Abstract

Given the underdeveloped attention to political and policy origins of aggregate work time patterns in the work-time literature, and the lack of any significant attention to work-time in the broader comparative political economy literature, this paper has pursues a broad mandate: to bring more politics into the study of work-time, and work-time into the study of politics. Using data allowing better comparison among OECD countries, we argue that study of working time needs to consider annual hours per employee and per working-age person, shaped by a range of social as well as direct work-time policies. We also argue that union interest in work-time reduction is more ambiguous than customarily supposed, with union interests likely mediated by a range of other conditions, especially female labor market participation and female union membership. Finally, we argue that attention to party systems and policy clusters should begin with consideration of Social Democratic, Liberal and Christian Democratic worlds of work time. We support these arguments with cross-section time-series study of 18 OECD countries, and brief qualitative studies of work-time in Finland, the United States, and the Netherlands.

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How much people work is an important and politically-contested part of economic life. Measured in terms of hours per worker, per full-time worker, or per person, the total hours of work is an important measure of how much of life is spent earning money rather than in other pursuits. By at least some normative standards, working fewer hours is an important measure of the “good life,” to be weighed against other, well-recognized measures of economic well-being such as wealth and employment. Indeed, the significantly greater number of hours worked by Americans than their European or even Japanese counterparts has raised concern about “overwork” that is a blemish on the US’s employment and growth success (Schorr 1996). Whether the normative concern is this “overworked American” or instead “a lazy European,” working time matters in our common-sense judgments of successful political economy.

Working hours have also long been the subject of real political fights between employers, unions, religious groups, and political parties. These contests most directly involve regulation of the work-day, work-week, holidays, over-time and the like, but also policies with indirect effects for working hours, such as welfare, education, and various labor regulations. Sometimes, as with German union strikes to win the 35-hour week in the 1990s or French government’s more recent hours reductions to fight persistent unemployment, working-time reductions can be front-page news in the politics of the economy.

Despite working time’s politically-contested importance, we actually know very little about its politics. The well developed literature on comparative political economy with so much to say about the major economic and policy differences between industrialized countries has devoted very little attention to the issue of work-time policies or work-time in general. The significant and growing study of working time, meanwhile,
is dominated by labor economists, who tell us plenty about work-time patterns, the
efficacy of work-time regulations, and about some of the industrial relations conditions
that can explain work-time patterns. But they tell us much less about the working-time
consequences of policies less directly regulating such hours; or about the conditions
under which unions prioritize working-hours limits in their policy and wage-bargaining;
or about how different party politics and the systems of welfare and labor market
institutions they create play-out in work-time patterns. Most generally, the literature
leaves the core issue unclear how and to what extent organized politics rather than private
economic incentives shape differences in work time across polities and time.

This paper’s ambition is, most broadly, to bring politics into the study of working
time, and working time into the study of politics. It develops a simple framework to
refine understanding of the basic politics of working time, focused on broad measures of
work-time and indirect and direct work-time policies, and on the social actors and party-
systems that we believe strongly influence work-time patterns.

On the social actors, the argument focuses on clarifying the role of unions in
work-time. Union interests over working hours per employee are mixed, with some
incentive to protect incumbent positions that imply ambiguous consequences of union
strength for working time, measured either as annual hours per employee or per working-
age person in the population. In light of such ambiguity, the paper reasons that union
support for policies that reduce work-time is likely mediated by female participation in
labor markets and unions, long-term unemployment, bargaining centralization, and
ideational factors.

On party systems, the argument is that the partisan-ideological differences that
have given rise to distinct Social Democratic, Liberal and Christian Democratic “worlds
of welfare capitalism” (Esping-Andersen 1990) also imply three discernable worlds of
working-time and work-time regulation. The Social Democratic parties champion full-
employment, solidaristic welfare states and work-time policies that imply significant
leveling of work-time but, because they eschew labor market dualisms between part-time
and full-time or male and female employment, are limited in the net effects of hours-
reductions across the population as a whole. Liberal parties champion market-led,
minimalist welfare states channeled through labor market participation (e.g. negative
income taxes), and side with employers against formal work-time limits. Christian
Democratic parties, we argue, can be reasonably interpreted as always being the starkest
champions on work limitations, in the broadest sense of hours per working-age person.
And secularization and the past problems associated with past Christian Democratic
“welfare without work” (Esping-Andersen 1996) have inspired shifting policies that not
only limit population work-time through traditional forms of labor market exclusion and
early retirement, but also through a new work-time recipe that combines resistance to the
“24-hour economy” with support for part-time female labor market participation. The
working-time consequences of this policy clustering depend systematically on whether
one measures work time per-employee or more broadly as hours per working-age person
in the population. The relationship we suggest is represented schematically below.

Table One: Three Worlds of Working Time

<table>
<thead>
<tr>
<th>Lower work-hours per working-age person</th>
<th>Higher work-hours per working-age person</th>
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<tr>
<td>Higher work-hours per employee</td>
<td>Christian Democratic</td>
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<tr>
<td>Lower work-hours per employee</td>
<td>Reformed Christian Democratic(?)</td>
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The paper makes two empirical contributions that aim to explore the role that political configurations play, above and beyond economic conditions, in explaining work-time differences between countries and over time. The first is a set of brief case studies covering one country from each regime-type (Holland, Finland and the United States) to test and illustrate our argument in a way that is attentive to the qualitative politics of individual countries. Secondly, using newly aggregated comparable data on working hours in 18 OECD countries, descriptive-statistics, cross-sectional, and pooled cross-sectional time series analysis of OECD political economic conditions and work time, we provide some quantitative evidence for the above arguments about union movements and partisan-led Social Democratic, Liberal, and Christian Democratic worlds of work hours.

1. Under-Studied Politics in the Study of Work Time

Study of working time in industrialized countries has been the province of labor economists and industrial relations specialists. Their work is partly premised on the idea that leisure time is a measure of worker contentment, but it is equally motivated by how work-hours is an input in per-hour productivity central to growth economics. The literature on working time, in any event, has focused on describing, explaining, and evaluating work-time patterns and work-time limits across sectors, countries and time.

The descriptive tasks have been non-trivial. Measures of annual hours, full-time hours, and the like have long suffered from comparability problems across countries and even over time within countries, because of differences in definitions used for “work” and “non-work” (measures differ in treatment of part-time, overtime, vacation time, sick leave, absenteeism, child-care leave, etc.) (Maddison 1982; OECD 2000; Eurostat). More recent work has focused on making some such measures internationally and
temporally comparable, but with only qualified success (Groningen 2002). Improving such measures has, thus, involved reliance on micro-level time use and attitude surveys that provide more comparable national measures of work time, though very limited in the detail of work-time patterns, countries included and years covered (Bell and Freeman 1995, 1996).

Across a wide range of sources and measures, existing research has nonetheless revealed some basic trends. For virtually all industrialized countries working hours per employee and per person have declined steadily since the 1870s.\(^4\) A significant, though declining, portion of productivity gains have been used to decrease work time as countries industrialized; and working hours likewise are thought to be longer in the undeveloped world. Higher-income countries within the industrialized world do not, however, show a clear trend toward faster reductions in work hours.\(^5\) Moreover, as illustrated by Figure One (shown here since 1950 for data purposes) through the post-War period and at least the 1960s most OECD countries were experiencing similar declines, after which the United States has increasingly stood out as the country with the least decline, in the last two decades experiencing absolute increases in work time by most measures, and considerably more hours than any other industrialized country, even Japan. By 2000, US annual hours per employee were 16 percent greater than the OECD-18 average, and 21 percent higher than the European-13 average in the sample (Groningen 2002).

\[ [[	ext{Figure One: US, European, OECD Annual Hours per Employee, 1950-2000}]] \]

This divergence has provided the puzzle motivating much of the existing research into the origins of variation in working time. Especially in existing quantitative research,
explanatory pride of place has been given to economic rather than policy or political conditions. For instance, Bell and Freeman’s influential work focuses on why US workers work so many more hours than their European counterparts considers a range of labor supply explanations, including income, education levels, etc., and ultimately emphasizes the role of income inequality as the most powerful explanation (Bell and Freeman 1995, 1996). They find strong support for this argument with a range of micro-level survey, cross-sectional data, and cross-industry data that suggest income effects to be small and inequality effects large. Other broadly economic conditions thought to explain working time differences include persistent (as opposed to cyclical and temporary) unemployment; labor-saving technological innovations; high trade balances (thought to increase work-time for competitive advantage); and generally rising part-time work patterns throughout the OECD (explaining decreased work-time per employee) (Bell 1995, Bosch et.al. 1994; Freeman; Hunt 1998).

Studies of work-time patterns have not focused on the often-unintended consequences of broad political configurations, tending instead to focus on explicit policies that limit the working day or week, holiday period, overtime, and the like. But existing studies at least hint at the role of a range of other public policies and collective bargaining goals that are indirectly relevant to explaining work time. Particularly before the post-war period, legislation protecting women and children has been linked to reduced work time. Higher income taxes might have an income effect of discouraging more work at the margin (Bell and Freeman 1994). And most importantly, social welfare programs may have a general income-equalizing effect that should decrease work time at the margin (Bell and Freeman), and may encompass early retirement social security that lowers working hours across the population (Bosch), or education and anti-
unemployment programs that might encourage part-time employment, thus lowering working hours measured per employee (Blainpain and Kohler 1988).

Finally and most importantly, existing working-time research has probed into at least the most obvious political conditions underlying policies and collective bargaining patterns that can directly or indirectly influence working time. The emphasis has been overwhelmingly on the “demand side” focusing on left-labor power: working hours are thought to be reduced proportional to union density, centralization of collective bargaining agreements, and the power of Left parties. The more or less articulated assumption is that union movements and the workers they represent, Left parties and the citizens they represent, will have a general interest in work-time reductions, especially when reductions come with pay compensation. Greater union density, centralization, and Left party strength are thought to provide the political and institutional power to force their preference for working-hours reductions. Although receiving much less attention, there is also some recognition in the literature that the main opposition to work-limits come from employers and employer associations, which see such reductions as a threat to flexibility and a rise in their total wage bill.8

As for evidence on all these political conditions, the only factor to receive significant attention is union density. Bell and Freeman’s survey research, for instance, revealed a significant hours-reduction effect for union members (Bell and Freeman 1996).9 More compellingly, Blanchflower’s study of labor union influence on wages and working conditions showed very strong and consistent evidence that union membership brought the benefit of lower working hours when compared to non-union workers in the same countries and industries (Blanchflower 1996). And the OECD itself concluded that “for a set of eleven countries for which data are available, the correlation between trade
union density and changes in annual hours between the most recent cyclical troughs in each is –0.43” (OECD 1998, quoted in Hunt 1998).

Historical studies of work-time reduction have painted rich portraits of the ways that work-time efforts are implicated in other political agendas and broad cultural trends. Focusing again on organized labor movements and on explicit work-time limitations, these studies have sometimes shown how union attention to hours-reduction was often driven by a more consistent motivation to secure wage gains or employment security, for instance as might result from increased overtime pay or tighter labor markets (Hunnicut 1988). Historical studies have offered little attempt to systematically generalize across cases, but they underline how complex affinities might exist between clusters of interrelated causes. They remind us that the extent to which work-reduction is a priority for political actors may depend upon their broad visions of the good life, and the ways that social goals are institutionalized by policy instruments.

Critique. Despite this range of evidence and attention to patterns and origins of work time, including some of its politics, existing understanding of the political underpinnings of work-time over time and space is quite thin. Empirically, the main problem is that many of the insights articulated or mentioned in the literature get scant little empirical attention to test those insights and develop others. With the existing quantitative work this is largely a function of the micro-survey data on which many scholars reasonably rely, in steering clear of the comparability problems of past measures of national-level aggregates. Such data makes it simply impossible to measure the effects of different social policies or tax systems, or for that matter the variations in union centralization or Left-party influence, all of which are national or regional level features. And when cross-sectional, aggregate comparisons have been used in the literature, the various political conditions, except for union density, have not been investigated.
Existing qualitative studies, meanwhile, have been much more useful for unraveling such political conditions, but primarily focused on national case experiences in points of time, with little comparison geared towards explaining differences across countries and time.

Conceptually, the problems with existing policy comparisons are mainly that the conception of politics underlying work time differences is rather simplistic. It is not clear, for instance, that the policies most relevant to shaping difference in working time are those directly regulating time rather than those that have indirect, often unintentional work time consequences – such as broad social policy regimes, active labor market programs, tax policy, and other labor market regulations.

More importantly, the common intuition that has informed most of the literature has naively been that because workers prefer less toil, greater power for worker representatives at the bargaining table or the ballot box should decrease working time. The resulting emphasis on union density and centralization, and Left-party support is at best ambiguous, since there are a variety of reasons to believe these conditions are neither necessary nor sufficient for policies that lower working time.

One should recognize that although most unions may have called for working time reductions, some have often also called for labor market restrictions that discourage part-time work or women’s labor market participation – with off-setting effects for per-employee working time. More importantly, even if support among unions for working time regulations were nearly universal, the priority unions attach to such support varies substantially over time and space. For some unions at some times, it has been a top agenda item, to be pursued even at the expense of wage gains, flexibility or social policy retrenchment; and at other times and for a few unions most of the time, it has been relatively low on the list of negotiating or legislative objectives. The US labor movement was, indeed, the “folks who brought you the weekend,” but that was the US labor
movement of yesteryear, long since eclipsed by a union movement with very low-priority support for work-time reductions. And, of course, labor movements in different countries have shown very different tastes for work-time reductions. The problem, of course, is that the existing literature tells us very little to understand the conditions that mediate such taste.

And finally, in the treatment of party system differences, the common presumption that Left party influence stimulates restrictions on work time, is even more over-simplified than the treatment of unions. Left party support for work-time regulations are an insufficient condition because such parties, like their affiliated union movements, have sometimes promoted social policy and labor market choices that have the effect of increasing total work time. It may also be an unnecessary partisan condition, since other parties may take positions that consistently spawn less working time. Christian Democratic parties have played a dominant role in the policy developments of many continental European states, including being the infamous champions of early retirement and labor market exclusion, with important working-time implications.

More generally, simple Left-Right spectrums are confounded by the substantial literature focused on institutional-political clustering of distinct sub-types of capitalism, and particularly the identification of distinct social democratic, liberal, and Christian democratic paths of welfare and labor market governance. Given the centrality of working time in quality of life and economic welfare in labor markets, such regime types might correspond to distinct postures toward work time. And yet, the work-time literature’s simplification of party politics over work time is surpassed by the utter silence of the welfare regime or varieties of capitalism to consider the implications of their political institutional conditions for work time.
Existing literature thus leaves the role of politics in the world of work time quite ambiguous. Given the conceptual ambiguities or silences about such politics, what role do direct policy regulations of working time play relative to other social, labor or tax policies in shaping work-time differences? What are the conditions under which labor movements will tend to prioritize work-time regulations in their collective bargaining and legislative agendas? And what role do Christian Democratic, Left, and Right party movements, and their kindred worlds of welfare capitalism play in shaping work time variation?

2. Work-time Policies, Unions, and Three Worlds of Work Time

Answering these questions obviously requires bringing more politics into the study of working time, and bringing existing study of politics to working time. We try to do so by outlining and testing a simple and quite stripped-down framework of work time politics. This framework has three parts: the first outlines the aspects of work-time interest and the policies and industrial relations practices that plausibly shape work-time patterns; the second outlines the positions of social actors in the contestation of those policies and practices, for this paper focused on the role of unions; and the third outlines a vision of liberal, social democratic and Christian democratic worlds of work time. In each of these sections we build on well-trodden political science treatments of industrialized country welfare state and industrial relations to identify testable hypotheses.
2.1. The Dimensions and Policies of Working Time

The first step in our framework is a statement of the aspects of work-time most in need of studying and of the policies and practices that condition such work-time. Our interest is in working time patterns as a broad measure of political economic success or happiness, of the good life, to be weighed against the many other standard measures of success. This calls for describing and explaining working time patterns for a population or working-age population as a whole, not only for employees, let alone full-time employees in one or other sector of the economy. Hence, we concentrate in this paper on very aggregate measures of working time: annual hours of work per employee and annual hours of work per working age person. We say little about particular industries, full-time manufacturing work, or other more disaggregated aspects of work time patterns that often of greater interest to labor economists and industrial relations experts. We do so independent of data considerations, to highlight the aggregate political economic picture most relevant to our scholarly motivation.\(^{12}\)

As for the policies and practice, our interest is not only in the policies directly limiting work time, but equally also those targeted at other objectives but with plausibly strong consequences for working time. In the former category, we consider the policies and collective agreements, from firm to national level, that limit hours per day, days per week, weeks per year, but also wage premiums for over-time work, and limitations on “un-social work” (night and weekend work).\(^{13}\) The influence of such policies on hours per year are difficult to evaluate since we know that the general link between stipulated or “agreed” hours and actual hours worked can be relatively weak.\(^{14}\) Figure Two below, for instance, maps the relationship between the agreed (as predicted by legislation and collective bargaining agreements), and actual hours of eleven countries in 1989. This is not nearly as strong a correlation as one would expect (r-sq. of .62), and within Europe
the correlation is virtually nonexistent, suggesting that other economic or political
conditions might matter more.

[Figure Two: Agreed and Actual Hours per Employee, 1989]

Our theoretical assumption, in any event, is that such direct policies might have
less influence on work hours patterns than other policies and features of the public
economy, particularly: tax policy, non-working-hours labor market regulations, and
especially social welfare policies. Tax levels affect general welfare and income of
workers and, plausibly, their interest in working more hours, or trading-off reductions in
hours for wage moderation (Bell and Freeman); payroll taxes can affect the marginal cost
to employers of work-time restrictions, hence their willingness to support work-time
reductions; and, of course, the structure of tax rules can have incentives for or against
part-time work or female labor market participation, such as tax rules that simply add
spousal income to that of the breadwinner. Some labor market regulations, such as job
protections or pension rights for temporary or part-time workers, might not directly limit
work-time patterns, but strongly encourage part-time work, lowering working-hours per
employee (but possibly raising hours per working-age person).

Finally, social policies – unemployment insurance, active labor market policies,
family and old-age stipends and services, education, health, and disability – have diverse
and sometimes off-setting implications for working time. Most generally, the literature
hypothesizes that security provided by generous welfare programs generally raise
reservation wages and, plausibly, the taste for more free and less working time (Esping-
Andersen 1990; Bell and Freeman 1995). And particular programs have distinct
implications for working time that may vary depending on whether we are concerned
with hours per employee or hours per capita in the working age population more broadly. For instance: early retirement programs should obviously lower hours per working-age population (though not per employee); subsidized child care services should encourage female labor market participation and part-time work, decreasing working hours per employee but probably increasing hours per working-age person; and some public employment and employment subsidization programs can promote part-time work, again decreasing hours per employee but plausibly increasing hours per working-age person.

2.2. Social Actors and Work-time: Union Tastes for Work-time Reduction

To explain patterns of aggregate working time and the broader policies and practices that may influence those patterns, we believe on the one side that it is important to move beyond the simplistic treatment of economic conditions and socio-economic actors of existing scholarship. But we also suspect that it is also important to move beyond the intuition that broad social values across countries shape their work-time differences. Although we often hear about the “hard-working Japanese” or the leisurely “Mediterranean culture,” actual work-time patterns cannot simply be explained as reflections of broad cultural or value preferences within the population. A first-cut glimpse at 1990 World Values Survey and work time data makes this crudely apparent. The degree to which surveyed respondents say that work or family is "very important in their lives" exhibits no relationship with actual work hours (per employee or working-age population).15 There is also no relationship between those who attest to the great importance of "leisure" and the actual hours of work in these populations.16 Perhaps surprisingly, there is no significant relationship between measures of "post-materialist values" and short hours.17 Lastly, actual changes of either measure of working hours
from 1980 to 2000 had no relationship with whether people in 1990 agreed with the statement that it would be good to "decrease the importance of work in our lives."^{18}

Rather than jettisoning the role of social economic actors for the role of culture, we seek to clarify the role of those social actors most engaged in shaping work-time policies and practice, broadly construed. This minimally includes both employers and unions, but at this early stage in the research we begin with two simple claims about the role of unions.

The first is to recognize that as measures of political power, union density and centralization might have mixed consequences for aggregate hours measures on which we focus. Even if micro-data provides compelling evidence that union membership within a given sector implies less working time, union density and centralization at the national level may not: To the degree that union protection of the core interests of incumbent, largely male workers leads them to oppose part-time work policies or female labor market participation, this could easily off-set the working-time limits that the same unions might also champion, leading to more hours per employee in the aggregate (a positive correlation between density/centralization and annual work hours per employee). For annual hours per working-age person, union density and centralization might seem to have more unambiguous hours-reducing implications, because any labor market exclusion, support for welfare programs, and work-time limitations all push in the same downward direction on aggregate hours. But even here, the union preference for full employment could imply high employment rates that push up this broader work-time measure.

Second and more specifically, union support for policies that generally reduce aggregate working hours may be mediated by several conditions other than power itself: (1) persistent unemployment in the population, and in the union population in particular;
(2) female labor market participation, and female union membership in particular; (3) centralization of collective bargaining; and (4) ideational or cultural factors that influence how organized labor defines its priorities and what constitutes “success.” First, as the literature on work time has already pointed out, the prevalence of long-term unemployment is a clear candidate for predicting experimentation with work-time reductions, and it may well play an important role in mediating union tastes in particular. Especially as a defensive action to prevent still deeper unemployment from among the core membership, but also as pursuit of a public good, unions facing persistent unemployment should be more inclined to place a higher priority on work-sharing compared to wage or other demands. Such work-sharing preference should be particularly strong to the extent that unemployed workers are union members. Hence, persistent unemployment and high unemployment among union membership should correlate negatively with work-time, and should strengthen any negative correlation between union density/centralization and work-time.

Exogenous trends in female labor market participation and female union membership should also mediate union taste for policies that directly or indirectly reduce aggregate working time. Regardless of the positions unions may have taken on issues of women’s working rights in the past, higher levels of female labor market entry will signal to union leaders the potential for female recruitment into union membership, bringing the interests of the union closer to those of a (future) female client base. Having an incentive to win the hearts and minds of female workers, in turn, will inspire support for part-time work protections and conditions, social policies that ease female labor market participation (e.g. childcare services, parental leave, etc.), and work-time limits that narrow any stigma women with part-time work interests might face in a high-hours, full time setting. To the extent that female union membership is already high, such is a direct
indicator that these female-friendly work-time policy preferences might already be endogenized by union organizations.

For efforts at work reduction through shortening the standard work-week, centralization of collective bargaining may also mediate union preferences. One line of reasoning follows from Calmfors and Driffel or Olson’s work on collective bargaining, which argues that only those unions that are organized above the industry level will tend to endogenize public good considerations (Calmfors and Driffel 1988, Olson 1965). Unions who are primarily concerned about higher wages or greater employment security might nonetheless promote these priorities indirectly by demanding shorter working-hours policies that would effectively reduce the available labor supply by requiring more workers to provide the same number of hours.20 But we would expect that wage-prioritizing unions would be less likely to pursue such a strategy in more fragmented bargaining situations because the result on effective labor supply of isolated plant or even regional agreements would be relatively insignificant.21 Another line of argument posits a similar relationship between organized labor’s capacity for collective action and efforts to reduce working time, but posits an opposite line of causality. As historians of the American case in particular argue, the issue of increased free time may have “unique capacity to unify workers across the lines of craft, race, sex, skill, age and ethnicity” (Roediger and 1993: vii; Hunnicut 1988), as well as to free up exhausted workers to use their time for organizing (p. 178).

Finally, union tastes for policies that reduce work time should also reflect their own experience with such policies in earlier rounds of legislative or collective bargaining. The logic is that political experience can change causal beliefs about the efficacy of prioritizing a particular policy, leading to a consolidation or erosion of support for work-time reductions.22 This experience involves more or less success, expending
more or less political capital, in getting employers and/or governments to accept particular work-time reductions: the more successful, the more experience will consolidate work-time reduction demands. Experience also includes, however, judgments of the efficacy of the past policy concessions: e.g. did they improve the real economic position of union members?; did they actually reduce unemployment? The literature on the efficacy of work-sharing, for instance, suggests that such sharing efforts have tended to help the quality of life of incumbent union workers in their secure full-time settings, but that due to concomitant wage demands and other conditions, employers have not always used reduced work hours to create more jobs (c.f. Hunt 1998). One can hypothesize that learning such disappointments could well dampen the enthusiasm of unions for work-time reductions. Alternately, once unions define success in terms of reducing work-time they may lock themselves into this strategy as their supporters use this criterion to evaluate efficacy.23

2.3. Three Worlds of Working Hours

Finally, our framework considers the implications for working time of different party-political movements, and welfare/labor-market regime-type differences they have created. Where the literature emphasizes the proclivities of Left governments to reduce work time, this most narrowly requires clarifying Left party work-time preferences, and mainly considering Right party and, especially, Christian Democratic party preferences. But it also means considering the role of the welfare and labor-market regime differences associated with these three party movements in industrialized societies. As first distinguished by Gosta Esping-Andersen’s seminal discussion of Three Worlds of Welfare Capitalism, Social Democratic, Liberal, and Christian Democratic regime types
have distinct partisan-constructed welfare policy styles and labor market practices that vary in their employment implications, their provision of social rights, their degree and basis of social stratification (1990). We consider here some reasons to believe that these same cleavages lead to three distinct paths of aggregate work-time. These differences, we believe, are a product of the core partisan preferences about work in the Left, Right and Christian Democratic parties that underlie each path, not just to the downstream effects of the welfare states already well associated with each.

Table One at the outset summarized the hypothesized differences between social democratic, liberal, and Christian Democratic party and welfare regimes for aggregate working hours. Liberal party-systems select for higher working hours per employee and working-age person. Social democratic party systems select for lower hours per employee but also fight dualism and support full employment in ways that may raise, in particular, hours per working-age person. And Christian Democratic party systems select for policies that should lead to the lowest hours per working-age person and, through more recent reform efforts, limit hours per employee even compared to their social democratic counterparts.

Social Democratic regimes should pursue work time reduction, but in a pattern of solidaristic work-sharing (rather than part-time/full-time dual labor markets) and high levels of labor market participation. In the traditional welfare regime context, the Social Democratic model relies on state-intervention to promote social rights through highly de-commodifying and solidaristic, service-heavy welfare states with high employment participation. Economies dominated by Social Democratic parties experience the earliest and highest levels of female labor market participation, and have built upon their welfare services tradition to deepen childcare services, parental leave policies, and active labor
market policies that consolidate such employment. And to the extent that the Social Democratic commitments to income equalization through welfare redistribution, the resulting more modest income inequality should imply lower private work-hour incentives (Palme and Korpi 1992). The highly de-commodifying nature of social-democratic welfare states, their pro-participation labor market policies, and egalitarian income distribution imply relatively low hours per employee. But the inclusionary and full-employment biases of these welfare states imply not particularly low hours per working-age person in the population.

More directly, Social Democratic parties can be expected to favor particular kinds of policies that restrict work time in particular ways. Social Democratic Party commitments to full-employment ideals, and perhaps old-Left romance with the value of work, see labor market participation as a virtue in itself. But these Left party systems also champion de-commodification and social rights more generally that can be expected to make them champions of various kinds of work-reduction and work-sharing strategies, provided they don’t threaten the full employment and solidaristic ideals. This suggests that Social Democrats might well favor general work-time reductions, but will also make them resistant of trends that lead to labor market dualisms in terms of wages, employment rights, benefits, or social prestige. Such dualisms between female and male, part-time and full-time workers, for instance, should be targeted for attack by Social Democrats, in their work-time as well as welfare strategies. Empirically, this should imply a preference for increasing significant shortened-time employment for all of working age. And this, in turn, should make the Social Democratic party strength a correlate of low hours per employee, if not particularly low hours per working-age person.
Liberal regimes and their Right party champions are likely to embrace social policy, labor market, and work-time regulations that imply relatively high levels of aggregate work time by all measures. The Liberal welfare regime-type typically relies on the market much more than state intervention for labor market regulation, and offers relatively modest welfare provisions that are least de-commodifying and most stratifying in terms of class or skill level. Such welfare minimalism leads to relatively low reservation wages and high employment rates, and comes with unregulated labor markets and private-sector job creation that imply the same. Such neo-liberal welfare and labor market regulation tends also to foster high inequality levels, in turn more private working-hour incentives. And the recent deepening of Liberal welfare state expansion of negative income tax policy provisions and other “welfare-to-work” activating measures as an important element of welfare reform (along with some modest retrenchment), Liberal welfare states foster yet more work as a necessary means to earn the most generous state welfare benefits (Myles and Pierson 1998).

More directly on working hours regulation, Right-wing (neo-liberal) parties that most carry the Liberal regime ideals will tend to favor the interests of employers over unions, meaning desire for flexible rather than reduced work. And Right parties can be said to generally embrace maximal private-market labor market participation and norms of hard work. The same neo-Liberal Right philosophy of work and responsibility that demonizes the welfare laggard and lionizes the multi-job worker (voiced most stridently by Reagan Republicans and Thatcher Conservatives), can be expected to oppose any interventions in private labor as well as product markets, and to generally see work reductions as indulgences in sloth. All these welfare and direct implications of Right wing neo-Liberal regimes and parties unambiguously select for high annual hours per employee and per working-age person.
Christian Democratic parties and welfare regimes have characteristics that make it, we believe, the system that in recent guises should be the greatest champion (intentional or not) of reduced work-hours for both hours per employee as well as per working-age person. The Christian Democratic welfare state is ideal-typically premised on preserving conservative family priorities, highly de-commodifying but strongly seeking to consolidate rather than diminish status and, especially, gender, stratification. Social benefits in the Christian Democratic welfare tend to be earnings-related, transfer-heavy and service-weak. Such “social capitalism” has led to high uses of early retirement schemes and female labor market exclusion that has invited much scorn from most political economists, deserving Esping-Andersen’s pejorative “welfare without work.” In terms of working hours measures, however, the results should be traditionally very low annual hours per working-age person – due to low employment rates and high de-commodification. But traditionally it may imply relatively high annual hours per employee, reflecting the bias towards only full-time, breadwinner employment (rather than part-time).

Christian Democracy, we suggests, is important for the kind of political and regulatory strategies it engenders, rather than merely an affinity between Protestantism and long hours. A cross-sectional glance at international survey data shows that the percent of citizens who belong to Roman Catholic denominations exhibits no relationship to how long employees work. 24 Catholicism does have a significant negative relationship with the number of hours of work among the working-age population more broadly (R-sq. 0.32), 25 which supports the view that Catholicism is causally most important insofar as Catholic families and Christian Democratic welfare regimes correspond to a breadwinner model that discourages work among women, youth and other labor force “outsiders.”
As for policies that more directly regulate work, Christian Democratic parties have been traditionally the parties of least work time per working-age person, and in recent reforms may (as with welfare reform) be moving to the parties of least work time in general. A traditional anti-materialism, or at least worry that work can crowd out family, charity, church, community or spiritual pursuits, can be read in the development of the same “little catholic” tradition that Esping-Andersen and, in fuller detail, van Kersbergen have linked to the rise of Christian Democracy and “social capitalism” welfare (van Kersbergen 1994). The idea of work sharing has had most recent currency in France, Germany, Belgium and Italy. And as Hugh Compston notes, countries with a separate Christian or Christian-influenced national union confederation have best been able to negotiate government-imposed solidarity contracts for combating unemployment through reduced hours because negotiations are more oriented toward maintaining class harmony (Compston, 1997, cited in Julkunen, 1999). Christian Democratic parties have also been among the strongest proponents of maintaining restrictive shop hours on work days, more restrictive on Saturdays, and closure on Sundays. Such was part of the general bias to encourage female house-holding and child-rearing, hence against female labor market participation. And this same bias is more draconian in particularly strict working laws ostensibly designed to protect women. In general, this traditional Christian Democracy approach to labor market regulation implies support, within its subsidiarity-based delegation of such matters to social partners, a relatively high priority given to work-hours limits for wage moderation. This should imply unambiguously low hours per working-age person. But the female labor market exclusion and support for a breadwinner model should discourage part-time work, having more ambiguous implications for hours per employee.
The recent reforms of Christian Democratic welfare states, however, imply an altered partisan bias that may select for welfare policies lowering hours per working-age person and employee. Recognizing the fiscal costs of their “welfare without work” – combined with increasing neo-liberal elements within the parties, and feminization and secularization in the polities whose votes they seek – Christian Democratic parties have shown plenty willingness to “recalibrate” welfare regimes away from their passive, transfer-heavy bias and explicit social exclusion. Such reform has involved some retrenchment of the pension systems and lower early-retirement eligibility, which in turn politically necessitate and make financially possible expansions of some activation labor market policies and welfare services, and also direct work-time reduction measures (Levy 1999). But pushing Levy’s “vice into virtue” logic further to work time, it may be that Christian Democratic welfare reformers can use past history of social exclusion to use part-time work to more easily activate welfare states and encourage youth and female labor market participation. These are often very modest and incomplete reforms, but they encourage such work trends with important implications for work-time.

In recent years, the electoral struggles and reform of Christian Democracy suggest that Christian democratic parties may be the biggest hours reducers, even compared to Social Democrats. In the climate of secularization, female liberation, and demographic pressures, Christian Democratic parties have faced pressures for excluding less “core” workers from the labor market. They have been criticized for “social exclusion” and they have generated high dependency ratios that fiscally strain pension systems and the ability to stay within EU debt limits. And they have sought to refine their central message to voters as distinguishable from Left and Right parties. One model has been to still emphasize protection of family, social, and spiritual integrity, but in ways friendly to feminism and secularism: a modest anti-materialism that one of the smaller Dutch
Christian parties calls “anti-24-hour economy” and German critics call a defense of “time sovereignty.” Such a platform is as connected to work-hour limitations as any of the traditional regime types.

Add to this the way in which Christian Democrats are less concerned about maintaining solidarity and equality among all workers, statuses, and genders, and there is a willingness to allow dualisms to develop in job security and benefits between various forms of part-time work on the one hand, and full-time work on the other. Put differently, the rise of part time work is not likely to elicit as strong demands for upgrading to full time status while reducing the hours of that status – as in the Social Democratic realm. And this implies a politically less confrontational path to hours reductions, given the stance of employers to full-time work-hour limits compared to protected part-time work rises. Hence, in the context of recent fiscal and electoral challenge, Christian Democracy’s welfare and direct labor market preferences may be the champion of low work-hours per employee as well as working-age person.

For our purposes these distinctions between Social Democratic, Liberal, and Christian democratic welfare state regimes make more sense than the varieties of capitalism literature’s distinction between “coordinated” and “uncoordinated” economies (Hall and Soskice 2001). The coordinated versus uncoordinated framework may be more useful when focusing on efforts at limiting duration of full-time work. In that case it would be crucial whether or not there existed the capacity to implement work-time limitations through a standardized week, overtime regulations, collective bargaining, or fair competition agreements. Among full-time manufacturing workers, Hunt has shown that changes in work-time in recent decades reveal the largest reductions in Germany on one side of the spectrum and large American increases on the other side (1998). These two countries represent the precisely the antipodal cases of coordinated and
uncoordinated capitalism. But because our interest is on the volume of work-time more
generally throughout the population, we instead focus on the logics of distinct “worlds of
welfare” that may also consistently effect labor force participation and part-time work.

In sum, the above framework tries to clarify the role of politics in working time
patterns by: emphasizing the importance of broad, aggregate work-time measures and
broad recognition of the policies shaping them; identifying conditions mediating union
tastes for work-time reduction; and most importantly, identifying how there may well be
distinctive Social Democratic, Liberal and Christian Democratic worlds of work time.
Such a framework is obviously very partial, leaving out the potentially crucial role of
employers and other social groups, many institutional conditions, and political culture or
policy beliefs. But the existing conditions are a meaningful and testable first step in
bringing politics in into study of work-time and work-time into the study of politics.

3. Quantitative Evidence

To test the arguments, we begin with the quantitative investigation. This includes
the use of descriptive statistics, bi-variate correlations, and cross-sectional time series
panel study of the work-time and political conditions of 18 OECD countries. Testing of
virtually all of the above arguments is possible when combining these data with those on
partisan power, union density and centralization, female labor market participation and
union membership, social welfare spending, income tax rates, unemployment, inequality
and some economic controls. Even though there are some qualifications necessary in the
use of many of these data, especially those on the working hours measures, quantitative
treatment of the above arguments is not possible otherwise, certainly not with the micro-
level or limited cross-sectional quantitative comparisons in previous work.
3.1. Descriptive Statistics

We begin by looking at the differences in annual hours per employee and annual hours per working person in the 18 OECD countries. Data on such hours comes from a recently assembled dataset on annual hours per employee that seeks to improve upon the cross-national comparability problems of past national working-hours statistics (Groningen 2002). Although drawn on the OECD, Eurostat, ILO, and BLS numbers, the data has been adjusted country by country to improve the comparability of the national estimates. Unlike other similar databases, the reported “annual hours per employee” cover both full-time and part-time work, include overtime, and do not count paid holidays or parental leave. And by multiplying these numbers by civilian employment as a percentage of the working-age population, available from the OECD Labor Force Statistics, we get the broader measures of working time per working person.²⁶

Table Two summarizes the basic picture of hours per employee between 1950 and 2000, and hours per working-age population between 1973 and 2000. The countries have been divided by Social Democratic, Liberal and Christian Democratic regime type to capture whether descriptive and cross-country trends corroborate our argument that these partisan-led regime types have a work-time dimension. Most generally, overall hours went down for the full period by most countries by both measures, with very significant differences across countries. As Figure One above has already shown, the OECD unweighted average of annual hours per employee dropped 23 percent in the last fifty years, from 2147 to 1626, and seven percent since 1980. Hours per working-age person have also dropped, but more modestly: an eight percent drop since 1973 (from 1233 to 1140 hours), two percent since 1980 (from 1144 to 1140 hours). Captured formally by the country standard deviation, Table Two also shows that there has been no clear pattern of
divergence or convergence across countries, though since 1980 there has been a very modest convergence (one percent drop in standard deviation). This contrasts the consistent and significant divergence in hours per working-age person, an eleven percent rise since 1980.

[[Table One: Annual Hours per Employee and per Working-age Person, 1950-2000]]

As can immediately be seen from the basic break-down in the series, however, the differences between countries have always been considerable, broadly consistent with the Three Worlds hypotheses above. The basic regime differences can be more easily seen in Figure Three, which shows the trend lines in annual hours per employee and per working-age person for the Social Democratic, Liberal, and Christian Democratic polities. Together, Table Two and Figure Three show significant and in some case growing work-time differences between these regime types.

Looking first at hours per employee, the Social Democratic regimes consistently worked the fewest hours through the early 1990s, though by the 1990s the Christian Democratic countries fully caught up, as the Christian Democratic countries have continued to see hours decline while Social Democratic countries have seen a modest increase since 1990. The result is that by the late 1990s the Christian Democrats have become the leaders in low work hours per employee: 1531 hours in 2000, compared to the Social Democratic 1544. Since the 1960s, moreover, the Liberal regimes have worked the longest hours (1762 by 2000), and have become ever more so: Although total hours in the liberal world dropped 15 percent between 1950 and 1980, and by 13 percent between 1980 and 2000, these drops were well out-paced by those in the Social Democratic and, especially, Christian Democratic worlds. By 2000, Liberal countries
worked 1762 hours, 14 and 15 percent more than in the Social Democratic and Christian Democratic worlds, respectively. Expressed in terms of standard deviation, Table Two also shows that these differences have not experienced any convergence, unlike the general country differences.

[[Figure Three: Annual Working Hours in the Social Democratic, Liberal, and Christian Democratic Worlds (1950-2000)]]

Looking at hours per working-age person, the picture reveals stronger and more enduring differences between the three worlds. Here the Christian Democrats have since the early 1970s been by far the countries with the lowest hours, reflecting the patterns of labor market exclusion (low female labor market participation and lots of early retirement). This trend softens by the 1990s, but the differences relative to the other regimes is considerable, in 2000 a mere 1029 hours – nine percent lower than the Social Democrats in 2000. Social Democratic countries, where employment rates have consistently been higher since the 1970s, seen their hours per working-age person remain much more stable, dropping four rather than the Christian Democratic 15 percent over the 1970-2000 period. The modest drop in hours in the last 15 years, moreover, clearly reflects a dropping employment rate, given the modest rise in hours per employee over the same period.

In any event, the Liberal regimes have always out-worked both the Social Democratic and the Christian Democratic regimes by this broader measure of work-time. After a roughly ten year decline in the total hours into the 1980s, the Liberal pattern remained stable for a decade, and has sharply risen since the 1990s, with the double-whammy of rising hours per employee and rising employment rates. By 2000, Liberal regimes had working hours per working-age person that were ten percent more than the
Social Democrats, 21 percent more than the Christian Democrats. These significant and growing difference are quantified by the significant rise in standard deviation among the regime-type averages, a 76 percent rise since 1980 (fully consumed by the Liberal outlier, as Figure Two makes clear). Compared to a mere 11 percent rise for the country standard deviation, thus, we see that again the regimes are becoming more different than are the countries in general.

Each regime type encompasses countries that differ plenty from one another in terms of hours per employee or working-age person. The Social Democrats have Sweden as the most working and Norway as the least working in the regime-type. The Liberals have the Irish, which have gone from the highest to among the lowest of the liberal countries in working hours (UK is lowest in hours per employee); and they also have the Americans, who have since the 1970s grown to the lead position as the hardest working in the Liberal regime and, hence, the industrialized world. And the Christian Democrats have the Dutch, who are the low-work-hours outliers for hours per employee but in recent years of rising employment rates have actually seen their hours per working-age person rise by 28 percent (since 1980). And on the other extreme they have the Swiss, who have consistently worked the most hours by both standards, though still generally lower than the overworked Liberal.

Such a descriptive portrait is very preliminary evidence that there may well be Three Worlds of work time. The Liberal polities are, clear and simple, the consistent hard-workers by both measures. The Social Democratic polities work substantially less, but have also seen their annual hours per employee rise in the last decade or so, probably reflecting the very significant slow-down in growth of part time work compared to many other countries. This slow down may, in turn, reflect the way Social Democratic work-time policies and welfare regimes have come to encourage some convergence in the time
worked between the full-time and part-time segments of the labor market. The Christian Democrats, finally, appear to be the leaders in work reduction (intended or not) in terms of both hours per employee and, especially, hours per working-age person. The rapid drops in working time per employee likely does not reflect more “welfare without work” social exclusion, but instead the rise in part time work, often encouraged by social policy backing of part-time employment and pension rights, combined with the Christian Democratic world’s long list of work-time reductions through legislation and collective bargaining.

3.1.2. Bivariate Correlation

To provide some more information on the Three Worlds arguments, as well as for the various union, social policy, and tax policy arguments, we can consider bivariate regressions in a cross-sectional and pooled cross-section time series of the above annual hours data, with measures of our political variables. Being bivariate regressions, of course, these do not control for the roll of other economic or political forces. But they give at least a snapshot of the relationship between a range of political conditions and hours worked. In all cases, we show the scatter-plot for a cross-sectional run of such correlation, to reveal the positions of the various countries relative to the regression lines. But the more empirically relevant results are the bivariate regression statistics from the full 18-country, 22-year panel of pooled cross-section time series, which we report in the text.27

First, we find evidence supporting our basic policy hypotheses about social policy expenditures. The simple hypothesis is that higher social expenditures imply more de-commodification and security, raising the reservation wage and lowering the marginal
incentive to work more hours in the aggregate. This should imply a negative relationship between social expenditures and both annual hours per employee and per working-age person. The OECD, the IMF and the World Bank all produce estimates for our OECD country sample. We consider all three measures, in a variety of lags, and the result is always very strong and consistent with expectation. The bivariate correlation using OECD Social Expenditures, for instance, is strongly negative (coef. = -18.205, t-stat. = -24.043, r-sq. = .59). Figure Four shows the cross-sectional scatterplot, which focuses on the relationship between the 1979-2000 average of hours per working-age person, and 1975-95 average of social expenditures (logged) (though the results are similar for all the measures, logs, lags).

\[ \text{[Figure Four: Annual Hours per Working-age Person and Social Welfare]} \]

Second, we found mixed results for our arguments about union density and centralization. The first hypothesis was that union density and centralization should have ambiguous but generally negative results: more positive for annual hours per employee given the interests of unions for fewer hours for their core membership, but less positive for hours or per working-age person, given the off-setting interests for fewer part-time workers, which reduced employment rates. Union density numbers come from the IMF and Visser and Ebbinghaus, and we considered two centralization measures, Iversen’s and Golden, Lange and Wallerstein’s (Iversen 1998, Golden et.al.2000). The bivariate correlation between annual hours per employee and lagged union density (t-1) is negative but with modest significance under the circumstances (coef. = -1.5, t-stat = -4, r-sq. = .21). Figure Five captures the scatter-plot of this relationship, weaker of course given the cross-sectional version of the correlation. The bivariate regression for centralization was
more strongly negative, perhaps reflecting the way centralization is the more important institutional pre-condition for diffusing legislated or collectively bargained work time reductions (coef. = -41, t-stat. = -10, r-sq. = .21). Both results suggest, in general, that both union density and centralization could lower work-time.

[[Figure Five: AHPE and Union Density]]

[[Figure Six: AHPE and Collective Bargaining Centralization]]

Our main argument about unions, however, was that their support for work-time reductions should be mediated by a range of conditions: among the five, female labor market participation/female union participation, secular unemployment, and centralization. Such arguments can be tested through bivariate correlation by restricting the full 396 observation sample to those observations where the hypothesized mediating variable has a value greater than its mean will make union density (as a broad union power measure) a more strongly negative predictor of annual hours. Of the mediating conditions, we have data on female labor market participation (OECD Labour Force Statistics), female union representation (Ebbinghaus and Visser; BLS; our calculations), centralization (see above), and unemployment (OECD LFS).

Running such interactions, female labor market participation and female union membership appear to play some mediating role as expected, while unemployment and centralization do not. On the one hand, female labor market participation raised the union density coefficient, t-statistic, and r-square (from coef. = -1.5, t-stat=-4, r-sq=.04, n = 396, to coef. = -2, t-stat=-4.9, r-sq=.29, and n=211). And the mediating effect of female union membership appears stronger (to coef. = -3.1, t-stat. = -7.7, r-sq=.35, n=211). Figure Seven below shows the comparison of the relationship between union density and
annual hours per employee before and after restricting the sample above the female union membership mean. On the other hand, the interactions with unemployment and centralization, lagged or with lagged moving averages, does not strengthen the negative relationship between union density and annual hours per employee or per working-age person. In fact, when run on the working hours per working-age person, they modestly strengthen a positive (i.e. hours increasing) effect. Hence, there is some modest correlation evidence that the most important mediating conditions for union tastes for work-time reduction may in fact be female labor market and union participation.

[Figure Seven: AHPE and Union Density with Full Sample, and Where Female Union Participation is Above Average]]

Finally, we find modest evidence of Social Democratic, Liberal and Christian Democratic worlds of work time. We do so using Duane Swank’s data on Left, Right, and Christian Democratic partisanship in OECD countries to measure the power of parties most affiliated with the Social Democratic, Liberal and Christian Democratic welfare states and worlds of work time (Swank 2002). Here, the results are not particularly strong, but they all indicate the relationships with work time predicted above, regardless of the measure of partisanship (cabinet proportion, governing party seats, total seats, total votes). We report only the most common measure, cabinet portfolio results. Left party strength correlates with reductions in both annual hours per employee and, somewhat less so, hours per working-age person (Coef.= -1.09, t-stat = -5.635, r-sq.=.07). Right party strength, “right” defined to focus on neo-liberal parties we predict ought to side with employers and oppose work-reducing policies, correlate with increases in work time (Coef.= 1.24, t-stat= 7.4, r-sq.=.12). Christian Democratic party strength correlates with reductions in annual hours per employee (Coef.= -2.85, t-stat= -6.5, r-sq.=.10). And
consistent with the expectation that Christian Democratic reduces hours traditionally through labor exclusion, Christian Democratic cabinet portfolios correlate even more strongly with reductions hours per working person (Coef.=-3.97, t-stat= -9.616, r-sq.= .19). Figures Eight through Ten show the cross-sectional scatter-plots consistent with all of these findings.

[[Figure Eight: AHPE and Left]]
[[Figure Nine: AHPE and Right]]
[[Figure Ten: AHPE and Christian Democratic]]

3.1.3. Controlled Estimation

A more significant test of the political arguments requires multiple regression OLS estimation with relevant economic controls. This we conduct using the same panel of pooled cross-section time series for the 18 OECD countries from which the bivariate correlation tests were derived: working hours per employee and per working-age person (Groningen 2000, OECD various); social welfare expenditures (OECD); income taxes (IMF); union density (Visser, BLS, OECD); and collective bargaining centralization (Iversen 1998).

The controls, derived from insights in the existing literature, include: (1) unemployment, measured as both a 5-year lagged moving average and for year condition, should correlate with reductions in work time (Bell 1995); (2) GDP per capita, which is a measure of income/wealth, and should in theory correlate with reductions in work-time (Freeman and Bell 1994); (3) income inequality, measured with GINI-index scores, has been shown to have some significant positive effect on working time (Ibid.); (4) female
labor market participation, which given female preferences for part-time work\textsuperscript{28} should imply lower hours per employee but more hours per working-age person; and (5) trade openness (imports plus exports as percentage GDP), which the pessimist globalization literature might predict should lead to more labor sweating and, hence, more hours. 

\textit{Results.} With these controls and our measures of the above political variables, we imputed missing values and estimated the relationship between work time and our policy, party, union and control variables in a range of estimations. Table Three reports two estimations for each of our dependent variables (hours per employee and hours per working-age person): (1) a minimal model that considers only the policy, party, union and control variables; and (2) a full model with a lagged dependent variable, inclusion of interaction terms to model how female labor market participation may mediate union demands, and country and time-period fixed effects.\textsuperscript{29} We provide both estimations to give some sense of the instability of the results for all the variables. Despite such volatility, however, we do find support for the above arguments, including the Three Worlds and social welfare claims.\textsuperscript{30}

\textbf{[[Table Three: OLS Estimation Results of Working-Hours, Policy and Politics]]}

The controls behaved only roughly as expected. Unemployment was negatively and significantly correlated with the full model of annual hours per working-age person, but insignificant for the other estimations. Female labor market participation was negative but significant for minimalist estimation of hour per employee, positive and significant for the full estimation. But the results were much stronger and positive for both the minimalist and full estimation of hours per working-age person – fitting expectation that women whom tend to prefer part-time work may well drive down hours
per employee but drive up hours per working-age person. GDP per capita was significant and negative for both estimations of hours per employee, but significantly positive for the minimalist estimation of working-age person, providing mixed results for the standard labor supply income effect that Bell and Freeman also rejected in their micro-data study. The Gini index was significant and positive only for the minimalist estimation of per working-age person hours, in contrast with the Bell-Freeman finding that we could reproduce with the cross-sectional estimation (Bell and Freeman 1994). Finally, trade has volatile results, with only a significant and positive effect for the full estimation of hours per working-age person, giving modest support for globalization pessimism.

Our party variables behaved broadly as expected. Christian Democratic partisanship is, indeed, the party which is by all measures and estimations the most negatively associated with working time – a finding which holds regardless of lags or inclusion/ommission of controls. It is significantly negative for the full specification of hours per employee, not for the simple; and it is significantly negative for both the minimalist and the full specification of hours per working-age person. In the full specification, Christian Democracy correlated more strongly negative with hours per employee than with working-age person hours -- against our expectation for traditional Christian Democratic capitalism, but possibly capturing more recent reform in Christian Democracies to promote part time female labor market participation that decrease hours per employee while raising per working-age person participation. In any event, Right portfolios were significantly positive for the minimal specifications of hours per employee and working-age person, though not for the full specifications. And the only significant result for Left cabinets was for the minimal specification of hours per employee. Such a pattern broadly accords with our Three Worlds view.
The findings for unions were more mixed. Union density was positive and significant for both measures and specifications. This may reflect the way unions have often opposed part-time work protections, but have supported all sorts of social welfare expenditures, including early retirement schemes – which show up as unambiguous hours-reducers for hours per working-age person. Centralization coefficients had the hypothesized negative coefficient, significant for the minimal and nearly so for full specification of hours per working-age person. And the interaction term for union density and female labor force participation captures how a given level of union density correlates with working hours as female participation goes up, and how a given level of participation influences working hours as union density rises. The negative and modestly significant coefficient lends some rough support to our argument that female labor force and union participation should increase union support for work-time limits: the higher the female labor market participation, the more weakly positive (or more strongly negative) the hours effects of union density.\(^{31}\)

Finally, social and tax policies had the roughly expected effects. Social welfare expenditures were strongly negatively associated with both the minimal and full specifications of working-hours per working-age person, among the strongest effects among in the models. But such expenditures gave mixed message with the minimal and full specifications of hours per employee, negative in the case of the former and positive in the case of the full specification. This mixed finding, however, accords with the possibility that generous welfare may easily discourage part-time work\(^{32}\) and possibly increase the total hours of working employees, whereas for working-age population has unambiguous negative consequences via family and retirement assistance. Income taxes, in any event, were negative (as predicted) for all measures, significantly so for the minimal specification of hours per employee.
We interpret all these findings as unstable but broadly supporting our view that there are Three distinct Worlds of working time, that female labor market participation mediates union policy, and that social policy has very important implications for work time, especially given the above descriptive and bi-variate correlation evidence. But the instability of the results mean that the jury is still out on many of these arguments and the data we can use to analyze them, making it all the more important to consider qualitative history.

4. Case Studies: United States, Finland and Netherlands

And such history can be found in brief qualitative case studies of work-time politics in Finland, the US and the Netherlands. These studies flesh-out the politics and policy surrounding particular country experiences with some historical perspective, focusing on the role of social actors, social and tax policy, and the party-system worlds of work time, highlighted in the arguments above. And although all have features that belie categorization, they do illustrate most of the arguments and, in particular, the distinctions between the Social Democratic, Liberal and Christian Democratic worlds of work time.

4.1. Finland

Although its total levels of state spending are significantly less than Swedish levels, Finland accentuates the qualities of the Social Democratic welfare and work-time regime. Finland has, arguably, the most even distribution of incomes in the world and the lowest levels of poverty (Julkunen, 1999, 25). It also has the smallest gender differences between men and women. Labor is highly organized and centralized, and collective
bargaining agreements cover 95 percent of employees, the highest rate in the Western world (Esping-Andersen, 1999, 20). The Finnish economy has undergone serious tumult in the last decades and has responded with deregulation, decentralization and greater export-orientation, but reforms have maintained a definite social-democratic character.

Finland also appears at first glance an ideal case for very low hours of work. The Finns introduced among the world’s first legislation for a forty-hour week in 1917 and continue to be innovators in working-time policies. At a symbolic level the Finnish Prime Minister Paavo Lipponen himself took a week’s parental leave to care for his newborn child in 1998. Moreover, a deep recession in the early 1990s provided impetus for work-sharing and policies to reduce labor supply.

But the patterns of work-time are Social Democratic rather than simply low hours. Work hours in Finland have fallen by both hours-per-employee and per-working-age person, but the hours per-employee remained steady during the 1990s at levels higher than any Christian Democratic country. And although the number of hours per working-age person were brought down by widespread unemployment, the levels nonetheless remained higher than any Christian Democratic country except Switzerland. The reasons for such patterns, we believe, have much to do with the classic Social Democratic model's commitment to solidarism and social rights without labor market dualisms.

Direct reductions in standard working time were collectively bargained in 1984 and 1986 without any provisions for increased working time flexibility, unlike such reductions in other countries (Julkunen and Nätti 1999, 58). In the 1990s, a push for more “flexible” or “many-sided” work hours led to a reduction in the standard work-week and an increase in hours that were in shifts at non-standard times, such as weekends (Julkunen and Nätti 1999, 74). Finnish employers presented a unified front in blocking radical wide work-hours reduction of a French variety.
In 1996 there was sharp dispute between employers groups and unions over work sharing policies. A joint statement by the social partners recommended experimentation with work sharing but there remained intense disagreement over how extensive these initiatives should be. Three types of experiments were implemented, all cost-neutral and all having some kind of explicit business appeal. The first used the public employment funds to compensate most of the wages lost by full-time workers shifting into part-time work when part of their job was temporarily taken by an unemployed person.\(^{36}\) The government restricted the program in 1999 because its goal was to combat heightened unemployment rather than to encourage part-time work in the longer term (Julkunen and Nätty 1999). A second experiment allowed elderly workers to partly go into early retirement with the government supplementing half of the wages lost by moving into part-time work. One appeal was that by relieving workers with failing health, it would decrease the number of disability claims. The third experiment increased flexibility through six-hour shifts that would allow plant and equipment to be utilized for greater time with additional shifts. This initiative was funded through the European Social Fund. Although studies indicated that efficiency increased and work-family tensions were significantly mitigated, employers staunchly resisted letting the six-hour shift become a national norm (Anttila, Nätty and Väisänen 2001).

While the Finns have been at the forefront of work sharing experiments, they have not been as protective as Christian Democratic governments from the perspective of maintaining “pro-social” hours or those with non-onerous times for families. According to the 1997 European Labor Force Survey, evening work, night work, and working on Sunday were almost twice as common in Finland than the EU average (Julkunen and Nätty 1999, 40). The motivation for work time policies have been more to reduce unemployment, combat gender and other employment dualisms, and relieve the toil of
labor, than to pursue a family and community-centered vision of the good life that we argue has indirectly led to greater work reductions in Christian Democratic polities.

Finnish employment and social institutions indirectly promote higher levels of paid work. For instance, since 1973 all those in need have been eligible for full-time public daycare. Unlike the German, and even French public day care systems, which can discourage full-time work by such policies as lunch or Wednesday closure, Finnish daycare times and meal provision explicitly facilitate full-time work (Julkunen and Nätty 1999, 47). In a composite study of policies ensuring that women have an alternative to quitting their jobs and providing full-time childcare, Finland was found to have the policies most supportive of employment for mothers with children under 3 (followed by social-democratic Denmark and Sweden) (Meyers, Gornick and Ross 1999, 129). In 1993, 51 percent of children aged 3-6 were in some form of day care, mostly full-time (Sainsbury 1999, 107). Direct state spending on childcare in 1987 came to $1,212 per child, plus some minor tax relief for private childcare costs (Meyers, Gornick and Ross 1999, 127). Both married and single women enjoy tax advantages for entering the labor market (Sainsbury, 1999, 84). High employment is a well-established goal of Finnish government and is viewed from the viewpoint of active labor market policies and macroeconomic stimulus that Julkunen and Nätty characterize as, “Work creates work; less work creates less work” (Julkunen and Nätty 1999, 95). In 1998 the Finnish employment rate was 69 percent (78 percent of men and 69 percent of women), higher than the 63 percent rate for the EU15 plus Norway (Bosch and Wagner 2001).

Work hours reductions in Finland are limited by resistance to part-time work and variegated distribution of hours between employees. “Trade unions and women activists in unions have always been very cautious regarding sexually differentiated working times. …Part time work is seen as a trap for women, as a source of small incomes, a
catalyst of male dependency and a key to sexually divided housework and caring” (Julkunen and Nätti 1999). The proportion of part-time work in 1996 was 11 percent, below the EU15 average of 17 percent and the 38 percent in the Netherlands (Julkunen and Nätti 1999). Only 16 percent of women work part time compared to double that in the EU average. And those Finns who do work part-time are more likely to do so involuntarily (38 percent in Finland, compared to the EU average of 20 percent) (Julkunen and Nätti 1999, 96). Finland’s solidaristic norms are reflected in their highly uniform patterns of working time. Finland has relatively few workers clocking in more 45 hours a week or more, and extremely few clocking in less than twenty hours. This uniformity is largely because Finnish women workers overwhelmingly work full-time. In 1997 the length of the work week for male employees in Finland was less than three hours more than women workers, compared to an average gap of 7.4 weekly hours across Europe (Julkunen and Nätti 1999, 38).

The Finnish case suggests that a high concentration of female unionized labor may work in opposite ways as a cause and effect. As our statistical analysis suggests, the large number of women in Finnish unions may be a factor in promoting hours reductions and family-friendly experiments. But at the same time a highly female unionized workforce is indicative of social democratic values resistant to larger work time reductions that might marginalize women in the labor force. Compared to other European countries that have been studied, Finnish women are also unusually oriented toward full-time work in the sense that their stated ideal is to work full time and they do not feel torn between the desire to stay at home or work at the office the way women are in studies of the Netherlands or Germany (Prau-Effinger 1998).
4.2. United States

The case of the United States seems paradoxical in that the long work hours of recent decades seem over-determined by a number of overlapping factors; yet historically, the US has transformed from an international leader in work reduction to an outlier in the other direction. In the American case the decline of work-reduction is intimately tied up with the decline of the American labor movement, and yet this decline is at once tied up with the some of the very same factors that independently tend to increase work hours.

The American labor struggle for the eight-hour day has a legendary status in the folklore of international labor, even inspiring “May Day” as an international labor holiday. The early decades of the American Century were the hey day of American organized labor and also the era of the greatest reduction in working time. Unions were crucial, but not only as wielders of “labor power” for pre-existing preferences. During the early part of the century (1899-1929), when work time fell most quickly, hours were not reduced more in more unionized industries (Hunnicutt 1988, 19). Rozenzweig’s classic study of the battle for the eight-hour day argues that earlier efforts were deeply embedded in ethnic working class culture and the struggle to carve out those leisure spaces – especially the saloon and the holiday picnic – that were central to these cultural identities. He shows how these identities were themselves absorbed by the later commercialization of leisure into more mainstream activities such as the amusement park and the movie theater (Rozenzweig 1983). AFL president George Meany famously stated that, “the progress towards a shorter work-day and a shorter work week is a history of the labor movement itself (Roediger 1989, vii). The issue had a “unique capacity to unify workers across the lines of craft, race, sex, skill, age and ethnicity” (Roediger 1989, vii). This
unifying influence has been both a cause and effect of labor power. The US labor
movement’s ability to unify diverse constituencies may be particularly dependent upon
the existence of such unifying issues.

[Figure Eleven: Average Weekly Hours of US Full-time Work]

As the above data on full-time industrial work reflects, work-week reduction
initiatives reached their high water mark during the early years of the Depression. Government policies then came to be increasingly packaged in terms of economic growth
and “reemploying idleness.” “Roosevelt and the majority of Americans saw this free time
as a tragedy that had to be eliminated by increasing economic activity and governmental
provision of work. The idea that free time could be leisure – a natural part of economic
advance and a foil to materialist values – was abandoned” (Hunnicutt 1988, 309). “The
adoption of a jobs strategy to stimulate the economy in many ways marked the end of the
period of hours reduction in the United States” (Christopherson 1991, 174). Public policy
turned toward economic growth as the benchmark of socio-economic progress by
maintaining adequate demand and full employment. The Employment Act of 1946
declared, “the continuing policy of the Federal government… to promote maximum
employment, production, and purchasing power… sufficient to bring the aggregate
volume… up to the level required to assume a full employment volume of production”
(Hunnicutt 1988, 310). The War mobilization only lent fire to this trend, as long hours of
work were equated with active world citizenship and supporting the troops. In 1940 the
AFL convention had still endorsed the six-hour day and championed resolutions for six-
hour shifts in defense industries. But with the actual entrance into the war, labor’s stance
became more defensive. Industrialists launched an effort to roll back the 40-hour week,
with some linking the fall of France to working hours reductions there. The workweek
rose by 7.1 hours in manufacturing from 1940 to 1944 (Roediger 1989, 259). Unions largely gave up wage premiums for Sunday and holiday work. Roosevelt ordered a 48-hour minimum week in whatever industries the War Manpower Commission deemed necessary (Roediger 1989, 260). Union tactics shifted towards securing pay increases and sacrificing longer hours.

Work sharing was briefly on the bargaining table at the end of the war, and the AFL called for a six-hour day, thirty-day week upon cessation of fighting that was joined by other unions (Roediger 1989, 261). But these efforts were framed solely as unemployment-fighting efforts, and when high unemployment failed to return, these efforts ran out of steam. “The guaranteed annual wage and alliances with liberal Democrats in support of Keynesian economic policies were much preferred as antirecession, anti-unemployment measures” (Roediger 1989, 262). Tellingly, in lobbying to pass the Full Employment Act of 1946, labor leaders and democrats did not include hours-reductions in the list of tools for achieving the goals of the law (Roediger 1989, 263-66).

No major party has made shorter hours a political issue since the Depression. No resolutions were passed, nor convention platforms issued with reference to this traditional reform (Hunnicutt 1988, 3). Organized labor reportedly raised the issue during the Kennedy administration but was satisfied with promises to stimulate the economy (Hunnicutt 1988, 311). In 1979 a bill was offered in the House of Representatives to modify the Fair labor Standards Act of 1938 so that the standard workweek would be set at 35 hours, but it found little support even from organized labor (Hunnicutt 1988, 312; Roediger 1989, 274).42
Indirect features of American political economy may be a more important reason why hours of work have stagnated and even risen. Contractual working time remained unchanged in past decades, anchored in the 1938 Fair Labor Standards Act that was once a pioneer in international work hours reduction. But population surveys echo the findings of our data set: that working time has slightly increased due to overtime and multiple job holding, and the number of Americans working 49 hours or more per week as grown particularly sharply over recent decades (Rones, Ilg and Gardner 1997). The work-intensiveness of American life is not simply a product of the so-called “American jobs machine,” since work hours also increased in the decades when American unemployment was typically higher than West European rates. Inequality has increased more or less constantly since the 1960s, increasing the marginal benefits of putting in long hours (Census Bureau Gini coefficients). The existence of a very low wage workforce encourages employment of some personal services, such as more drycleaners, nannies and valets that are often priced out of the market in countries with a higher minimum wage (Esping-Andersen, 1999). The availability of low-wage (and often off the books immigrant) child care makes possible the relatively high rate of labor force participation by US women, despite the relative lack of public subsidies for this care. The US (along with other liberal countries provide the least public support for women with young children in terms of public childcare (Meyers, Gornick and Ross 1999, 120). American direct spending on childcare in 1987 came to a mere $44 per child, although some minor tax relief was available to offset costs (Meyers, Gornick and Ross 1999, 127). The lack of family benefits means that single mothers have a strong incentive to perform paid work (even if 43 percent of them are still in poverty) because the poverty rate among single mothers who do not work is 93 percent (Kilkey and Bradshaw 1999, 161).
From the employee point of view, part-time work is particularly undesirable in the US context because part-timers often receive lower hourly wages and lack the health benefits provided more or less universally in other wealthy nations. The major strike at United Parcel Service (UPS) in 2000 was chiefly against increased use of part-time work, largely because part-timers received less than half the hourly wage and lacked pension or health insurance. Not only are unions weak and fragmented, the Taft-Hartley revision of the National Labor Relations Act in 1947 also indirectly undermined organizing against long hours because it outlawed sympathy strikes and secondary boycotts which had been organizing tactics for the broader labor interests against long hours (Roediger 1989, 267).

From the employers’ viewpoint, the availability of low-wage labor encourages deployment of more labor-intensive production techniques – one reason that US productivity has generally been slower than West European nations like Germany where production is more capital intensive. The lack of socialized medicine in America also makes often unprofitable for employers to pay large fixed health costs for part-time jobs, an institutional feature that leaves many part-time jobs without health coverage. American employers generally pay pension and health insurance benefits on a per-employee basis, which makes it more cost-effective to pay for overtime than hire new workers (Cutler and Madrian 1996). Employers have little incentive to trade shorter hours for more flexible shifts because American management generally already has much greater control over the production process, and work-time is often deregulated such that employees are paid by task or on a non-time based salary, making regulation of work-time administratively infeasible in the first place.
4.3. Netherlands

The Netherlands has the industrialized world’s lowest working hours per employee and among the lowest per working-age person. But if it is an outlier, it is because it is also an extreme example of the Christian Democratic model of work-time. Crafted under decades of Christian Democratic rule, Dutch welfare capitalism was, until recently, classic stratifying welfare without work. And more recent changes typify the Christian Democratic work-time reform. Between 1980 and 2000 Dutch hours were by all measures below the OECD average, but hours per working-age person became less so, rising from 29 to 14 percent below the OECD average, while hours per employee have become yet lower, from 10 to 17 percent below the OECD average.

In terms of coverage, eligibility, and generosity, Dutch social insurance is among the most de-commodifying, rivaling Social Democratic welfare and fostering high reservation wages that lower hours of work. Until recent reforms, Dutch welfare also typified Christian Democracy’s passive stratification of status and gender, premised upon a full-time, male breadwinner. The generous transfer payments were contributory-based, closely tied to income levels. Tax structures discouraged part-time and second-earner work. Temporary and part-time workers were given fewer social security guarantees, such as exempting those working less than one-third time from social coverage. And active labor market, child and family-focused welfare services have been very modest by OECD standards. These features discouraged part-time work and female labor participation -- the lowest in the OECD in the mid-1970s -- and added-up to unusually low hours per working-age person.

Industrial relations and direct hours regulations reinforced these work-time patterns. Unions traditionally opposed part-time and temporary work, worrying that this would foster segmentation and/or undermine the core full-time wage bargain. But they
were open to, and sometimes championed, general work-time limits, particularly when they were part of work-sharing strategies to combat unemployment. Only moderately strong in terms of union density and centralization, however, unions faced fierce opposition from employers, keeping such limits consistently off the collective bargaining table. On the other hand, Dutch labor laws were won with a broader political base and had long offered generous dismissal protections, strict constraints on evening and Sunday business and work hours, and among the most stringent labor laws against female and youth work during "un-social" hours.

By the 1980s, this system faced serious crisis of inactivity and poor economic performance. Double-digit open unemployment (13 percent in 1985) paled in comparison to hidden unemployment through welfare-inspired exit, through sickness and disability rather than early-retirement schemes. By the late 1980s the percentage of the Dutch population inactive under such programs reached nearly 16 percent, double the EU average, inspiring CDA Prime Minister Ruud Lubbers's famous lament that "the Netherlands is sick." Such labor-market exit cut the employment rate -- 69 percent for men and 35 percent for women in 1983, well below the EU averages of 76 and 43 percent, respectively (OECD Employment Outlook). The net result was that the Netherlands maintained the OECD's lowest hours per working-age person throughout the 1980s -- in 1980 29 percent below the OECD average.

Broad recognition of crisis inspired major industrial relations and welfare policy reforms that have shifted Dutch working hours. According to some, the reforms are a story of crisis-induced learning that begins with industrial relations, spills-over to broader welfare reform, and yields a kind of "third-way" "miracle" of moderately flexible labor markets with broad social protection (Visser and Hemerijck 1997). As much from
unintended as intended consequence, in any event, the reforms have raised hours per working-age person while lowering hours per employee.

In welfare policy, the main reforms have activated Dutch welfare without work. Real change only began with the three CDA-led Lubbers administrations (from 1982-94), and continued under the Social-democrat-led "Purple" governments (from 1994-2002). The Lubbers I "austerity coalition" tightened unemployment eligibility and financing and lowered benefits (from 80 to 70 percent replacements rates), but was unwilling or unable to do much on sickness and disability. After Lubbers II's explicit moratorium on welfare reform, however, the Lubbers III's coalition with the Social Democrats (1989-94) began serious reform of disability schemes. It introduced financial incentives to discourage employers from using sickness and disability for early exit, and imposed tighter eligibility criteria and lower, tiered benefit levels.

Announcement of such reforms in the summer of 1991 sparked the largest protest demonstration in Dutch history, and exacted a high political price in the 1994 elections, bringing for the first the Social Democrats into power without CDA participation. But the Kok-led coalition continued reforms, tightening disability and sickness benefits and eligibility, institutionally taking control of the system away from the social partners, and privatizing some benefit provision. But the Purple Coalition also stepped-up introduction of active labor market policies such as subsidized and public employment, and expanded job training. As early as 1994, such reforms helped turned the tide, with disability rolls dropping for the first time. The effects on work-time were simple, mainly higher employment rates and lower absenteeism, hence, higher hours per employee and per working-age person.

Reformed collective bargaining under threat of government intervention – “the shadow of hierarchy" -- have had even stronger implications for work time. For years,
the social partners were stalemated over wage and working-conditions. The two main union confederations -- CDA-affiliated CNV and PvdA-affiliated FNV – generally shared the goals of wage moderation and working hours reduction, prevention of large earnings differentials, and defense of social security (Klandermans and Visster 1995, VH 1997, 84). Employers pleaded for wage moderation for its own employment-enhancing sake, and saw blanket work-time reductions as inimical to profitability. Thus, the social partners were unable to close agreements, inviting repeated government-imposed solutions on wages and social-policy.

With the 1982 Wassenaar Accord, the social partners unexpectedly negotiated wage moderation in exchange for work-sharing limits. This agreement was crafted under threat of yet more government intervention: literally on the eve of the Accord, the new Lubbers "No Nonsense" austerity coalition had announced its three-track strategy to reorganize public finances, lower labor costs and regulation to improve business profitability, and lower unemployment through work-time reduction "without extra cost to business " (VH, 100). Whether or not this forced employers to lift their veto on work-time discussions, subsequent bargaining rounds reduced average working hours by five percent in place of price compensation, and in 1984 introduced a 38-hour work-week for government employees. These were followed by other reductions that ultimately sought a 32-hour week by 1990s.

But general work-time reductions in collective bargaining was frustrated by lack of union power or unanimity, combined with continued employer demands for individual and part-time rather than collective agreements. Since 1980 Dutch unions have experienced some of Europe's most rapid declines in union density and centralization, and nearly 40 percent of the union movement opposed pushing for shorter hours if this meant less pay (VH, 104, Smirzai 1981). This weakened and divided opposition
strengthened the hand of employers who, even right after Wassenaar, "stepped up their campaign to promote part time jobs and increased flexibility in working hours arrangements" (VH, 102, Visser 1989).

Collective bargaining had the biggest affect on work-time, not through aggregate work-time agreements, but through increases in part-time and temporary employment, and female labor market participation. Unions had long helped craft policies and practices constraining both part-time and temporary work, but by the mid-1990s they reversed course, explicitly supporting work-time reductions through part-time work expansion. Behind this shift was rising female union representation -- making its largest increase between the early 1980s and 1995 – and recognition that part-time and temporary employment were inevitable, due to: the work-time agenda of employers; the rise in service sector employment; and most important, the spontaneous rise in female labor market participation (by far the fastest growing in the OECD from 1980 to 1995) interacting with weak Christian Democratic welfare services for child care, steering such participation into part-time work (Visser 2002).

Such converging support for part-time and temporary work led to some important changes. The last Lubbers government in 1993 ended the previous statutory exemption of jobs of less than one-third of normal working week from the legal minimum wage and social security entitlements (VH, 43); the 1996 "flexicurity" agreement strengthened employment conditions for temporary workers in exchange for loosened dismissal protection for core workers; and union-employer recommendation that employers grant worker requests to work part time. Through such embrace, the wage disparity between full and part-time work narrowed to an unusual 5 percent by the end of the 1990s, creating a self-reinforcing cycle of rising part-time work expansion and social actor and policy support for such expansion.
The result is exploding part-time work with big consequences for work time. Roughly three-quarters of Dutch jobs created since the 1980s have been part-time, with the part-time proportion of total employment growing from 18.5 to 32.1 percent in 2000, by far the highest share in the OECD (average than 16 percent) (OECD 2000). Rising part-time work is part of the new "one-and-a-half-job" family, where the half-timer is almost always the woman (in 33.2 percent of households with children the man is fulltime and woman halftime, and in only 1.7 percent is it the other way around) (Visser 2002, 24). But male part time work has also risen substantially -- from 3 to 17 percent between 1981 and 1999 -- mainly as the province of rising youth and student employment (ibid, Delsen 1998). The consequence for work-time is, of course, double-sided, pushing hours for the traditionally gender-stratified society up, and hours of a hitherto more full-time breadwinner labor force down.

Despite the employment-activating policy changes, these trends appear to dominate. In addition to the hours-increasing welfare reforms, 1996 reforms under the Social Democrats have abolished important work-week constraints on shop-opening hours, business licenses, permitting longer evening and weekend hours -- all changes from the Christian Democratic party platforms. But these have had only modest effects on Dutch life patterns. Hence, part-time work and female labor market changes have dove-tailed with other reforms to create the very unusual absolute increases in Dutch hours per working-age person, but together with negotiated work-hour reductions they led to OECD's largest absolute decreases in hours per employee.
5. Conclusion and Directions for Future Research

Given the underdeveloped attention to political and policy origins of aggregate work time patterns in the work-time literature, and the lack of any significant attention to work-time in the broader comparative political economy literature, this paper has pursued a broad mandate: to bring more politics into the study of work-time, and work-time into the study of politics. Substantively, we argued that the political economy of working time needs to consider annual hours per employee and per working-age person in terms of a range of social as well as direct work-time policies. We also argued that the attention to social actors needs to begin with exploring the contingencies behind the unions interests in work-time reductions, with such interests plausibly mediated by female labor market participation, female union membership, unemployment, collective bargaining centralization, and ideational or policy-experiential learning factors. And we argued that attention to party systems and policy clusters should begin with consideration of how and whether there are Social Democratic, Liberal and Christian Democratic worlds of work time as well as welfare capitalism. Although such comparisons are not pursued in this paper, it is notable that even when examination is restricted to the hours of full-time manufacturing workers the descriptive story of work-reduction also appears to cluster into broad worlds of welfare capitalism. Using a very different data set, Hunt’s findings show for instance that the only countries that have experienced high unemployment without reducing the hours of full-time workers are liberal regimes (1998: 353).44

The empirical sections of the paper laid out an array of quantitative and qualitative evidence for these arguments. Descriptive statistics, bivariate regressions, and more developed OLS estimation, provide significant support for the view that there are,
indeed, Three Worlds of Work Time. The bivariate and multivariate estimation also
provided unambiguous support for the view that social welfare policies strongly reduce
total working time per working-person, though not necessarily per employee. The union
data was more mixed, though the bivariate and multivariate regressions suggest that
union density negatively effects at least hours per working-age person. The bivariate
regressions also provide some preliminary but promising evidence that female labor
market participation and union membership may be important mediating influences that
explain whether union movements will prioritize working hour reductions. Finally, the
case studies suggest how particular national political histories of welfare, tax and direct
work-time policy reforms cluster into the Three Worlds.

Further research needs to focus on a number of areas including more systematic
attention to the role of unemployment, employers, culture, and cognitive maps. Case
studies and journalistic accounts of work-reduction often stress how efforts to reduce
work-time are animated by struggles against unemployment, but this strong relationship
is not exhibited by our simple examination of the data. It may be the case that more
complicated interaction effects exist because the fear of unemployment leads to divergent
responses under different regimes and conditions. Or it may be the case that high
unemployment is most important in attempts to share jobs by reducing the standard
workweek. These narratively compelling efforts may be ineffective at reducing actual
hours, especially for the broader kinds of measures captured by our data.

Attempts to better understand the work-time politics among social actors will
need to examine the role of employers. The “varieties of capitalism” literature makes
clear that different kinds of production regimes favor more or less or capital intensity. It
stands to reason that more-capital intensive production will correspond to less labor hours
in the economy. Different kinds of risks regarding such things as product demand or the
loss of labor skills may also affect hiring decisions and preferences for social policy institutions (e.g.: Mares 2001). Different financing arrangements for social benefits, for instance, may greatly influence employers’ preferences. If employer contributions to health care and other benefits are financed on a per-worker basis (as in the United States) then we would expect firms to maximize employee hours rather than pay to cover a greater number of workers.\textsuperscript{45} Capital-intensity of production may be an important cause as well as an effect of work time reductions, since employers would be more interested in shortening work time per employee in more capital-intensive industries where the potential costs of fatigued workers are greater and there are greater benefits from combining more short shifts to keep expensive machines running all day and night.

Examination of the multiple interaction effects that define different worlds of working time has a long way to go. Looking into the future, the politics of work-time is likely to have increasing relevance limits on individuals’ time represent an increasingly crucial form of scarcity in increasingly information and personal service-driven economies (e.g.: Gordon 2000). This line of research is at an early stage and will benefit from more refined data and case studies.

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Figure One: Annual Working Hours per Employee, 1950-2000

Figure Two: Agreed vs Actual hours

Source: Pettersson, 1989
Table Two:
Annual Hours per Employee (1950-2000) and per Working-age Person (1973-2000)

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<th>Social Democratic</th>
<th>Annual Hours Per Employee</th>
<th>Change</th>
<th>Annual Hours Per Working-Age Person</th>
<th>Change</th>
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<td></td>
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<th>Change</th>
<th>Annual Hours Per Working-Age Person</th>
<th>Change</th>
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<td>1277 1112 1103 1035</td>
<td>-7%</td>
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<tr>
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<tr>
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<td>1186 1060 923 939</td>
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<tr>
<td>Germany</td>
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<thead>
<tr>
<th>Liberal</th>
<th>Annual Hours Per Employee</th>
<th>Change</th>
<th>Annual Hours Per Working-Age Person</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2023 1945 1880 1815 1806 1797</td>
<td>-10% -1%</td>
<td>1283 1192 1241 1262</td>
<td>6%</td>
</tr>
<tr>
<td>Canada</td>
<td>2090 1994 1899 1806 1799 1789</td>
<td>-14% -1%</td>
<td>1186 1179 1237 1261</td>
<td>7%</td>
</tr>
<tr>
<td>Ireland</td>
<td>2437 2320 2177 2025 1922 1700</td>
<td>-17% -16%</td>
<td>1305 1154 1030 1114</td>
<td>-3%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1759 1756 n.a. n.a. n.a.</td>
<td>1179 1248</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2112 2134 1919 1758 1698 1653</td>
<td>-17% -6%</td>
<td>1345 1202 1208 1170</td>
<td>-3%</td>
</tr>
<tr>
<td>United States</td>
<td>2166 1967 1882 1831 1819 1879</td>
<td>-15% 3%</td>
<td>1217 1207 1313 1396</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>2166 2072 1951 1847 1801 1762</td>
<td>-15% -5%</td>
<td>1267 1187 1201 1242</td>
<td>5%</td>
</tr>
</tbody>
</table>

| Japan                   | 1958 2095 2042 2000 1956 1799 | 2% -10% | 1427 1403 1419 1346 | -4%    |
| OECD Average            | 2123 2050 1845 1746 1677 1626 | -18% -7% | 1233 1165 1144 1140 | -2%    |
| Country SD              | 145.9 118.5 149.9 146.3 152.8 144.4 | 0% -1% | 121.1 126.8 144 140.8 | 11%    |
| Regime SD               | 67.7 71.5 153.7 129.5 136 129.9 | 91% 0%  | 44.2 55.0 83.8 106.6 | 94%    |

Source: Groningen 2002; OECD Labour Force Statistics, various years
Figure Three:
Annual Hours in Social Democratic, Christian Democratic and Liberal Countries
Figure Four: Hours per Working-Age Person and Social Welfare Expenditure

Annual Hours per W.Age Person and Log Social Welfare
r-sq. = .70

Social Welfare Spending (log % GDP) (1975-95 average)
Figure Five: Annual Hours per Employee and Union Density

Figure Six: Annual Hours per Employee and Centralization

Annual Hours per Employee and Bargaining Centralization
r-sq. = .21
Figure Seven: Annual Hours per Employee and Union Density with Full Sample, and Where Female Union Participation is Above Average

Annual Hours per Employee on Union Density

Coef. = -1.54, t-stat. = -4,
r-sq = .039, n = 396

Where Female Union Membership > Mean

Coef. = -3.13, t-stat. = -7.7
r-sq = .35, n = 114
[[Figure Eight: Annual Hours per Employee and Left]]

Figure Four: Annual Hours per Employee and Left Cabinet %
r-sq. = .24

[[Figure Nine: Annual Hours per Employee and Right]]

Figure Three: Annual Hours per Employee and Right Cabinet %
r-sq. = .35
Figure Two: Annual Hours per W.Age Person and Christ. Dem. Cabinet %
r-sq. = .28

% Cabinet Christian Democratic (1975-95 average)

JAP
US
UK
NOR
IRL
FR
AUS
SWI
DK
ITA
BEL
NL
GER
Table Three: OLS Estimation of Work-time, Politics, and Policy

<table>
<thead>
<tr>
<th></th>
<th>Annual Hours per Employee</th>
<th>Annual Hours per Working-age Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hours (t-1)</strong></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Hours (t-1)</td>
<td>0.84***</td>
<td>0.76***</td>
</tr>
<tr>
<td><strong>Parties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian Dem.</td>
<td>0.02</td>
<td>-.159**</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(-2.2)</td>
</tr>
<tr>
<td>Right (Neo-Lib.)</td>
<td>0.28***</td>
<td>-.06</td>
</tr>
<tr>
<td></td>
<td>(2.16)</td>
<td>(-0.96)</td>
</tr>
<tr>
<td>Left (Social Dem.)</td>
<td>0.29*</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(1.65)</td>
<td>(0.00)</td>
</tr>
<tr>
<td><strong>Unions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union Density</td>
<td>2.39***</td>
<td>2.8**</td>
</tr>
<tr>
<td></td>
<td>(7.980)</td>
<td>(2.38)</td>
</tr>
<tr>
<td>Centralization</td>
<td>-280.28***</td>
<td>-15.99</td>
</tr>
<tr>
<td></td>
<td>(-7.12)</td>
<td>(-1.07)</td>
</tr>
<tr>
<td>Density x FemLabForcePart.</td>
<td>-0.05*</td>
<td>(-1.92)</td>
</tr>
<tr>
<td></td>
<td>(-1.92)</td>
<td>(-1.12)</td>
</tr>
<tr>
<td><strong>Policies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Welfare</td>
<td>-17.16***</td>
<td>1.6***</td>
</tr>
<tr>
<td></td>
<td>(-19.73)</td>
<td>(2.64)</td>
</tr>
<tr>
<td>Income Tax</td>
<td>-1.61</td>
<td>-0.7</td>
</tr>
<tr>
<td></td>
<td>(-1.13)</td>
<td>(-1.12)</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td>0.29</td>
<td>-0.08</td>
</tr>
<tr>
<td></td>
<td>(0.17)</td>
<td>(-0.15)</td>
</tr>
<tr>
<td>Fem. Lab. Force Part.</td>
<td>-1.74</td>
<td>2.36*</td>
</tr>
<tr>
<td></td>
<td>(-1.08)</td>
<td>(1.80)</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>-0.01***</td>
<td>0.00***</td>
</tr>
<tr>
<td></td>
<td>(-3.72)</td>
<td>(-2.47)</td>
</tr>
<tr>
<td>Gini Index</td>
<td>48.69</td>
<td>-3.09</td>
</tr>
<tr>
<td></td>
<td>(0.52)</td>
<td>(-0.07)</td>
</tr>
<tr>
<td>Trade</td>
<td>-22.86</td>
<td>17.16</td>
</tr>
<tr>
<td></td>
<td>(-0.96)</td>
<td>(0.84)</td>
</tr>
<tr>
<td>Constant</td>
<td>2216.74***</td>
<td>186.34***</td>
</tr>
<tr>
<td></td>
<td>(31.37)</td>
<td>(2.12)</td>
</tr>
<tr>
<td>Wald Chi-Sq (12-14)</td>
<td>396</td>
<td>378</td>
</tr>
</tbody>
</table>

Note: OLS error-correction model with OLS coefficients, panel-corrected standard errors, presuming panel-wise heteroskedasticity. Estimated using STATA 6.0 xtgls. Country dummies are not shown for estimation (2).


*** p < .01
** p < .05
* p < .10
Figure Eleven:

![Average weekly hours of fulltime industrial work, USA 1900-1972](image)


NOTES

1 For a criticism of GDP and employment as indicators of “progress,” see United Nations discussions of social development indicators such as the Sustainable Development Index and also (Rowe and Silverstein, 1999). An exception to the general condemnation of “welfare without work” in the comparative political economy literature is Goodin 2001.


3 On the political causes and consequences of different conceptions of employment and non-work see Baxandall (2002).

4 The six-day, 48-hour week was a major goal of labor movements during the interwar period. Strikes and other industrial protests to achieve reduced hours were common in the 19th Century, though legislation tended to only protect women or children from “over-work.”

5 If we look at cross-sectional data on GNP and PPC data for 1990, for instance, we find virtually no relationship between employee hours and income, and a very weak relationship between population hours and income in the opposite direction as expected (n=16, R-squared=0.21 for PPC, 0.33 for GNP) (Groningen 2002; World Values Survey). And cross-sectional time-series results show unstable results, sometimes with positive and sometimes with negative correlation with work-time measures, depending on the particular estimation (See quantitative section below).

6 The logic is simply that higher income inequality implies a higher marginal payoff to an extra hour’s work, and a higher marginal penalty for less work (moving up the same percentile in income distribution implies a greater income increase in high than low inequality settings).

7 The evaluation literature, meanwhile, often casts doubt on the role that such limits play in reducing annual hours, since many hour-limiting agreements or legislation can have the unintended effect of doing little to change or even raising total hours (Hunt 1998).
to participate in the labor market in the first place (1993).

Andersen, emancipation from the labor market pertains to women only insofar as women are unencumbered breadwinner model makes working at home an imposition. As Orloff has argued as a criticism of Esping-

Moreover, emancipation from work for women may be severely tempered in situations where a male corporatist countries – though not the Netherlands -- “work” as much as liberal countries (Goodin 2001, 30).

incomparable but, if we were to include unpaid work time (such as housework and child minding), then most high-wage workers launder the same shirt for the equivalent of $5.20. Time use studies are notoriously (where a shirt is laundered by low-wage workers for $1.50) is almost ten times what it is in Denmark where

democratic countries. He finds, for instance, that the proportion of laundry workers in the US population (where a shirt is laundered by low-wage workers for $1.50) is almost ten times what it is in Denmark where high-wage workers launder the same shirt for the equivalent of $5.20. Time use studies are notoriously incomparable but, if we were to include unpaid work time (such as housework and child minding), then most corporatist countries – though not the Netherlands -- “work” as much as liberal countries (Goodin 2001, 30). Moreover, emancipation from work for women may be severely tempered in situations where a male breadwinner model makes working at home an imposition. As Orloff has argued as a criticism of Esping-Andersen (1999) has argued that liberal economies have high inequality and large low-wage service markets that encourage activities such as laundry, food preparation, or care for dependents to be performed more through paid labor than they are in social democratic or Christian democratic countries. He finds, for instance, that the proportion of laundry workers in the US population (where a shirt is laundered by low-wage workers for $1.50) is almost ten times what it is in Denmark where

romanticize domestic labor. Esping-Andersen (1999) has argued that liberal economies have high inequality and large low-wage service markets that encourage activities such as laundry, food preparation, or care for dependents to be performed more through paid labor than they are in social democratic or Christian democratic countries. He finds, for instance, that the proportion of laundry workers in the US population (where a shirt is laundered by low-wage workers for $1.50) is almost ten times what it is in Denmark where high-wage workers launder the same shirt for the equivalent of $5.20. Time use studies are notoriously incomparable but, if we were to include unpaid work time (such as housework and child minding), then most corporatist countries – though not the Netherlands -- “work” as much as liberal countries (Goodin 2001, 30). Moreover, emancipation from work for women may be severely tempered in situations where a male breadwinner model makes working at home an imposition. As Orloff has argued as a criticism of Esping-Andersen, emancipation from the labor market pertains to women only insofar as women are unencumbered to participate in the labor market in the first place (1993).

It is arguably a limitation of this study that our focus on reduced volume of work time does not consider whether less hours take the form of shifts at “unsocial” working times. The standard industrial time regime was characterized by four time institutions – free evenings, free weekends, annual common holidays and retirement – all of which, held in common within a community, add to a sense of security, ability to plan, and community. Some have worried that flexibilization strategies which reduce work time may do so at the cost of creating a 24-hour, 365-day work society which undermines some of the communal benefits of free time and erodes zeitsouveränität (Breedveld 1998; Barnett and Garais 2000; Siriani 1991). Our study also does not examine the differing extent to which the process of work itself may be more or less virtuous in achieving the good life. See the debate on this issue vis a vis “commodification” in (Room 2000).

There may be significant differences even in a single country among full-time workers. In the United States, for instance, contractually agreed hours for full-time workers have remained relatively static in recent decades, but total hours have increased due to greater overtime and multiple job-holding (Hunnicut 1988).

For the 16 countries available in our cross-section, the percentage of respondents saying that work was “very important in their life” had an R-squared below 0.02 for either measure of hours. Values seem to be most important as intermediating (or perhaps reflecting) differences in family structure. The highest R-squared value observed (R-squared = 0.74) was in the relationship between how long employees work and the portion of the population who thought being a housewife was just as fulfilling as paid work. The more a population embraces housewifery, the longer employees work. Perhaps societies celebrating housewives feel more comfortable with a sharper division of labor in which the breadwinner works long hours and the wife keeps the home. And yet the US and Canada have high female participation rates along with their high embrace of housewifery, and the broader cross-sectional relationship is less than half as strong (0.32) in relation to hours per working age population.

The R-squared is 0.01. There is however a significant relationship between the percentage who say leisure is very important and the average hours of those who are employed (R-squared =0.37).

On direct work-reduction policies this contradicts the contention by Julkunen and Nätti that readiness for work-sharing policies presuppose “green values or a non-consumptionist life stage” (Julkunen and Nätti 1999: 89). Despite the fact that the work-intensive Japanese score low as post-materialist, and the least
work-intensive Dutch score the highest on postmaterialist scores, the overall R-squared is 0.13 for the population and 0.06 for employee hours.  

18 For hour-per-employee the R-squared was 0.03, for the population it was .001.  

This doesn’t require, notice, that unions believe work-sharing to be particularly effective in reducing overall unemployment.  

19 Unions oriented towards income gains might also support hours-reduction policies that lowered the “standard week” because overtime wage premiums would begin at a lower time threshold. This effect does not have a public goods dynamic. Hunt argues that the actual effect on wages of reductions in work hours for full-time workers depends on a wide variety of factors with often ambiguous outcomes (1998: 353).  

By this logic we would also expect that more skill-specific labor would be more supportive of policies that reduce working time per-employee because employers will have trouble finding more workers to make up for lost hours and will therefore bid up wages and avoid lay-offs.  

20 In the political economy literature on learning, this would be an example of Deutsch’s “simple learning” or Argyris and Schon’s “single-loop” learning (Deutsch 1963, p.92; Argyris and Schon 1978, pp.20-6). On policy-learning and social policy, see also Helclo (1974).  

For a similar argument explaining commitments against unemployment, see Baxandall (2003).  

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For a similar argument explaining commitments against unemployment, see Baxandall (2003).  

25 World Values Survey 1990, with sixteen countries. (R-sq. 0.32). The relationship would be far stronger if the Dutch and Germans didn't have so many Protestants, and the Americans, Canadians and Swiss didn't have so many Catholics.  

26 We also constructed and analyzed a third, broader measure of working time, annual hours per person, multiplying hours per year by the broader employment rate (civilian employment as percentage of total population). But since this is so similar to working-age population, with all the statistical results virtually the same as well, we leave these numbers out of the presentation.  

27 All bivariate correlation tests are on a sample of 396 observations (22 years X 18 countries).  

28 Esping-Andersen shows how this preference, far from biological, corresponds to the inadequacy of institutional support for family and career goals (Esping-Andersen 2002).  

29 Missing values were imputed with the multiple-imputation “Amelia” program to generate panels with less bias and inefficiency than list- or case-wise deletion (King et.al. 2000; Honaker et.al. 2000). Panel-corrected standard errors produce unbiased standard errors in the face of heteroskedasticity, especially since time periods do not appreciably exceed the number of cross-sections (Beck and Katz 1995, Beck 1998). And because regression diagnostics revealed heteroskedasticity to still be a problem, we used error-correction OLS models presuming heteroskedastic panels. Although our degrees of freedom may lead to some bias when including lagged dependent variables and country or period dummies, doing such has important advantages. Adding lagged dependent variables address serial correlation, and inclusion of country dummy variables assess country fixed effects, particularly important where we suspect country differences to matter beyond the variables in the estimation model.  

The full model, for estimations (2), take the following general form:  

\[ \text{Hours}_{it} = \beta_0 + \sum \beta_1 \text{Party Variables}_{it-5} + \sum \beta_2 \text{Union Variables}_{it-5} + \sum \beta_3 \text{Union*FemalePartic}_{it-5} + \sum \beta_4 \text{Policy Variables}_{it-1} + \sum \beta_5 \text{Controls}_{it-5} + \sum \beta_6 \text{Country}_{gi} + α_{it} \]  

The \( \beta \)'s are the parameter estimates for the independent, control, and country/year dummy variables, where the subscripts \( i \) and \( t \) denote the country and year of the observations, respectively. \( \text{Hours}_{it} \) is the dependent variable – annual hours per employee or hours per working-age person. \( \text{Hours}_{it-1} \) is the lagged dependent variable. \( \text{Party Variables}_{it-5} \) are the Right, Left, and Christian Democratic partisan power measures – measured with lags to deal with possible endogeneity (the real possibility that our political conditions are themselves artifacts of working hours developments), and to take account of how these political conditions must percolate their way through group interests, interactions, and policy change. \( \text{Union Variables}_{it-5} \) capture the union density and centralization measures, with the same lags. \( \text{Union*FemalePartic}_{it-5} \) Capture possible interaction effects between union density and female labor market participation (see text). \( \text{Policy Variables}_{it-1} \) are social welfare expenditure and income tax levels, measured with and without one year lags to deal again with endogeneity and to allow policies time to influence work preferences. \( \text{Controls}_{it-5} \) are unemployment, GDP per-capita, female labor force participation, income inequality, and trade – measured in
lags concomitant with the Political and Policy variables being tested. Country\_gi are the dummies for fixed
country effects.

Country dummies are not shown, though virtually all had highly significant coefficients. Not surprisingly,
the Netherlands was the biggest negative outlier (fewer hours than the model predicts) and the US is the
biggest positive outlier (more hours than the model can predict).

Running regressions without or with different lags produced somewhat different results, especially
for union density. But particularly the unlagged runs produced results on the controls that suggested poor
specification (such as turning the income per capita from significant negative to positive, and unemployment
from negative to positive). In any event, adding or deleting various the controls and using log
transformations do not change these results.

Fuller evaluation of this interaction effect requires analysis of how particular levels of participation
mediate union density, particularly since the coefficients for density are positive and significant. But for
reasons of space, the simple negative coefficient of the interaction term captures at least a weak version of
our argument that high female labor force participation should dampen hours-increasing effects of higher
density.

Firstly because social protection raises the reservation wages, and secondly because recipients of social
benefits would often become ineligible if they worked part-time.

In 1993, 54 percent of Finnish of fathers took paternity leave and 28 percent took additional leave for
extended care of a child or parents. (ie not male breadwinner). All four Scandinavian countries provide
parental leave to fathers as well as mothers, although in all four countries women take many more parental
leave days (Sainsbury, 1999, 92-3).

Finland was in a deep recession in the early 90s. Unemployment grew from 3.5 percent in 1990 to 18.4

Surveys indicated that Finns individually prefer the more traditional work hours arrangements (Julkunen
and Näätä 1999, 76).

This experiment appealed to employers who jointly desired an expansion of part-time work, and it saved
the government budget money because the wage supplements to former full-timers were less than the money
saved by not having to pay the new part-timers unemployment benefits. About ninety percent of those using
this program were women.

Norway also performed well above average, although for children aged three to school age France came in
first.

A national law in 1985 required all local governments to provide either child care or a care allowance to
all parents needing it. During the economic crisis of the 1990s local budgets were particularly squeezed and
many economized by moving out of daycare into direct benefits (Siplä and Kopinen 1998).

Whapples identifies the second decade of the century as the fastest period of work-week reduction, in
which the Census of Manufacturers indicates that the “normal” work week fell from 57 hours in 1909 to 51
hours in 1919 (1990: 394n). Labor shortages during the First World War gave workers the leverage to
demand shorter hours. In 1916 alone there were 600 strikes where working hours were at issue (Roediger,
1989: 201). Great precedent was made of the fact that the War Industries Board in WWI approved a “basic”
eight-hour day. Broad representatives of labor from the IWW to the AFL, from Theodore Roosevelet’s
Progressive Party to the then-relevant Socialist Party, were all staunch advocates of shorter hours

Other historical studies of the longer movements include (Cahill 1932; Christopherson 1991; Hunicutt
1988).

Direct legislation reducing work time in the US was rarely accomplished through national legislation.
Instead reductions were won in particular regions or industries. The last high water mark in national debate
over reducing work time was 1932 when shorter hours were a cause on both the Democratic and Republican
party platforms and both Hoover and FDR were prominent in their support of reducing hours as a way to
spread work. Even conservative organizations like the National Chamber of Commerce voiced their
reluctant support. New York mayor Fiorello La Guardia opined that unless a six-hour, five-day week were
passed by Congress, the U.S. Constitution would have to be rewritten within three years. After the election,
the AFL drafted a plan that was taken up in Congress which would have prohibited that interstate or
international traffic of all goods produced by establishments where workers were employed more than five
days a week or six hours a day (Hunnicutt, 1988: 1, 149-150). But when a 30-hour bill seemed destined to pass it elicited a strong backlash, especially from businesses that had rhetorically supported voluntary measures but now felt threatened by mandatory and permanent rules. Instead of the 30-hour bill FDR scrambled to propose a variety of unfair competition measures and public works that were packaged as the National Industrial Recovery Act (Hunnicutt, 1988: 158-190).

42 A 1963 Gallup Poll had similarly found that just 42 percent of union members were in favor of a thirty-five-hour week (Roediger, 1989: 268).

43 The smaller and more market-oriented VHPP unions formally abandoned shorter-hours as early as 1986.

44 There are, of course, significant differences in relative time rankings that result from this different measure. For instance, countries like the Netherlands that rely on part-time work appear to have much smaller reductions in working time.

45 Cutler and Madrian, for instance, show that working time is longer in firms that operate their own insurance schemes (1996).
ERRATA:

- p. 7, line 4, last expression: \[ \hat{s} = \frac{\Delta_f}{1 + \lambda_f} \]

- p. 7, footnote 16, last line:

\[
W \equiv (1-q)(W^H - \lambda s - zE) + q(1-x)(W_L - \lambda s) + qx \left[ (1-z) \left( W^H + \frac{\Delta_f}{1 + \lambda_f} - \lambda_s \right) + z(W_L - E) \right]
\]

- p. 17, sentence starting in line 11 (last sentence above 4.4):

The menu of contracts under integration is \( \{(\tilde{\sigma}_1, \tilde{\sigma}_2, \tilde{c}), (\tilde{\sigma}_1, \tilde{\sigma}_2, \tilde{c}), s(\tilde{\sigma}_1, \tilde{\sigma}_2)\} \); transfers, output and agency payoff depend on both the announced reports of the agencies on the signal \( \tilde{\sigma}_i \) and the announced type of the firm \( \tilde{c} \).