were not included. Specifically, during the Accord period, the ALP governments devalued and then floated the currency, drastically reduced tariffs, restructured the public service, and emphasized domestic competition among firms. Willis explains why these other items were not on the Accord agenda: “The exchange rate, tariffs. They had nothing to do with Accord agenda. They were excluded because unions would disagree and had no electoral benefit.” While the ACTU, Kelty in particular, were almost surely informed of these moves, the unions were never *publicly* consulted nor was their consent requested. The Accord’s primary purpose from the government’s perspective was electoral. Michael Keating sums up: “There was dialogue [between the government and ACTU] on a significant but limited number of issues.”

In sum, the close relationships, both organizational and personal, between the ACTU and the ALP made the Accord both electorally necessary and practically feasible. The ALP clearly needed union cooperation to signal credibility. Hawke fit the bill as party leader due to his public reputation as a consensus builder and his strong personal ties to the union movement. The personnel linkages between the ACTU and ALP, with a former ACTU Secretary occupying the Prime Minister’s office reinforced the ongoing nature of the union-party relationship. All respondents emphasized that the Accord served chiefly as an electoral document.

#### *Australian Voters*

The crux of the model is the willingness of the pivotal voter to alter her evaluation of the partisan actors based on the costly signal sent by a (credible) pact. There is some evidence that this did in fact occur in Australia.

The most obvious depiction that voters’ evaluations changed is the results of the elections themselves. The ALP defeat of the Coalition government in 1983 saw the party increase its seat share in the lower house from 41% in 1980 to 60% in 1983. The 1987 election saw that share increase further to 69%. Note that this second electoral result occurred immediately after the second renegotiation of the Accord and in the context of an improving economic

situation relative to 1982 (see figure 8.1).

Although I have been unable to find survey data that ask directly about the Accord, there is some survey evidence that appears to corroborate the idea that (at least some) voters changed their mind based on signals sent during the Accord process. In a 1983 post-election survey (Beed et al., 1983), 58% of respondents claimed that the choice of party leader affected their vote “a great deal” or “somewhat”; recall that Hawke was installed as leader of the ALP shortly before the election. Of the 8.1% of voters in 1983 who reported switching their party vote from the 1980 election, the perception of party and policy was the most frequently cited reason. In a separate survey administered just after the election (Beed, Centre and McNair, 1983), a plurality (49%) thought that top management of trade unions had gotten worse over the previous decade; a majority of 81% believed that unions had too much power. Nevertheless, 66% reported believing the government does not cooperate enough with the unions. When presented a menu of policy options and asked to choose the three best for combating unemployment, extending the wages freeze (the Coalition’s proffered solution) was among the two least likely to be chosen.<sup>10</sup>

Polling data from the 1987 election (McAllister and Mughan, 1987) also sheds some light. 62% named ALP leader Hawke as the most likely to get Australia out of its current economic problems. 40.5% believed that government policy would improve the economic situation one year hence compared to 18.5% who believed the opposite. The proportion of respondents claiming that trade unions had too much power declined 10 points to 70.1%.

### *New Zealand*

In New Zealand, there was no need for the NZLP to signal credibility to the electorate; Muldoon had succeeded in completely discrediting the National party on economic issues. This was exacerbated by the fact that Muldoon had courted the FoL. “[Muldoon] was unable to achieve the political arrangements his policies depended on. He was counting on the leadership of the union movement to use their influence to limit wages growth in

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<sup>10</sup>7.3% named it among their top 3 policy options. The least likely to be chosen was restricting overtime (6.4%). 25% named controlling inflation and 19% chose restricting wage rises.

exchange for tax concessions. The [FoL] leadership was unwilling to cooperate in this and was unable to as the constituent unions would not surrender their autonomy for setting wages to central authorities. Neither were they interested in contributing to the success of Muldoon's strategy even if they could." (Scott, 2005:63) Others, mentioned above, describe Labour as the only real game in town.

Unions were no great source of power within the NZLP at the time. A former union leader and subsequent aide to a rebel NZLP MP explains:

Unions were not as tightly integrated into the Labour Party. They couldn't veto policies. Numerous unions were outside the party. Affiliation to the national Labour Party was a joke. Anybody could show up as a delegate. What was much more important was to get onto the party Executive. But you're in the Executive as individual members...Unions were not aware of the presence of anti-union folks in the Labour Party. Anti-Muldoon business went along with Labour as well. Labour didn't think they needed the unions (Simpson, 2006).

Another advisor describes the situation in more detail:

While there were crossovers between the Labour Party and the union movement, many key union leaders were not powerful figures in the Labour Party—although some were. The most influential figure in the union movement, Ken Douglas, belonged to another party altogether. Some of the unionists who were most influential in the Labour Party were not important figures in the union movement (Scott, 2005:63).

Muldoon called snap elections, making for an extremely abbreviated campaign period. There was little in the way of specific policy proposals or extensive debate and little time to formulate an agreement between unions and the NZLP even if one were considered. Labour did campaign on the basis of an orderly exit from the wage-price freeze. Once elected, however, the first order of business was to address the foreign exchange crisis. The currency was devalued and then floated almost immediately. From there the reforms increased in pace for the next two years. Unions (and others) were "blindsided by the timing

of devaluation issues. People were bewildered by the pace and speed of it.” (Conway, 2006) Nevertheless, the FoL approached the Minister of Labour in 1984 about a negotiated exit from the wage-price freeze. The offer was rejected (Harris, 2006). The Lange government turned to interest rate policies to address inflation. “Treasury advisers rather half-heartedly advised the Government that a brief return to central control of wages was an option. I doubt the idea was taken seriously by the Government. The ministry concluded that deals with the FoL over wage fixing wouldn’t work but neither would a return to controls. The stage was set for a rise in unemployment.” (Scott, 2005:64)

The stock market crash of 1987 had a major negative effect on New Zealand, pushing the economy into recession while the budget was still in a precarious position. In 1988, Prime Minister Lange unilaterally halted the economic reform package. By this point, the Labour government was staring at the prospect of elections while undertaking unpopular spending cuts in an extremely inhospitable economic climate. Under these conditions, the NZLP began floating ideas about some sort of deal with the newly formed NZCTU. Several interview subjects referred to this offer as an act of desperation. Even union members seemed unimpressed “Unions and government approached one another to get an Accord-style agreement to keep Labour in power for the 1990 election but the [union] membership was uninterested. Members didn’t attend CTU meetings regarding the possible accord.” Though the so-called Growth Agreement was signed, it was only in existence for six weeks. Labour lost the 1990 election in a landslide and the agreement was never implemented.

The evidence presented above shows New Zealand as a negative example supporting the notion that pacts are electoral signals. In the 1984 election, the NZLP had no need to signal the electorate about their economic credentials and unions had insufficient influence with the NZLP to make any demands or credibly offer a deal. Once it became clear that the deep and rapid reforms of the 1984-88 period were unpopular and the economy was entering recession, however, a desperate NZLP government suddenly found a taste for a deal with unions. Ironically, in this case the Growth Agreement was not a signal of competence to deal with economic problems but rather a signal that Labour’s electoral promises not to

continue the reform program were credible.<sup>11</sup> The Growth Agreement can be viewed as a belated attempt to tie the hands of a government that was institutionally unconstrained and had backtracked on previous promises.

### *8.2.3 Legislative and wage bargaining institutions*

Institutional considerations affect the constraints on governments and the executive's capacity to implement decisions. They played a role in the divergent paths of Australia and New Zealand. There are two relevant differences between the countries. The first involves the legislature and electoral rules while the second involves the powers of the industrial relations tribunals.

#### *Australia*

Australia is a federal system with a bicameral legislature. This has two immediate implications for wage bargaining. First, the Australian constitution does not permit the federal government to unilaterally set wages and prices across the whole country. Some of these powers are reserved for the states while others are shared between the state and federal governments. Any government wishing to unilaterally interfere with wages and prices needed to alter the constitution. Indeed, a referendum to this effect was floated in 1973 but lost. In 1979, the ALP Conference again debated a proposed referendum to give the government powers to legislate prices and incomes. ALP-affiliated unions were able to block this proposal within the party, making it clear that voluntary union consent would be needed for any incomes policy (Singleton, 1990:115-118). Second, the Senate in Australia has powers to alter and revise legislation. Any attempt to revise wage bargaining institutions would need the support of both the house and senate; joint control of both houses by the same party are rare in Australia and never occurred between 1970 and 2000. These two institutional features prevent governments from simply legislating on issues of wages and prices.

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<sup>11</sup>For example, 56% of Kiwis polled in 1990 found they had "no trust" in the Labour party compared to 54% "not sure" about National; a plurality of 42% thought Labour "not capable" to govern. At the time of the election, 56% of voters thought the economy had gotten worse over the prior year and 66% believed that government policy had a negative effect on the economy (Vowels and Aimer, 1990).

Recourse was made to monetary and fiscal policy. Any direct incomes policy required the consent of the unions.

The Commission also played a key role in the Accord; they were in a position to undo the wage restraint needed to keep it together if they allowed wage demands outside the guidelines<sup>12</sup> to go through. Several respondents expressed concern with the Commission's role: "If we couldn't get the Commission to endorse the Accords then it wouldn't work." (Willis, 2006) Keltly took the position that the Commission did more harm than good by attaching small restrictions and penalties to carefully crafted wage policies. In general, however, the Commission supported the Accord, mainly because the unions and the government were coordinated in their wage cases before the tribunal. State governments required that their state commissions follow the federal awards. An appeals procedure set up within the Commission solved the problem of individual commissioners handing down judgements outside the Accord guidelines (Isaac, 2006).

The combination of the structure of the legislative institutions and the restrictions on the federal government provided an added incentive for the ALP to negotiate with the unions. Other areas for unilateral action were restricted.

### *New Zealand*

New Zealand is a unified state with a single legislative house. Prior to 1993, MPs were elected under SMD electoral rules and, consequently, there are two major political parties. More importantly, however, once elected, there are virtually no restrictions on the parliamentary majority. This flows through directly to the industrial relations system. While there was an arbitration system, the government could (and did) intervene directly in outcomes. It could also legislate union rights and prerogatives at will. As such, there was no concern with the arbitration system standing in the way of any government initiative. No interview subjects mentioned this as a roadblock for the Lange government and the secondary literature is silent on the topic. What is clear, however, is that there were few institutional avenues

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<sup>12</sup>The centralized wage setting part of the Accord functioned on a "no extra claims" principle, in which the ACTU and government would jointly present a national wage case to the Commission after agreeing on the target wage rate; individual unions were not to push for anything more.

available to unions to block government policies they did not like and therefore a reduced incentive for the NZLP to bring unions to the table.

The NZLP's handling of the crisis period and National's subsequent extension of Labour's policies also had long-term consequences that could not have been foreseen by Lange, Roger Douglas and other NZLP policy makers. The most dramatic has to be the national referendum of 1993 in which New Zealand voters chose to replace their SMD electoral rule with an MMPR system. Several observers have argued that voter disgust with both major parties' drastic deviations from their electoral promises, the inability to moderate policy between elections, and the economic outcomes from the reforms, especially increased inequality and reductions in welfare spending, were major factors in the rejection of SMD. (James, 2006; Kelsey, 1997). The public debate prior to the referendum specifically linked MMPR with a more responsive partisan system and more frequent coalition governments with correspondingly more moderate policies (James, 2006). One former policy maker at the Reserve Bank of New Zealand opined that for "at least two elections in a row, people felt like they had been conned." (Grimes, 2006). The head of research and policy advocacy for the FoL and CSU observed that "the shift to MMP totally related to what had happened [in 1984-92]. Both Labour and National came in saying 'we're going to do  $x$ ' and they did  $y$ . The need for a check on executive authority was clear. Once the election was over, there was nothing more to be done [by citizens]," (Harris, 2006).

#### *8.2.4 The players' time horizons*

##### *Australia*

Consistent with the notion that the Accord served an electoral function for the ALP, political leaders had fairly short initial time horizons, though they did not have a specific end date in mind either. Ralph Willis states "We hoped it would last one period of government and then see how it went. We didn't say we will keep this in place for the next ten years." Schott has a similar evaluation: "What the Australians thought, on the basis of the UK incomes policy, was that they [wage restraint agreements] were very unstable and they never stayed in place for very long. You could hold it for a couple of years and then you'd lose it...You

could only hold it together for about two or three years. This was because you only had wage restraint and nothing else. It was very hard on the unions.”

The Accord proved remarkably durable, largely due to the willingness of the ACTU to renegotiate as conditions changed. The government was seeing benefits from the arrangement as well. Michael Keating says “success bred success and that’s important.” This had the effect of lengthening politicians time horizons: “At any point in time we [the government] wanted it [the Accord] to last.”

On the ACTU side, it is clear that union leaders had much longer-term goals for the Accord. Kelty viewed the Accord as the vehicle that would transform the Australian economy while improving the plight of workers. He had correspondingly long time horizons: “We needed a long period Labor government. At least nine to ten years expected from the Accord.” Carmichael is even more explicit in his goals. “The main influence in my mind was trying to pursue the possibility of something like a Swedish agreement between the political and industrial sections of the movement.” He explicitly stated that he viewed the Accord as the first step on a longer path to a stronger welfare state supported by centrally negotiated wage/price bargaining.

In Australia, ALP time horizons were governed by election cycles, but, as the Accord proved useful and flexible leaders saw no definite end date for the process. Union leaders, for their part, had very long term goals for the Accord, goals which required the ALP remain in office. As such, the time horizons of the two major players coincided.

### *New Zealand*

In New Zealand, there appeared to be a profound mismatch between union and partisan goals. In particular, the newly elected NZLP had very short time frames and foresaw an end date. “The Labour government thought they were going to lose in 1987 anyways so they may as well take the tough decisions now and front them later.” (Wilkinson, 2006) Union leaders, “because of the nearly three years of the wages freeze, were desperate to want to believe that Labour would save them. In my view herein lies much of the subsequent problem of the trade union movement.” (Douglas, 2005:80) Expectations for the incoming



NZLP government were quite high, but nobody possessed time horizons sufficiently long to make a large deal possible. Once the path the Lange government was pursuing under Roger Douglas became clear to unions, the union movement fell in to disarray; private sector unions were unsure of how to respond while public sector unions expressed opposition to the government (Harris, 2006). Neither the will nor the patience required to make an agreement self enforcing appears to have existed on either side.

*Power and credibility of unions federations*

When asked why an Accord-like arrangement never emerged in New Zealand, interview subjects in both countries frequently responded with statements similar to the one given by this former NZCTU official: “There was no Accord in New Zealand because the unions are too weak.” (Goulter, 2006) This in spite of higher levels of union density in New Zealand. Ken Douglas—the head of the FoL at the time—gives a more specific evaluation:

Our leadership, my leadership if you like, could not deliver the required union membership support in a coherent and progressive way. The fact that the Labour movement collectively had never seen itself as a cohesive movement of mass action, capable of developing a consensus that was able to be turned into a popular political programme was our Achilles’ heel (Douglas, 2005:83).

Another advisor recalls that “The Federation of Labour did not have the power over the constituent unions that the ACTU had at the time in Australia...Powerful unions here had made it clear to FOL headquarters that the days of [former FoL secretary] Skinner and Muldoon doing deals over wage movements were over for good,” (Scott, 2005:63).

But why were there such profound differences between the strategic capacity of the ACTU and the FoL? There are several immediate reasons. First, unions in New Zealand were split between the public and private sector federations and each federation faced different bargaining institutions. The two federations could not come to an agreement on how much support to give the NZLP. In Australia, the ACTU had succeeded in absorbing both the public sector federation in 1979 and the white-collar union federation in 1981. By 1983,

the ACTU affiliates represented about 82% of unionized workers in Australia<sup>13</sup> (Golden, Wallerstein and Lange, 2002). Party-union linkages, as noted above, were much stronger in Australia.

A second reason is less obvious and only uncovered through interviews: New Zealand unions, especially in the private sector, were dependent on government for wage outcomes. They had ceded the capacity for independent action.<sup>14</sup> Several subjects reported a situation similar to that described by Peter Harris: “Unions in New Zealand were very schizophrenic. They had the rhetoric of free bargaining but heavy reliance on government patronage.” A former president of the public sector workers union remarked that “Union leaders were bureaucrats who were used to working a system of industrial patronage. They had nothing to do but sit in an office and count the money.” (Simpson, 2006) The industrial relations system had freed them from the need to actively organize workers and all but the few strongest did not have to actively bargain. Wage outcomes came from a combination of the industrial strength of a few and government intervention. Thus, when it came time for the NZLP to address pressing problems, the “government believed that the unions had little to offer,” (Harris, 2006).

This state of affair contrasts markedly with the ACTU in Australia. Beginning in the 1960s, the ACTU had begun investing heavily in their research capabilities; in Bob Hawke the ACTU hired its first advocate. Hawke later hired Ralph Willis who notes that “at that time we were the only people in the ACTU with college degrees.” As Hawke progressed through the ranks at the ACTU, this changed dramatically. By 1983, the ACTU had a sophisticated political and research operation under its roof.

The nature of the Australian arbitration system also affected the capacity of the ACTU. “The ACTU had responsibility for the basic wage case so the ACTU had a history of and capability for bargaining. Unions ceded the bargaining power to the ACTU in the 1950s because everybody got the basic wage and had an interest in keeping it as high as it could

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<sup>13</sup>Comparable data are not available for New Zealand

<sup>14</sup>Indeed, union leaders were so expectant of government munificence that, upon receiving a report in early 1984 detailing Roger Douglas’ policy agenda, “many in the [FoL] Executive, including [then head] Knox, did not want to believe it and openly espoused that it was a fabrication.” (Douglas, 2005:80)

be. The Commission brought in the total wage case in 1960s which gave everybody the same percentage increase. The ACTU managed that as well.” (Willis, 2006) In addition, the ACTU can use the arbitration system to punish affiliates. If it chooses, it can file statements with the Commission undermining the wage demands of any particular union. I return to this below in the discussion of how the Accord was maintained.

Clearly, then, there were substantial and important differences in the strategic capacities of the peak labor bodies in Australia and New Zealand that affected the likelihood of a social pact’s emergence. The discussion above, however, implies that this variation in strategic capacity is to some degree endogenous to the institutional environment in which the unions and parties operated.

### *Employers*

Interview subjects in both countries universally described employers as fragmented, unorganized, and relatively uninvolved in policy making, especially at the early stages. Kelty describes his take on the employers’ role in the Accord era:

The employers’ commitment, in personal terms, was strong. But they had nothing to do with it. They weren’t driving it. They weren’t doing anything. We [the ACTU] were running it. We were giving them wage reductions. They would never get up in an election campaign and say ‘this is great’. They never even supported us when we pushed for enterprise bargaining...They were intellectual puissants. Some were really opportunists...Some of the key companies stuck with us, but they never publicly supported the system. Only Alan Jackson got up and said he supported the Accord, but he was run out of the country after the [1996] election.

There was some effort made in Australia to bring employers on board. Hawke convened a tripartite economic summit immediately upon taking office with the idea of garnering support from both labor and business. By that time, however, the Accord had already been ratified by the ACTU. More substantively, the initial monitoring and, in later iterations, superannuation and training programs did require some degree of employer participation.

The government foresaw this and actively endeavored to strengthen organized business: “The business sector was really very weak. We had no strong business peak body. [The Government] went out of its way to build up the expertise of the Business Council of Australia, which is now much stronger.” (Schott, 2006)

While there was not organized opposition from employers, there was no groundswell of support either.<sup>15</sup> Joe Isaac says that “employers were hostile to the whole idea of the Accord formally. Essentially it was a fear that the ACTU was getting too much access to the government.” He further identifies the lack of employer integration as the Accord’s key deficiency (Isaac, 2006). Without the support of business, there was little hope that an Accord could survive a change in government. When the ALP lost the 1996 election, the Accord process ended.

#### 8.2.5 *Holding the Accord together*

While the theoretical discussion in section two does not directly address the issue of maintaining the Accord, modeling the Accord as a repeated game implies that the parameters affecting the Accord’s emergence are also relevant to its maintenance over time. Specifically, the trigger strategy described in the repeated game requires that unions and the incumbent can monitor one another’s compliance and that they in fact implement the agreed policies. Relaxing the assumption of a single unified union agent also implies that enforcement mechanisms must exist to punish unions that deviate. Exogenous shocks to the economic system or players’ discount rates could derail the deal. The Accord also seems likely to have an endogenous effect on the likelihood that it can be sustained over time: as the economic situation improves there is a weaker incentive for workers to remain in the tightly controlled bargaining relationship, potentially requiring further increases in the social wage. Though not modeled explicitly, the flexibility to renegotiate in the face of both the endogenous changes and exogenous shocks must also exist to accommodate the varying interests within the ACTU’s union coalition and the ALP’s political one. Interview subjects spoke at length about the various mechanisms that held the Accord together and the weaknesses

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<sup>15</sup>See, for example, Scott (1987).

that ultimately brought the Accord down.

### *Monitoring*

Monitoring union wage demands was relatively easy. The arbitration system centralized the reporting of all wage settlements. When claims outside the guidelines were filed, the ACTU and government, specifically the department of employment and industrial relations, would join together and make presentations before the Commission, asking them to make awards in line with the Accord (Schott, 2006).

Monitoring the government is more difficult. An added complication is the fact that the Accord was not directly binding on non-unionized workers in the economy, most notably in the professions. The ACTU was sensitive that its members not be the only ones giving up wage increases; doctors, barristers, and the like should have their fees tied to the Accord guidelines as well. As a result the government sponsored the creation of two consultative bodies, the Economic Planning Advisory Committee (EPAC), under the Treasury, and Australian Council on Prices and Incomes (ACPI) under the department of employment and industrial relations. The latter was directly responsible for monitoring prices and incomes of the professions. The Accord set up a series of bi- and tri-partite bodies for the purpose of monitoring wages and prices across the economy.

### *Enforcement*

In general, union compliance with the Accord guidelines was quite good, particularly in the first years (Schott, 2006). Nevertheless, There were several cases in which certain unions, some not affiliated to the ACTU, clearly attempted to challenge the Accord guidelines.

Probably the most dramatic challenge to the Accord came with the 1989 pilots strike. The Australian Federation of Air Pilots, not an ACTU union, had gone outside the arbitration system to secure a 30% pay increase. Willis states “We could not allow [the pilots] to win. It would have brought down Accord.” In the end, the government went to extreme lengths to break the strike, including importing foreign “scab” pilots and using the air force to fly domestic passenger and freight routes. The ACTU supported the government

in its actions. The ACTU had also supported the government in its 1984 deregistration of the Builders Labourers' Federation. This union had a long history of "standover contracts" where the union would strike at critical moments in construction projects for side payments. Without ACTU support, the deregistration would have caused major national disruptions (Keating, 2006).

*Safety valves, creative accounting, and renegotiation*

Monitoring and punishment alone would be insufficient to keep the Accord going over time, especially if a major union decided that it was no longer in its interests to go along. Interview subjects cited three major ways that these pressures were accommodated.

First, Schott and Willis mentioned that the government and ACTU approached the Commission to allow some anomalous wage claims to go through, "You basically had to keep everybody in the tent and at the same time have a few little back doors you could let people sneak out of for good reason, like they weren't getting paid much to begin with." (Schott, 2006). These "safety valves" were built in to the system so some out-of-line wage increases could go through without flowing on to everybody. "There was sufficient discipline within the Commission especially with the anomalies procedure...The building industry was always a difficult area. Anomalies arising in building by and large didn't flow outside." (Isaac, 2006)

Second, negotiators at the highest levels showed extraordinary creativity in generating workable solutions to challenges, particularly in the context of renegotiation. One of the first things to note is that the original (1983) Accord actually did not promise real wage restraint on the part of the unions; it only conceded a return to centralized wage setting and full indexation, based on the CPI. Some real wage reductions were achieved in the first year due to some creative accounting work by the government and ACTU (Schott, 1989). Specifically, health care expenses are a component of the CPI. One of the first social policy initiatives of the new ALP government was the introduction of comprehensive medical insurance program which effectively removed the health care component of the CPI. As a result, wage indexation was approximately 1% lower than would have otherwise

occurred.(Belchamber, 2006; Willis, 2006)

In 1984, the building trades union negotiated a supplementary payment package outside the Accord guidelines; this union was too powerful for the ACTU to just reject the contract. Willis credits Keltly with having the idea to repackage this payment as a form of employer-sponsored superannuation. “Superannuation came about because some of the more Left wanted to rock the Accord boat. We came across super[annuation] by accident.” (Willis, 2006) The union agreed, thereby deferring these payments and keeping money wage demands in line with the Accord. “Health care and superannuation made tradeoffs easier. These trades were not inconsistent with general philosophy of the Left in Australia. You establish a beachhead and you let society catch up.” (Keltly, 2006)

This creative use of superannuation to maintain wage restraint was extended to everyone in the following year. By 1985, Australia was confronting a dramatic decline in the terms of trade and a devaluation of the Australian dollar. The Hawke government approached the ACTU, asking the unions to renegotiate the Accord and accept less than full indexation in order to accommodate the devaluation in the currency and the corresponding increase in prices of imported goods. The ACTU eventually agreed in exchange for superannuation and tax cuts, both to be phased in over time. Several respondents cited the introduction of industry superannuation as one of the most important and enduring achievements of the Accord period. (Keltly, 2006; Schott, 2006; Willis, 2006) This achievement was in no way anticipated at the outset. It came about in the process of maintaining a larger commitment to cooperation built on certain shared interests, namely the ALP’s desire to remain in office and the unions’ belief that an ALP government was its best hope for delivering consistent improvements in living standards during challenging economic times.

All of these specific instances point to the fact that renegotiation of the Accord was not just possible but expected: “We knew the Accord would need to be renegotiated.” (Willis, 2006) The nature of the Accord changed significantly over the years. It was variously used to introduce centralized wage setting, rework wage relativities, transition bargaining back to individual unions, and, ultimately, respond to employers’ demands for more flexibility and productivity incentives by introducing enterprise level bargaining. Keltly knew the centralized system was a short-term solution; he had longer-range plans: “If you believe in the

internationalization of the Australian economy, a centralized system determined by a protected manufacturing sector does not work. Even to keep a minimum [wage] rates system you had to move progressively to a more devolved system. We wanted to keep an effective national minimum rate and so we had to change the nature of the wages system. It was a fixed wages, fixed exchange rate, high interest rate system. This doesn't work with lower tariffs, increased productivity, and low inflation." (Kelty, 2006) Michael Keating recognized this consciously flexible nature of the Accord process: "Kelty and [PM Paul] Keating definitely had a strategy over time. They wanted to wean unions off the most centralized system by enhancing and redistributing productivity gains." Through the process of renegotiation the overly rigid wage and policy prescriptions that brought down social pacts in places like the UK and Italy were avoided in Australia. Ultimately, the Commission refused to stand aside and let enterprise agreements go through; they wanted to ratify all agreements regardless of the level of negotiations

#### *Rank-and-file consent*

Several interview respondents identified the very centralized nature of the Accord as one of its major weaknesses. "The Accord finally turned in to a process between Kelty and [Prime Minister Paul] Keating. And that led to the undoing. Instead of it being a real negotiation for an Accord process that would have a long term life it became talks at the top level." (Carmichael, 2006) The Accord was never taken to a referendum of union *members*, though it was endorsed by ACTU congresses. Several former union officials did report extensive member education and information dissemination campaigns within their unions at the initial stages (Carmichael, 2006; Mansfield, 2006; Simmonds, 2006; Watson, 2006), but there was little mention of ongoing member-leadership dialogue on the Accord.

The centralized nature of the Accord and its heavy reliance on ACTU coordination and Bill Kelty's relationships with ALP Prime Ministers Hawke and Paul Keating stunted the roles for union leaders and reduced the value of union membership for workers in general. Willis says that wage "increases seemed to be generated by the ACTU or the government. There was no real job for individual unions. This put downward pressure on membership and



participation in unions.” Keltly describes the difficulty in transitioning back to decentralized bargaining: “The greatest problem I had was to get unions out there to bargain. You can easily kill a union movement if their only capacity is to file cases at the national level. They need to bargain and do their own things. We [the ACTU] borrowed the power [from the affiliates] to achieve these objectives. We had less trouble getting the power and more giving it back.” Another ACTU official agrees in describing why the ACTU pushed for a decentralization of bargaining in 1990: “Unions needed to do union things-organize and bargain. They were losing members.” (Belchamber, 2006). He goes on to argue that the centralized nature of the Accord harmed unions’ incentives to organize.

While there were no major rank-and-file revolts against restraining features of the Accord, neither were the rank-and-file directly brought in to the process nor was democratic endorsement used as a way to silence Leftist critics, as Bacarro argues occurred in Italy (Baccaro, 2000, 2002). Australian unions paid a price however. With little direct role for individual unions in the highly centralized period of the Accord and few options for the rank-and-file to express their “voice”, many chose the exit option. Union membership dropped but, as table 8.1 makes clear, the drop accelerated *after* the return to more decentralized bargaining when many unions struggled to regain their industrial footing.

#### 8.2.6 *Summary*

Interviews with twenty one key individuals involved in negotiating and implementing policy in both Australia and New Zealand shed considerable light on the divergent trajectories of the two countries during 1983-96. While unions in both countries were disposed to negotiate with governments during crisis, only in Australia were the electoral incentives and institutional constraints on the ALP sufficient to drive the government to negotiate incomes policy and offer substantive compensation for wage restraint. Tight party-union linkages made negotiation the best option for both the ACTU and the ALP. These same relationships made negotiation easier and bound key decision makers together in long-term personal relationships and career paths. Agents in Australia held longer time horizons, making the threat of defection more potent in sustaining the Accord.

The Accord's durability was largely a result of its flexibility. Both the ACTU and the ALP were willing to renegotiate in response to shocks to the system. Consent of the unions was garnered by a combination of the delivery of actual social wage outcomes and the continuing fragility of the Australian economy. Once the unemployment and inflation risks had abated, however, centralized bargaining came under sustained pressure from the strongest unions. The Commission's 1991 award which placed more restrictions on wage rises than either the ACTU or government had asked for spelled the end of centralized wage setting; Kelty used the Accord process to begin the transition to enterprise-level bargaining. Though the Accord continued to exist as a publicly declared policy statement from the ACTU and ALP, it ceased to make serious demands of the unions in terms of wage restraint. When Labor lost the 1996 election, the Accord died as well. Employers had never publicly supported the Accord and the incoming Coalition government had little to gain from allowing unions a say in social policy.

Finally, while it is not the central purpose of this paper to determine whether Australia's negotiated transition or New Zealand's rapid and deep reform program yielded better current outcomes, a few words on the subject are in order. First, it appears that both Australia and New Zealand have more-or-less successfully restructured their economies. Both countries are now deeply integrated into global trade, investment, currency, and financial networks. Gone are most of the inefficient industries from the pre-1982 ISI period. Service sector employment is the dominant and growing area of employment in both countries. Labor costs have declined. Inflation and unemployment has been brought under control. Both countries used to be among the most strike-prone in the OECD; industrial disputes have dropped off significantly. Labor markets are much more fluid and bargaining is much less centralized.<sup>16</sup>

That said, New Zealand has had to pay a much steeper price. Most obviously, inequality has increased dramatically when compared to Australia. Welfare benefits have eroded and training systems have weakened. The NZCTU argues that New Zealand essentially pursued a "low road" strategy to international competitiveness under the 1984-1996 Labour and

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<sup>16</sup>For an extended discussion of these changes, see Bray and Walsh (1998).

National governments (Conway, 2002). New Zealanders also paid a steeper price during the transition, facing higher unemployment and more volatile currency and inflation outcomes in the 1986-91 period, reinforcing the idea that monetary policy is a fairly blunt instrument that can impose high social costs in moving from one equilibrium to another. Australia's negotiated approach appears to have shared the costs of restructuring more equitably across society.

## Chapter 9

**CONCLUSION**

In this project I took on the ambitious task of exploring the variation in labor movement centralization and, through that lens, to better understand the degree to which politically relevant organizations develop the capacity to take meaningful strategic action at the national level.

**9.1 *Recapitulation***

Chapter 2 took as its puzzle the existence of confederally structured associations of interest groups and the wide variation they display in the degree of central power. Why would a set of autonomous organizations go to the expense of forming and maintaining a confederal organization? Why not just cooperate on some projects when it is useful or, conversely, why not merge into a single entity? Taking inspiration from the large fiscal federalism literature, I assume that the actions of individual unions affect other unions. I then develop a formal model of interest group confederation seeking to characterize the conditions under which a set groups with similar objectives might become more or less “encompassing”, i.e., delegate decision-making to a central body relative to retaining autonomy at the local level. I conceive of the confederal problem as a repeated Stag Hunt game under imperfect information. Unions have an incentive to cooperate but vary in their outside options and in the share of the collective good they can expect.

Based on the model, I made three major claims and several subsidiary ones. First, where affiliates vary widely in their “power”, confederations will be smaller in scale and/or more agents will remain outside the confederal organization; we can refer to this as the scale-size trade off. The exact form this trade off takes will depend on the internal decision rules developed in the confederal organization. Weaker affiliates have an incentive to yield decision rights to the stronger, up to a point. Whether these rules enable the better-endowed

affiliates to protect their interests from the demands of others will depend on the desirability of bringing the better-endowed agents into the fold. The second major claim is that there is a trade-off between size and scope. Where a large portion of the potential affiliates actually affiliate to the confederation, the confederation is less likely to have competency over a broad range of activities. This tendency is exacerbated as the variance in affiliates' endowments increases. Third, the presence and interests of organized counterparties can induce more centralization among the agents. The degree to which this happens, however, is affected by a slew of conditions. Among them are the ability and willingness of the counterparty to make credible promises, the extent to which the better endowed agents value confederal cooperation and the extent of compensation required to induce these better-endowed agents to cede additional powers to the confederal organization.

Chapters 3 and 4 explored empirical implications of the model. A central contention of the argument is that unions' strategic considerations in engendering a stable confederation inhibits the development of rank-and-file enfranchisement at the confederal level, especially when the distribution of members is highly unequal. This is consistent with the empirical observation that, unlike citizens of federally organized nation-states, individual workers are rarely direct (voting) members of labor confederations. One federation where this was the case, however, was the American Knights of Labor (KoL). It's competitor, the American Federation of Labor (AFL) has long been criticized as undemocratic. These two organizations provide an excellent paired case comparison. They shared the same politico-economic institutional environment while overlapping in time, space and membership. Yet they developed very distinct organizational structures and followed different historical trajectories. The Knights died out by the end of the 19th Century while the AFL continues to the present. I showed that the Knights attempted to marry broad organizational competency with radical rank-and-file democracy while the AFL had narrow organizational goals, rigid institutional protections for affiliate autonomy, and weak rank-and-file influence on confederal policy. The Knights' organizational structure empowered the less-skilled and previously unorganized workers to make consistent sympathy demands of the stronger craft unions. Ultimately these unions found the demands too onerous and the Knights' activities threatening to their organizational integrity. They left to stand alone or affiliate with the AFL.

The AFL explicitly precluded rank-and-file participation at the confederal level and developed voting procedures and secession rules that permitted bigger and stronger affiliates to protect their interests.

Given the theoretical importance of union centralization, it is curious that there is no major cross-national quantitative empirical study of the determinants of union centralization. Chapter 4 fills this gap by looking at several dimensions union “encompassingness” across 15-20 rich democracies since World War II. In so doing, I evaluated some of the model’s predictions from chapter 2 while also examining other hypotheses from the literature. I find consistent evidence for the size-scope trade-off as well as evidence that the structure of political authority, especially federalism and more frequent Left government, affect the scale and degree to which unions centralize membership and authority in confederal organizations. I also find large and significant effects for structural variables like trade exposure, size of the economy, and cultural/linguistic fractionalization.

In part one I showed how the “encompassingness” of union federations depends on structural and institutional factors and the returns available to unions for cooperative activity, especially through political activity and government policy. That being the case, it seems clear that rational politicians will anticipate how their actions and policies will affect the strategic capacity of interest groups. Put another way, depending on the structural and institutional environment, partisan politicians can act to both affect and take advantage of the strategic capacity of interest groups, especially federations of trade unions. Governments have indeed attempted this in a variety of ways, most visibly using formal policy agreements between governments and unions, so-called “social pacts”. Part two explored the emergence of social pacts in 20 OECD countries, 1974-2000.

Chapter 6 presented a model of social pacts. I argued that pacts are, at their core, political bargains in which political parties seek to send a message to the electorate demonstrating the politicians’ ability to address pressing economic problems. Unions enter in to the contract for two main reasons: they are compensated for their sacrifices through public policies they value and, due to economic circumstances, policy options are a more effective path to garner benefits for union members than industrial action. Pacts are sustained through time by the threat of defection by both parties. The ability to sustain the agree-

ment depends on the time horizons of the agents and the extent to which unions value the “social wage” relative to money wages. In the context of pacts, union leaders with strong career and personal connections to political parties have longer time horizons and are more willing to bargain. Unions with strong institutional ties to particular parties make pacts more likely under conditions of crisis for two reasons: due to their close relationship, the public does not view the party alone as capable unless the unions are known to consent to the party’s policy and, second, the unions keep the party from offering other policy options less to the unions’ liking.

Chapter 7 is an event history analysis of pact onset using an original dataset of social pacts covering 20 OECD countries between 1974 and 2000. I find that, conditional on electoral institutions and economic conditions, pacts are strongly influenced by the electoral cycle. Consistent with the notion that pacts are a way for policy makers to induce greater encompassingness in peak associations, pacts are also more likely where wage bargaining is moderately centralized relative to highly centralized or completely decentralized systems.

In an effort to better examine chapter 6’s predictions about transaction costs and time horizons, chapter 8 applies the model to an empirical puzzle in the cases of Australia and New Zealand. Facing similar macroeconomic crises and with historically similar wage bargaining institutions and levels of union density both elect Labor governments which then make opposite choices: the New Zealand government embarked on a period of radical deregulation, relying on unemployment and monetary policy to discipline wage demands while the Australian Labor Party (ALP) and Council of Trade Unions (ACTU) signed a formal Accord, enhancing unions’ relevance in wage bargaining and policy making. Consistent with the model, policy makers in New Zealand chose not to attempt a negotiated wage-policy contract. The NZLP was not suffering from electoral skepticism about its ability to address the country’s economic malaise. Unions were not a major force in the NZLP and unions were split into two federations and unable to come to internal consensus. The Westminsterian electoral-legislative system created a “dictatorship of the majority” in which the NZLP could legislate as it saw fit. Neither did the government require the cooperation of an independent industrial relations commission or subnational governments to implement policy. Time horizons for both the NZLP and unions were short. In contrast, the ALP

was struggling to establish credibility with voters on its ability to address inflation and unemployment concerns. Public union cooperation was essential for making credible policy statements. The ALP, though it handily won the 1983 election, did not control the senate or the Industrial Relations Commission. For an incomes policy to work, union cooperation was needed. High unemployment, especially in sectors of the economy where unions were industrially strong, induced the ACTU to come to an agreement. Organized employers played a negligible role in negotiating, implementing, or blocking policy both countries. That said, employers never expressed support either; when Labor finally lost office in 1996, the Accord ended as well. I concluded that the organizational relationship between the union peak associations and the Labor parties were the critical differences that made intertemporal political transactions possible (and self-enforcing) in Australia but not in New Zealand.

## **9.2 *Implications***

Taken as a whole, the research here provides several clues but falls short of the ambitious task of generating a unified story of group encompassingness. So what do we now know? Most immediately, findings here cast serious doubt on several assertions in the literature. Relating to union centralization and coordinated bargaining, employer centralization and support does not appear to be as universally necessary as the Scandinavian-focused literature would have us believe. For social pacts, pacts onset is not observed to be closely related to inflation or to a “weak” (i.e., minority) government, contrary to frequent assertions in the literature. More broadly, we have strong evidence that political actors and institutions affect how unions organize themselves and how politicians relate to workers in the making and implementation of major economic policy initiatives. We also have evidence that organizations that attempt to centralize many activities, especially those that are strongly redistributive across affiliates (like wage bargaining) tend to organize a smaller proportion of the relevant population. This then implies that if unions are to meaningfully centralize bargaining across an economy there will need to be other forces at work: institutional mechanisms that centralize power and extend confederal authority (as in Austria) or link wage agreements (as in Denmark and pre-1991 Australia); employers who actively supported more coordinated bargaining (as in Germany and pre-1983 Sweden); government actors



who threaten or buy off unions using policy (as with social pacts). Taken together, Olson's belief that encompassing groups are difficult to sustain is supported, but with important limits and caveats. Group organization and influence is not independent of the institutional environment in which it operates; policy makers can affect a group's strategic capacity, at least at the margins. Furthermore, simply identifying a trade off between size and scope does not fully delineate the magnitude of this trade-off. Understanding the extent to which a given confederation behaves more like an encompassing group or a distributional coalition requires understanding the distribution of resources across affiliates. Neither do political institutions fully explain groups organization. Large scale economic trends, changing distributions of members across and within confederations and the interests of policy makers affect organizational structure even without changes in political institutions.

This added nuance provides substantial guidance for further research. The long-standing cross-country differences in the basis for union organization (i.e., craft, industrial, etc.) appear to play an important role in structuring both the distributional conflicts among workers and how they organize to cooperate. This variation is underexplored theoretically and empirically. Clearly the choice over how to organize workers' representation is an important political matter for union leaders, employers, and politicians, implying an ongoing strategic interaction among all three to determine the rules underpinning labor representation; this interaction is surely conditioned by other political institutions. On the empirical side, appropriate measurement of the degree to which workers are organized into bargaining units based on skills or industry is not a trivial problem and has yet to be addressed.

There is also another area of concern about which I speculate here. There is no reason to believe that confederal organization is incentive neutral for union leaders. After all, union leaders are the ones negotiating the confederal constitution. To the extent that the preferences of the union membership differ from those of their respective leaders, the leadership does not benefit from extending "suffrage" to the federation's rank-and-file. Union leaders desire to remain in office while also achieving policy or other career goals can induce them to give competence to the federation that the pivotal rank-and-file member would prefer to be held at the union level. Union leaders can also collude to restrict the ability of the rank-and-file to go over the heads of their own unions and appeal directly to the

confederal level. Confederal organization might well have second-order effects on the leadership of affiliate unions. The confederation, with its bigger scope of activity, (possibly) bigger paychecks, proximity to politicians and the political process, and distance from the rank-and-file, presents a whole new career path for unions leaders. Leaders may face new incentives to use their positions to move further up the confederal hierarchy or into other offices presumed to offer additional benefits, both public and private. As forward looking rational individuals, they choose a strategy (e.g., policy, level of militance, etc.) that conforms with their future goals rather than the wishes of the rank-and-file. A labor leader looking to move into elected or appointed office will behave differently than the hypothetical perfect agent of her rank-and-file constituency. This tendency has not been lost on governments the world over. Powerful labor leaders have often found themselves ensconced in plush ministry offices in the capital city with little to do save play golf.

The work on pacts clearly indicates that attention needs to be paid to the exact nature of party-union relationships. As the Australia-New Zealand comparison ably demonstrates, all Left-labor parties are not alike. The development of quantitative measures of party-union interpenetration should be a goal here. Third, attention to the careers of union leaders should also be investigated. Though often in unintentional ways, the Accord provided several lucrative career paths for union officials, most notably the management of superannuation funds. How the career concerns of union leaders affect their willingness to commit their unions to certain policy agreements is understudied. The issues identified here point to other cases that could yield further insights. For example, why was there no agreement between unions and the government in Argentina during the 2000-02 crisis?

And what of the geo-temporal restrictions of the analysis? Union influence over the evolution of wages in rich democracies has steadily weakened. Simultaneously (and not coincidentally) the last twenty years has seen a wholesale migration of manufacturing capacity away from the democratic countries of the OECD and toward authoritarian and/or less stable regimes in Asia and Latin America where workers are unorganized or actively repressed. Newly industrializing countries are facing strong challenges in effectively organizing and equipping a modern workforce (Wibbels and Ahlquist, under review). What's more, high energy prices and the weak American dollar are fueling inflation and upheaval

that these countries are not institutionally equipped to manage, either through monetary policy or through direct bargaining with labor. In the absence of democratic accountability, there is no need to signal voters about policy credibility. Without organized workers, there is no coherent agent to work with nor an organization whose strategic capacity can be influenced by government actions and consequently no group who can extract policy concessions benefitting workers. All this implies policy responses relying on blunt macroeconomic instruments and greater pain for workers.

Finally, the normative question that all this poses but does not answer is how best to incorporate the interests of workers in the weakest labor market positions who, by definition, are most in need of the benefits of worker mobilization. The issue is complicated by the recognition that workers' interests may diverge in ways that correlate with their "stand alone" power in the labor market. Further consideration of confederal organizational design must address this heterogeneity of interests while also accounting for the incentives leaders face in the new organization.

## Appendix A

### PROOFS FROM CHAPTER TWO

#### ***Proof of lemma 2.1***

The proof proceeds through each case of  $\Delta u_i$ .

$$r_\alpha > \beta \geq r_i$$

The derivative with respect to  $\beta$  of the top half of equation 2.3 is

$$1 - \frac{r_i}{r_\alpha} + \log \frac{\beta}{r_i} + \log \frac{\bar{r}_{C_\alpha}}{r_\alpha}$$

$r_\alpha > \beta \geq r_i \geq 1 \Rightarrow$  the first two terms sum to a non-negative number and the third term is non-negative. Since  $r_\alpha \leq \bar{r}_{C_\alpha} \forall C \neq \emptyset$ , the last term is nonnegative.

$$r_\alpha > \beta; \quad r_i > \beta$$

The derivative with respect to  $\beta$  of the bottom half of equation 2.3 is

$$1 - r_i/r_\alpha + \log(\bar{r}_{C_\alpha}/r_\alpha)$$

which is nonnegative if and only if  $r_i/r_\alpha \leq \log(\bar{r}_{C_\alpha}/r_\alpha) + 1$ .

$$r_\alpha \leq \beta; \quad r_i \leq \beta$$

The derivative with respect to  $\beta$  of the top half of equation 2.4 is  $(\log \bar{r}_{C_\alpha} - \log r_i) \geq 0 \quad \forall \quad i$ .

$$r_\alpha \leq \beta < r_i$$

The derivative with respect to  $\beta$  of the bottom half of equation 2.4 is  $\log \bar{r}_{C_\alpha} - \log \beta$ .

$\bar{r}_{C_\alpha} \geq r_i > \beta \Rightarrow$  the derivative is positive. ■

**Proof of Lemma 2.2**

The proof proceeds through each case of  $\Delta u_i$ .

$$r_\alpha > \beta \geq r_i$$

The derivative with respect to  $r_i$  of the top half of equation 2.3 is

$$\frac{\partial \Delta u_i}{\partial r_i} = -\frac{\beta}{r_i} + \frac{\beta}{\bar{r}_{C_\alpha}} - \frac{\beta}{r_\alpha} + 1 \leq 0$$

$$r_\alpha > \beta; \quad r_i > \beta$$

The derivative with respect to  $r_i$  of the bottom half of equation 2.3 is

$$\frac{\partial \Delta u_i}{\partial r_i} = \frac{\beta}{\bar{r}_{C_\alpha}} - \frac{\beta}{r_\alpha} \leq 0$$

$$r_\alpha \leq \beta; \quad r_i \leq \beta$$

The derivative with respect to  $r_i$  of the top half of equation 2.4 is

$$\frac{\partial \Delta u_i}{\partial r_i} = \frac{\beta}{\bar{r}_{C_\alpha}} - \frac{\beta}{r_i} \leq 0$$

$$r_\alpha \leq \beta < r_i$$

The derivative with respect to  $\beta$  of the bottom half of equation 2.4 is

$$\frac{\partial \Delta u_i}{\partial r_i} = \frac{\beta}{\bar{r}_{C_\alpha}} - 1 \leq 0 \Leftrightarrow \beta \leq \bar{r}_{C_\alpha}$$

If  $i$  is decisive, i.e.,  $r_i = r_\alpha$  and a change in  $r_i$  changes  $r_\alpha$ , then  $\Delta u_i$  simplifies to  $\beta \log(r_{C_\alpha}/r_\alpha)$ , the derivative of which is  $\beta(r_\alpha - r_{C_\alpha})/r_\alpha^2$ , which is nonpositive since  $r_\alpha \leq r_{C_\alpha}$  by construction. Note that all weak inequalities above become strict when  $|C| > 1$ . ■

### ***Proof of Proposition 2.1***

Fix some  $\alpha$  and some membership  $C$ . If conditions 2.5 or 2.6 holds for  $r_\alpha$  then, by lemma 2.2, they hold  $\forall i$  such that  $r_i \leq r_\alpha$ . Each such  $i$  benefits by joining the confederation. Denote by  $\hat{r}$  the value of  $r_i$  for which either condition 2.5 or 2.6 holds with equality. Any agent  $j$  outside the confederation for which  $r_\alpha < r_j \leq \hat{r}$  can do better by joining since doing so moves the decisive member closer to  $j$ 's preferred  $t_j^*$  and adds resources thereby increasing the returns from the confederal activity. Thus, in equilibrium, there is a (compact) set of agents with contiguous preferences around the  $\alpha$ th agent satisfying either condition 2.5 or 2.6.

To see that the size of the confederation is weakly increasing in  $\beta$ , it suffices to show that when  $\beta < r_\alpha$ ,  $r_i$  members with  $r_i > r_\alpha(1 + \log \bar{r}_{C_\alpha} - \log r_\alpha)$  will find it unprofitable to join since, by lemma 2.1,  $\Delta u_i$  is increasing in  $\beta$  in all other cases implying that the equilibrium confederation will not shrink and may increase in size for any increase in  $\beta$ . If  $\tilde{r} = r_\alpha(1 + \log \bar{r}_{C_\alpha} - \log r_\alpha)$  then, substituting for  $r_i$  and  $\beta/r_\alpha$  for  $t_\alpha$ ,  $\Delta u_i = -\beta(1 + \log \bar{r}_{C_\alpha}/r_\alpha) + \beta(1 + \log \bar{r}_{C_\alpha}/r_\alpha) = 0$ . Thus any agent with  $r_i > \tilde{r}$  will have  $\Delta u_i < 0$  and will therefore not be a member of  $C_\alpha$ . ■

### ***Proof of Proposition 2.2***

For  $t_{\alpha'}$  to exist, it must be the case that  $i$  would join the confederation at some value of  $t$ . Since  $t_i^*$  is  $i$ 's most preferred contribution level and, by assumption, there is some  $i$  for which  $\beta < r_i$ , we can substitute  $\beta/r_i$  for  $t_i^*$  into  $\Delta u_i$ , leading to the condition that  $\beta \log \bar{r}_C/r_i \geq 0$ , which will always be true for nonnegative  $\beta$ .

The value of  $t$  that makes  $i$  indifferent between joining and not solves  $\Delta u_i = 0 \Leftrightarrow tr_i = \beta(1 + \log t \bar{r}_C/\beta)$ . Denote this value of  $t$  as  $\bar{t}_{\alpha'}$ . It must also be the case that all  $j$  would prefer that  $i$  be in the confederation. For this to be the case, there must exist some value of  $t$  that satisfies  $i$ 's participation constraint while making all  $j$  at least as well off as they were without  $i$ . This value exists if  $u_j(t_\alpha; C_{-i}) \leq u_j(\bar{t}_{\alpha'}; C_{-i}) \Leftrightarrow r_j(t_{\alpha'} - t_\alpha) + \beta(\log \bar{r}_{C_{-i}} t_\alpha - \log \bar{r}_C t_{\alpha'}) \leq 0$ . Rearranging terms gives condition 2.7. ■

## Appendix B

### DETAILS ON THE INTERVIEWS REPORTED IN CHAPTER EIGHT

Interviews were conducted by the author between September and December 2006. All interviews, save one phone interview, were conducted in person. In Australia interviews took place in Canberra, Melbourne, Sydney, and Tewanin. All New Zealand interviews occurred in Wellington. The goal was *not* to collect a random sample of any larger population (e.g., union members) but rather to identify the universe of individuals who played important roles in formulating and implementing policy *at the time* and interview as many of them as possible. Interview subjects were identified in two ways: first, through mentions in the public record, press, or secondary literature as having a pivotal or noteworthy role and, second, as referrals from already identified interview subjects. Most interviews were done individually though there was one group interview of commissioners on the Australian Industrial Relations Commission and two situations in which the referrer accompanied me on the interview with the referral. Interviews took place at numerous locations, ranging from subjects' homes or offices to cafes and bars. There is an interview protocol, but all were conducted as a structured conversation. Table B.1 identifies the interview subjects and their relevant affiliations.

Table B.1: Interview Subjects

Country	Subject	Relevant Position
Australia	Grant Belchamber	wages and policy div., dept. of employment & ind. rel.; ACTU research officer
	Laurie Carmichael	Federal secretary, Australian Metal Workers' Union; Asst. Gen Sec., ACTU
	Bruce Chapman	Liason between PM Keating and ACTU
	Paul Goulter	Head NZ TUC; Dir. ACTU Education & Campaign Centre
	Roy Green	Asst. to Bill Kelty, ACTU
	Bob Gregory	Board member, Reserve Bank of Australia
	Joseph Issac	Commissioner, AIRC <sup>1</sup>
	Bill Mansfield	Secretary, Telecommunications Union; ACTU; Commissioner, AIRC
	Michael Keating	Dep. sec. of finance; Sec. of employment & ind. rel.
	Bill Kelty	General Secretary, ACTU
	Kerry Schott	Head of wages and policy div., dept. of employment & ind. rel.
	Jim Simmonds	Commissioner, AIRC
	Chris Warren	Federal secretary, journalists' union
	Ian Watson	Commissioner, AIRC
	Ralph Willis	Min. of employment & ind. rel.; Treasury minister
New Zealand	Peter Conway	President, Distribution Union; Economist, NZCTU
	Arthur Grimes	Economist, Reserve Bank of New Zealand
	Peter Harris	Head of research and policy advocacy, CSU; head of technical services, NZCTU
	Colin James	Journalist
	Tony Simpson	President, CSU; chief of staff for Labour MP Jim Anderton
	Bryce Wilkinson	Treasury economist



## Appendix C

### DEFINITIONS AND DESCRIPTIONS OF DATA USED IN THE FIGURES AND ANALYSES

#### *C.0.1 Details on the pacts dataset*

Data on social pacts are coded from several sources. Data for all European countries comes from monthly issues of the *European Industrial Relations Review* while data for Australia, Canada, New Zealand, and the USA come from secondary sources. For Australia, I relied on Singleton (1990), Peetz (1998), and Hawke and Wooden (1998). For Canada I looked to Archer (1990). For New Zealand I looked to Kelsey (1997), Bray and Walsh (1998), Conway (2002), and especially Evans et al. (1996). For the United States, I relied on Flanagan (1980) and Lichtenstein (2002). Codings for all countries were checked for omissions using a search of news items in Lexis-Nexis. I searched the Lexis-Nexis Academic databases in the world news and business news categories using European, North and South American, and Asia/Pacific news sources. I used the following search protocols: “labor” within ten words of “agreement” within ten words of “inflation” in the headline or lead paragraph; the same, replacing “labor” with “union”; the same replacing “agreement” with “pact”, “social pact”, “accord”, and “social contract”. All searches cover 1974-2003. These Lexis-Nexis searches yielded no evidence of pacts in the countries in the sample not already captured through other sources.

Pacts were coded as union-government, union-employer, or tripartite. I also coded whether there was evidence of the government publicly supporting the pacts. For an agreement to be considered a pact for the purposes of this analysis presented in this study, this last condition must obtain.

I code a *pact* as occurring in a quarter when:

1. There is evidence of a public announcement that an agreement has been formally

accepted<sup>1</sup> by the a union confederation and at least one of the following: employer peak association, government/executive, and/or opposition party.

2. If the government (or party) is not a signatory to the document, the agreement must make demands of the government (or party) *and* there must be evidence that the government (or party) declares its support for the agreement and intention to take the required actions.

I code a pact as a *new pact* if a pact occurs in a quarter and there is no pact in effect in any of the last three quarters. Otherwise a pact will be coded as a *renegotiated pact*. A pact is considered to be *in effect* until one of the following occurs:

1. There is evidence of one of the signatories withdrawing from the pact
2. There is a change of government and the new government fails to declare its support for a pact.
3. The agreed expiration date for a pact passes with no pact taking its place for one quarter.
4. If a pact is for a one-off change in policy (i.e., not requiring ongoing commitment from the signatories), I code the pact as living for one period.

Pacts were also coded based on their expected duration. Pacts were coded as having an expected duration if they specifically mention an end date or term of applicability. Pacts were coded as “unspecified” if they had no explicit expiration date. “One-off” pacts were deals made over specific policy items that did not require ongoing commitments on the part of the unions (e.g., Spain’s 1998 part-time employment pact). These one-off agreements are potentially problematic for the empirical analysis when they occur while a larger pact is in

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<sup>1</sup>In some circumstances this entails a vote of ratification by the peak association’s affiliates whereas in others it does not. Where ratification is required I code the pact in the quarter in which all parties have ratified.

effect. I handle this in the analysis by ignoring one-off pacts that occur during the span of an existing pact; I consider one-off pacts as a form of renegotiation.

I code the percent of national-level peak organizations that sign the pact on both the union and employer sides. Finally, pacts were coded as to whether they contain provisions for policy in the following categories: wages, social security, taxes, and employment.

### *C.1 Variables from chapter 1*

**90/50, 50/10 gross earnings** Ratio of the worker at the 90th percentile of gross earnings to the 50th and the 50th to the 10th. Taken from the Comparative Welfare State dataset (Huber et al., 2004), henceforth CWS.

**90/10 disposable income, gini** Ratio of the 90th percentile of household disposable income to the 10th; gini coefficient. Taken from Luxembourg Income Study (2006)

**bargaining level** Four-category index of bargaining level from Golden, Wallerstein and Lange (2002), henceforth GWL.

**confederal share** Share of union members organized into union federations taken from GWL. Interpolated to the annual level.

**confederal strike fund** Indicator of whether the first union confederation controls a central strike fund. Taken from GWL.

**confederal strike veto** Indicator of whether the first union confederation can veto affiliates' strikes taken from GWL.

**interconfederation membership concentration** Herfindahl index of confederal union membership. Taken from GWL, interpolated to the annual level.

**interunion membership concentration** Where available, the approximate Herfindahl index among blue collar unions; if missing, then the weighted Herfindahl index across

federations; if missing then the approximate Herfindahl index for the biggest confederation. Interpolated to the annual level. All taken from GWL.

**organizing basis** Indicator of historical basis for union organizing as coded in Iversen and Soskice (2007)

**union density** Net union density taken from Golden, Wallerstein and Lange (2002) and supplemented with values from Visser (2006).

## ***C.2 Variables from chapter 4***

All variables are the same from chapter 1 except

**bargaining coordination** Kenworthy's index of wage coordination. The original index takes on values in  $\{1,2,3,4,5\}$  where "1= fragmented wage bargaining, confined largely to individual firms or plants...; 2=mixed industry- and firm-level bargaining, with little or no pattern setting and relatively weak elements of government coordination such as setting of basic pay rate or wage indexation...; 3 = industry-level bargaining with somewhat irregular and uncertain pattern setting and only moderate union concentration...; government wage arbitration; 4 =centralized bargaining by peak confederation(s) or government imposition of a wage schedule/freeze, without a peace obligation...; informal centralization of industry- and firm-level bargaining by peak associations...; extensive, regularized pattern setting coupled with a high degree of union concentration; 5 = Centralized bargaining by peak confederation(s) or government imposition of a wage schedule/freeze, with a peace obligation...; informal centralization of industry-level bargaining by a powerful, monopolistic union confederation...; extensive, regularized pattern setting and highly synchronized bargaining coupled with coordination of bargaining by influential large firms," (Kenworthy, 2003:41). I collapse categories one and two together.

**cultural fractionalization** Cultural-linguistic fractionalization taken from Fearon (2003).

**effective number of parliamentary parties** Effective number of parliamentary parties from Golder (2005)

**federal** Indicator for federal governmental system taken from Keefer (2002).

**inflation** Price level of consumption taken from the Penn World Tables (Heston, Summers and Aten, 2006), henceforth PWT.

**Left government** Proportion of the total number of legislative seats controlled by the government parties that are due to Left parties taken from Swank (1999)

**population** population in millions from taken from the PWT.

**trade** (Exports + Imports)/GDP in current \$US from PWT.

**unemployment** Standardized unemployment rate taken from the CWS.

### ***C.3 Variables from chapter 7***

**bargaining coordination** Same as above only collapsing categories two and three together.

**CBI** The Cukierman, Webb and Neyapti (1992) index of central bank independence.

**current account** Current account balance as %GDP from *World Development Indicators* (World Bank, 2006), henceforth WDI. Interpolated to the quarterly level.

**deficit**  $-1 \times$  overall government budget balance, taken from the WDI.

**election in next 6 Q** Takes on value of 1 if an election occurs in any of the subsequent three quarters and 0 otherwise. Dates for elections come from data provided by Kayser and supplemented with Wikipedia (2007)

**election in previous 6 Q** Takes on value of 1 if an election occurs in any of the previous three quarters and 0 otherwise. Dates for elections come from data provided by Kayser and supplemented with Wikipedia (2007).

**growth** Growth in real per capita GDP from PWT. Interpolated to the quarterly level.

**inflation** GDP deflator from the WDI. Interpolated to the quarterly level.

**TSLE/CIEP** Time since last election to the lower legislative house as proportion of the constitutional interelection period for such elections. Data from Kayser supplemented with data from Wikipedia (2007).

**unemployment** Quarterly standardized unemployment rate taken from OECD (2005).

**union density** Same as above only interpolated to the quarterly level.

#### ***C.4 Variables from chapter 8***

Same as above except

**inequality** Gini coefficient taken from the UTIP EHII dataset (an update of the Deninger & Squire data) (UTIP Research Group, 2006)

**ISI** Manufacturing as %GDP - Manufacturing exports as %GDP from WDI

**GDPpc** Per capita GDP from the PWT.

**Government debt** Central government debt from the WDI

**GDP/hr. worked** GDP per hour worked in 1990 \$US from International Labour Organization (2005*a*), henceforth KILM.

**Labor costs** Real unit labor costs index, 2000=100, taken from the KILM

**Real GDP** Index with 1980 as the base year. GDP data taken from the PWT

**Union density** Adjusted union density taken from Visser (2006)

**Union militance** Industrial disputes / labor force taken from CWS.

**Wage inequality** The 90/50 ratio taken from the CWS.

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## VITA

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