

RISK PERCEPTIONS AND RISK PREFERENCES
IN AN ERA OF PRECARITY AND AUSTERITY

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ABSTRACT

Lindsey M. King: Risk Perceptions and Risk Preferences in an Era of Precarity and Austerity
(Under the direction of Arne L. Kalleberg)

In an era of labor market precarity and welfare state austerity, workers in capitalist economies are exposed to manifold risks. How they perceive these risks is an emerging topic of interest. In keeping with the welfare state's role as a risk manager, labor market policies are found to directly impact workers' risk perceptions. However, the dearth of theoretical development, coupled with a lack of conceptual clarity, has hindered our understanding of the policies and labor market conditions that influence workers' risk perceptions.

This dissertation explores four types of risk perceptions. Job insecurity is the cognitive assessment of an unpredictable, uncontrollable threat to one's job. Employment insecurity is a belief that, in the event of job loss, a comparable job cannot be found. The third type of insecurity is anxiety about job loss, termed affective insecurity. This dissertation argues that these concepts should be modeled separately in policy research, a practice seldom followed. I also develop the concept of precarity avoidance, a cognitive aversion to precarious labor market situations. Combined, this dissertation explores, from a comparative perspective, what causes workers to feel threatened, what they fear, and what labor market outcomes they hope to avoid.

I explore the risk perceptions of adult non-agricultural workers in 25 capitalist countries using survey data from three waves of the International Social Survey Program's (ISSP) Work Orientations Module, matched with country-level indicators. Chapter 2 analyzes the effect of labor market and policy changes on job insecurity, concluding that fluctuations in the

unemployment rate and GDP are the strongest predictors of job insecurity. In Chapter 3, I model job insecurity and employment insecurity as mediators between policy and affective insecurity. This model is rejected in favor of one that directly links policy to affective insecurity. Precarity avoidance is, in Chapter 4, hypothesized to depend on labor market rigidity, as determined by employment protection legislation. Protected workers show markedly greater aversion to temporary work than unprotected workers in rigid labor markets, a schism not seen in flexible labor markets.

To worried workers everywhere,
may you remain strong in an unpredictable world with an uncertain future

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LIST OF ABBREVIATIONS

ALMP	Active Labor Market Policy
CWS	Comparative Welfare States Data Set
EPL	Employment Protection Legislation
ISSP	International Social Survey Program
OECD	Organization for Economic Co-operation and Development
PLMP	Passive Labor Market Policy

CHAPTER 1. INTRODUCTION

Background

During the past four decades, the rise of contingent work, erosion of the psychological contract, and mass layoffs in times of economic prosperity all indicate an upheaval in employment relationships. Parallel to this development runs welfare state retrenchment, a rollback of (or, at the least, failure to expand) the welfare state in response to new social risks (Huber and Stephens 2001; Levy 2010). Both the precarity and austerity literatures postulate that workers are exposed to ever-increasing labor market risk. Employers shift the risks of the employment relationship to workers, while the welfare state fails to compensate for the rearrangement.

How do workers perceive their employment opportunities in the new age of precarity and austerity? Emerging research connects state governance of labor market risks with workers' perception of those risks, yet the relationship remains underexplored. Considering that stable, lifetime careers with a single employer are, from a historical standpoint, the exception rather than the norm in the span of capitalism (Jacoby 2004; Kalleberg 2009), workers' perceptions of internal and external labor market risk merit exploration.

Scholars have identified three psychological reactions to labor market risk: Cognitive job insecurity, defined as the perceived threat of job loss; employment insecurity, or the perceived inability to secure a comparable alternative job in an external labor market; and affective insecurity, or the emotional experience of anxiety about job loss (Berntson and Marklund 2007;

De Cuyper, Bernhard-Oettel, Berntson, Witte, and Alarco 2008; Wittekind, Raeder, and Grote 2010). Affective insecurity is a product of both job and employment insecurity (Borg and Elizur 1992; Huang, Lee, Ashford, Zhenxiong, and Xiaopeng 2010), suggesting that the combined cognitive assessment of internal and external labor market prospects converge in a sense of fear about future employment.

To these three types of insecurity, I add a fourth psychological state: precarity avoidance, which I define as a psychological aversion to objectively insecure employment. This fourth concept opens a new avenue of insecurity research, one that explores how precarity and austerity influence job choice. All four of these psychological responses demonstrate workers' reactions to unpredictable and uncontrollable labor market situations (Ashford, Lee, and Bobko 1989; Burchell 2002; De Witte 2005). When threats outweigh coping resources, insecurity and avoidance follow. Coping resources counteract threats by providing workers with control over employment outcomes.

If these four risk perceptions show similar trends across advanced capitalist economies, a policy perspective is irrelevant because homogeneity would suggest that countries respond similarly to macroeconomic shifts regardless of policy configurations. However, this explanation fails upon empirical examination. Despite the popular belief that workers in postindustrial economies have become steadily more concerned about job loss since the advent of the age of precarity, chronologically located in the late 1970s, research fails to identify a consistent downward trend in subjective indicators of job insecurity (Felstead, Burchell, and Green 1998; Green 2009; Olsen, Kalleberg, and Nesheim 2010). Job insecurity has increased in most postindustrial economies, but to varying degrees and at different times. The impression of steadily worsening insecurity across countries is attributable to the disproportionate focus on the

United States, which does show a consistent trend toward higher insecurity (Aaronson and Sullivan 1998; Kalleberg and Marsden 2008; Schmidt 1999).

Have other countries also exhibited rising subjective job insecurity? Evidence from outside the United States is sparse and inconclusive. In a four-country comparison extending from 1989 to 2005, Olsen, Kalleberg, and Nesheim (2010) conclude that workers in West Germany and the United States grew steadily more insecure between 1989 and 2005. In Norway, job insecurity changed little between 1989 and 1997 but worsened thereafter. Great Britain showed no net change in job insecurity: perceived job insecurity worsened between 1989 and 1997 but then improved by an equivalent amount between 1997 and 2005. Overall, comparative studies do not establish any uniform trend in job insecurity across advanced economies. Based on existing research, the conclusion that workers in advanced economies have become steadily more insecure since the inception of the age of precarity does not receive overwhelming support. Change has been uneven, both temporally and geographically.

While we know much about the state of job insecurity in advanced capitalist economies, comparative research on employment insecurity and affective insecurity is scant, as is research on precarity avoidance. What we do know of employment and affective insecurity is based primarily on Green's (2009) comparative summary of insecurity. On average, Nordic countries express the least employment and affective insecurity, followed closely by market-oriented economies like Great Britain and Ireland. Transitional post-socialist countries are the most insecure on both dimensions, whereas other economic configurations such as corporatist economies express relatively high employment insecurity but low affective insecurity. In sum, the countries show sufficient heterogeneity to question the institutional idiosyncrasies that lead to such divergence in risk perceptions.

Establishing the Policy-Perception Connection

To explore the policy-perception link, I rely on three assumptions. First, most workers cannot absorb or counteract all of the market risks to which they are exposed. Against the unfettered free market rises a call for protection from market fluctuations—Polanyi’s “double movement” of free market growth and popular outcry for state protection (Kalleberg 2009; Polanyi [1944] 2001). The labor force will not abide endless uncertainty. For protection, workers turn to the state, the only non-market institution capable of restraining or addressing market risk. States function as institutionalized labor market risk managers, inextricable from the markets they are designed to regulate. The welfare state is an important third actor in labor markets, governing the relationship between employers and workers.

Second, “[a]ll Western countries are similarly affected by the informalization and individualization of paid work. But this epochal change is perceived and valued differently in different cultures” (Beck 2000:111). Convergence theories propose that globalization drives advanced economies toward a similar neoliberal model of restricted welfare states (Breen 1997; Howell 2003; Ó Riain 2000; Rodrik 1998; Stryker 1998). From this perspective, countries engage in an international “race to the bottom” that renders everyone insecure and subverts the state to the pressures of international competition.

My dissertation rejects this view, aligning instead with the regime literature, which proposes that welfare states adjust to similar economic changes in disparate ways (Gallie 2007; Hall and Thelen 2009; Iversen 2005; Thelen 2001). Policies are created and coordinated according to dominant logics—the most commonly cited being egalitarianism, corporatism, and liberalism—that guide the strategies nation-states use to govern labor market risks. To provide an example of what these logics look like in practice, an egalitarian ethos predominates in

Scandinavian countries. Strong active and passive labor market policies complement flexible labor markets, and coordinated wage-bargaining systems compress wage differences. Risk is minimized for the greatest possible number of workers.

Third, labor market conditions and policies impinge directly on perception. This dissertation challenges the bulk of the insecurity literature, which situates threats in the employing organization and defines coping resources as individual human capital. In the organizational literature, structural shifts matter only insofar as they create organizational turbulence (Ashford, Lee, and Bobko 1989; Greenhalgh and Rosenblatt 1984; Jacobson 1991; Mauno, Leskinen, and Kinnunen 2001). The psychological perspective also leans heavily toward explaining employment insecurity in terms of human capital, particularly education and skills (Berntson, Sverke, and Marklund 2006; Fugate, Kinicki, and Ashforth 2004). Workplace turbulence and human capital are undoubtedly important to perceptions of labor market risk, but workplaces are not the only sources of threat, nor are individual resources the only means of coping. Threats may also emanate from the external labor market, as evidenced by the reliably significant influence of the unemployment rate on both job insecurity and employment insecurity, a relationship that holds both time and countries (Auer 2005; Erlinghagen 2007; Esser and Olsen 2012; Fullerton and Wallace 2007).

Policy and Insecurity

Welfare states offer a comprehensive means of hedging labor market risks. Scholars such as Chung and van Oorschot (2011), Lübke and Erlinghagen (2014), Carr and Chung (2014), Dixon, Fullerton, and Robertson (2013), and Anderson and Pontusson (2007) recognize three types of policies influential over workers' risk perceptions: employment protection legislation, active labor market policies, and passive labor market policies. Employment protection

legislation (EPL) establishes hiring and firing practices, protecting workers from job loss. Active labor market policies (ALMP) facilitate labor market matching by serving as an employment intermediary or providing skills training. Passive labor market policies (PLMP) mitigate income shocks induced by job loss. What all employment policies have in common is their function as institutionalized risk management strategies. Employment protection legislation aims to reduce the threat of job loss by stabilizing jobs; active labor market policies help workers cope with finding new work; and passive labor market policies provide a means of coping with unemployment.

Employment Protection Legislation: Job Insecurity and Precarity Avoidance

As a means of preserving jobs, EPL regulates the hiring and firing of workers, stipulates the conditions under which employers may implement mass layoffs, and outlines the conditions for employment of temporary workers. In practice, EPL may cause outcomes counter to their intentions. Overly strict legislation for permanent work appears to inadvertently create rigid labor markets segmented by contract status. Gash and McGinnity (2007), Gash (2008), Diprete, de Graaf, Luijkx, Tåhlin, and Blossfeld (1997) show that seemingly rigid labor markets with strict EPL maintain numerical flexibility through temporary contracts, relegating temporary work to peripheral labor markets. Strict legislation may reduce employers' ability to fire workers, but also makes them more reluctant to hire new employees.

The perverse effect of labor market rigidity appears most dramatically in Spain, where legislation served to aggravate labor market threats rather than reduce them. From 1990 to 2005, temporary work's share of the labor force averaged about 4.5% in the United States, 16.8% in Finland, and 32.8% in Spain. In Spain, rigid employment protection for permanent work motivated employers to hire legions of workers on temporary contracts to circumvent strict laws

regarding the firing of workers (Dolado, García-Serrano, and Jimeno 2002; Polavieja 2003). A lax regulatory environment, conversely, enables employers to easily hire and fire workers--a condition that may increase the risk of job loss but also facilitates mobility (Auer, Berg, and Coulibaly 2004). In the United States, dictated by a logic of free markets, weak labor laws for both temporary and permanent work obviate the use of temporary contracts. In Finland, the principles of inclusion and full employment are maintained through flexible labor markets and labor laws that dictate that temporary contracts may be used under legally specified circumstances.

The perverse effects of strict EPL seem to lead to a net null effect on job insecurity (Böckerman 2004; Chung and van Oorschot 2011; Erlinghagen 2008; Esser and Olsen 2012; Robinson 2000). Upon closer inspection, strict EPL polarizes temporary and permanent work. The lack of influence is actually a canceling out of extremes (Lübke and Erlinghagen 2014). When permanent workers benefit from strong employment legislation, temporary workers are relegated to peripheral labor markets. If temporary work is a trap of precarity rather than a bridge to permanent work, workers may deem these jobs a hindrance to their career. In rigid labor markets, where temporary work is marginalized, workers should express deep aversion to these jobs.

Passive and Active Labor Market Policies: Employment Insecurity and Affective Insecurity

Welfare states in advanced economies usually alleviate the consequences of joblessness with passive labor market policies such as unemployment insurance or benefits, reducing the income loss associated with unemployment (OECD 2010). State-sponsored unemployment benefits can be a crucial income source while workers search for another job. Workers' ability to search for alternate employment depends heavily on their ability to maintain an income during

spells of unemployment. In countries with weak labor market protection, unemployment is a highly undesirable prospect due to the high likelihood of poverty (Gallie and Paugam 2000). Low replacement rates or benefits of limited duration encourage workers to find new employment quickly, regardless of how well the new job matches their skill set. Conversely, high benefits of long duration are associated with high unemployment rates and inflated long-term unemployment partly because workers have the luxury of seeking a job that fits their skills and expectations (Gangl 2008; Nickell 1997).

In countries that take a proactive approach to boosting the employability of the jobless, receipt of unemployment benefits is contingent on participation in active labor market programs such as training and job search assistance, both of which have been shown to reduce the duration of unemployment and facilitate mobility back into work (Dieckhoff 2007; Kluve 2006). ALMP offers retraining opportunities to unemployed workers, helping them update their skills and improve their marketability. These policies also include public sector job creation, small business incentives, and job-creation programs targeting private sector employers, though the highest proportion of active labor market spending is devoted to training programs.

With regard to these policies' effects on risk perceptions, ALMP alleviates employment insecurity, while PLMP reduces affective insecurity (Anderson and Pontusson 2007; Lübke and Erlinghagen 2014). To the extent that employment insecurity captures a worker's concern about their marketability in an external labor market, ALMP reassures workers that unemployment will not lead to skill degradation and long-term unemployment. Likewise, insofar as anxiety about job loss relates to anxiety about income loss, PLMP serves as a palliative, lessening workers' fear of the future by addressing the economic consequences of job loss.

Structure of the Dissertation

This dissertation is motivated by three questions related to workers' subjective experience of labor market precarity and welfare state austerity. (1) To the extent that job insecurity is a combination of perceived unpredictability and uncontrollability (De Witte and Näswall 2003), is it affected more by labor market fluctuations or changes in the welfare state? (2) Under what conditions are workers willing to accept precarious work? (3) Do job and employment insecurity mediate the effect of policy on affective insecurity?

I answer these research questions in three papers, all of which analyze survey responses from the Work Orientations Module of the International Social Survey Program (ISSP). The population of interest is adult workers in non-agricultural occupations, age 18 to 65, who work in dependent employment (i.e., not self-employed) at the time of the survey. The ISSP covers a breadth of countries representative of various logics of coordination: egalitarianism (Denmark, Finland, Norway, and Sweden), corporatism (Austria, Belgium, Germany, the Netherlands, Switzerland), liberalism (Australia, Canada, Ireland, New Zealand, the United Kingdom, and the United States), post-socialism (the Czech Republic, Hungary, Poland, Russia, and Slovenia), familialism (France, Italy, Portugal, and Spain), and firm-coordination (Japan and South Korea). To account for countries' labor market policies and prevalent risks, I incorporate data from the Organization for Economic Cooperation and Development (OECD 2014a; OECD 2014b) and the Comparative Welfare States Dataset (CWS) (Brady, Huber, and Stephens 2014).

Chapter 2 specifies how job insecurity responds to institutional change. In a series of multilevel ordinal logit models, I test the responsiveness of job insecurity to (1) changes in labor market risk, as measured by the unemployment rate, the temporary employment rate, and GDP growth, (2) job protections, consisting of EPL, left-party representation, and unionization, and

(3) worker protections, measured by active and passive labor market policies. Job insecurity responds most strongly to economic fluctuations but is little affected by changes in policies and coalitions that aim to preserve jobs. Nor is job insecurity influenced by changes in policies that protect workers from the deleterious effects of job loss. I conclude that workers are sensitive to market fluctuations but relatively insensitive to policy shifts.

Chapter 3 disentangles the insecurity literature, rife with idiosyncratic definitions, to clearly delineate job insecurity, employment insecurity, and affective insecurity. In many research studies, these concepts are combined into a single indicator, a practice that obscures the effects of policy on each specific type of insecurity. Having parsed these concepts, I then explore the policy and market antecedents of affective insecurity, with job and employment insecurity modeled as potential mediators. Multilevel mediation analysis reveals that active and passive labor market policies directly assuage affective insecurity, an effect unmediated by job or employment insecurity.

Chapter 4 determines the conditions under which workers are willing to accept precarious work to avoid unemployment. In tightly regulated labor markets, where mobility from temporary to permanent jobs is determined more by policies than individual skills, aversion to temporary work is expected to be high. Workers in protected labor market statuses should show particular resistance to precarious work under conditions of labor market rigidity. Conversely, in flexible labor markets, human capital provides access to high-quality temporary work, making workers more receptive to temporary work. Using a series of generalized ordered logit models, I find that human capital predicts willingness to take temporary work in countries with flexible labor markets but has no effect on precarity avoidance in labor markets where temporary work is

marginalized. Among protected classes of workers, labor market rigidity generates an aversion to temporary work so great that many of these workers would prefer to be unemployed.

Contributions

This compilation of research addresses three gaps in the growing comparative literature on workers' risk perceptions. First, I develop an institutional theory of job insecurity, a project that comparative research has so far overlooked. Drawing insight from organizational researchers, who lead theoretical development in this field, I test how well the main tenets of organizational research apply at the comparative level. In the organizational literature, job insecurity is stoked by organizational change, or at least the threat of such. At the comparative level, threat also induces job insecurity. I establish that workers are concerned with the threat of unpredictable economic shifts, although they are indifferent to policy shifts. This finding validates the role of threat in the arousal of job insecurity.

Second, this project addresses the definitional inconsistencies prevalent in the literature. Insecurity research has suffered from conceptual confusion, conflating job, employment, and affective insecurity—a definitional knot this dissertation unties. I establish that cognitive evaluations such as job insecurity and employment insecurity differ from the emotional state of affective insecurity, both conceptually and empirically. Third, I explore the novel concept of precarity avoidance. Workers' aversion to precarious work is an unprecedented research topic, but one that merits attention. If workers find themselves forced to choose between temporary work and unemployment, they may prefer unemployment, where they can search for a permanent job, over precarity. When workers find unemployment more appealing than temporary work, we should be concerned that the dual agendas of precarity and austerity lead to such pervasive aversion to insecurity as to distort the labor market.

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CHAPTER 2. CHANGES IN MARKET RISKS AND MARKET PROTECTIONS: AN INSTITUTIONAL THEORY OF JOB INSECURITY

Introduction

The psychological effects of economic change were a core concern of early sociologists. Durkheim, in his study of anomic suicide proposed, “If therefore industrial or financial crises increase suicides, this is not because they cause poverty, since crises of prosperity have the same result, it is because they are crises, that is, disturbances of the collective order” (Durkheim [1897] 1979:246). Marx’s theory of alienation—in selling one’s labor to another, workers become estranged from their work—is rooted in the economic changes during Britain’s Industrial Revolution. For Marx, workers constituted a perpetually vulnerable population. “These labourers, who must sell themselves piecemeal, are a commodity, like every other article of commerce, and are consequently exposed to all the vicissitudes of competition, to all the fluctuations of the market” (Marx [1872] 1976:58). The founders of sociology recognized the close relationship between economic stability and workers’ well-being.

Job insecurity, the perception of impending yet unpredictable involuntary job loss, has replaced the nebulous concepts of alienation and anomie as the primary indicator of the psychological impact of work. Job insecurity is an important topic of study for several reasons. Insecure workers exhibit an inability to adapt to changing circumstances (De Witte 2005; Green 2006), a sense of unfairness (Jacoby 1999), stress and anxiety (Burchell 2002; Jacobson 1987; Paugam and Zhou 2007), pessimism about one’s career (Anderson and Pontusson 2007), low job

satisfaction (De Witte and Näswall 2003), turnover intention (Hellgren, Sverke, and Isaksson 1999), and withdrawal of organizational commitment (Ashford, Lee, and Bobko 1989; King 2000). Chronic job insecurity is associated with poor health and depression (Burgard, Brand, and House 2009; Heaney, Israel, and House 1994) and diminished job satisfaction that persists after the objective threat of job loss has passed (Hellgren, Sverke, and Isaksson 1999; Rocha, Hause Crowell, and McCarter 2006). László, Pikhart, Kopp, Bobak, Pajak, Malyutina, Salavecz, and Marmot (2010) demonstrate that this relationship between job insecurity and health is an international phenomenon, endemic to capitalist economies.

In general, job insecurity leads to diminished mental health because “well-being is related to the workers’ ability to foresee, control, and especially to cope with bad events” (Green 2006:129). Secure workers feel equipped to handle economic fluctuations; insecure workers feel no such sense that all will turn out well. This lack of situational clarity causes workers to rely heavily on their subjective evaluations of the environment, because objective cues provide no clear indicator of appropriate responses (Roskies, Louis-Guerin, and Fournier 1993). In the face of ambiguity, workers are left to draw their own conclusions about what their future holds.

The study of the psychological repercussions of economic upheaval on workers, once central to the sociological project, has been largely overtaken by psychologists and organizational theorists. Though these scholars have significantly advanced theoretical development of the relationship between organizational change and job insecurity, we still know little about the role of macroeconomic change on the process whereby workers conclude their jobs are at risk. Dixon, Fullerton, and Robertson (2013) point out the surprising lack of research on economic and political indicators of job insecurity. Interest in this area has picked up, however, as evidenced by studies from Anderson and Pontusson (2007), Chung and van

Oorschot (2011), Green (2003), Green (2009), Esser and Olsen (2012), and Olsen, Kalleberg, and Nesheim (2010), all of whom examine the impact of labor markets and welfare states on workers' evaluations of the likelihood of job loss. The aggregate message of these studies is that market conditions reliably predict job insecurity. The empirical evidence regarding welfare state policies is suggestive but not consistent enough to make a definitive statement, especially considering these studies mostly examine the European case. How well these findings hold up in a broader context is so far unknown.

In a stable economic environment, workers know what to expect. Changes in markets and policies, conversely, render the future uncertain. Changes in policies or collective bargaining impact workers' power to counteract the threat of job loss. In organizational research, these two elements—unpredictability and uncontrollability—are the primary instigators of job insecurity. This study aims to apply this organizational definition of job insecurity to a comparative context. I predict that job insecurity reacts to (1) changes in labor market threats and (2) changes in the economic coping resources available to workers.

These hypotheses are tested using the 1989, 1997, and 2005 waves of the International Social Survey Program's (ISSP) Work Orientations Module, paired with economic and labor market indicators from the Organization for Economic Co-operation and Development (OECD). This permits analysis of a broad range of political-economic configurations. Empirically, multilevel modeling allows me to assess the effects of institutional change while controlling for a worker's labor market position. This method allows me to assess the direct effect of labor market risk on job insecurity, a connection that is often claimed but seldom tested.

Comparative Trends in Job Insecurity

Based on the dataset for the dependent variable, Figure 2.1 presents the trends in average job insecurity for capitalist economies that participated in all three waves of the Work Orientations Module, covering 1989, 1997, and 2005. Job insecurity is measured on a scale from 1 to 5, with high numbers indicative of high insecurity. The range of political-economic configurations presented in Figure 2.1 cover the typologies developed by Esping-Andersen (1999) and Hall and Soskice (2001). The labor markets of social democratic regimes (Norway) are structured in accordance with an egalitarian logic of flexible security, or “flexicurity.” The logic guiding labor markets in liberal regimes (the United Kingdom and the United States) is one of minimal state intervention. Labor markets in corporatist regimes (Germany) distribute benefits according to occupational class. Hungary does not fall within any established typologies. It is generally classified as a post-socialist regime, where the transition from communism to capitalism led to a mismatch between the communist logic of centrally planned stability and the reality of competitive capitalist markets, which these countries resolved at different rates.

Contrary to popular belief, there is no clear increase in job insecurity during this time. Job insecurity in Germany and Hungary rose sharply between 1989 and 1997, but slightly fell in 2005. Hungarian workers showed middling insecurity in 1989; by 1997, they were the most insecure, a status retained in 2005. In Norway and the United States, job insecurity barely changed between the three time points. Conversely, British workers, the most insecure in 1989, were among the least insecure 16 years later. The diversity of patterns affirms findings by Green (2009), OECD (1997), and Olsen, Kalleberg, and Nesheim (2010), all of whom emphasize the variety of job insecurity trends among capitalist countries.

To explore why job insecurity exhibits no clear pattern, it will be helpful to examine the shifts in markets, institutions, and human capital relevant to job insecurity over this period. Figures 2.2 through 2.4 present various measures of institutionalized risk and risk management for the countries to be used in the empirical analyses¹, grouped according to typology. These institutional summaries include two additional regimes not described above. The guiding logic of Mediterranean regimes is one of familialism. In practice, this means strong protection for male breadwinners and the concentration of risk among disadvantaged segments of the labor force. This same logic underpins firm-coordinated regimes, although these regimes differ significantly in that protection is divested from the state to firms.

As seen in Figure 2.2, workers' risk exposure in the form of unstable precarious work rose steadily between 1985 and 2005, except in liberal regimes where the share of temporary work remained consistently low. On its own, this would increase the aggregate job insecurity of a country, as the positive correlation between temporary work and job insecurity is a well-documented international phenomenon (Carr and Chung 2014; De Cuyper and De Witte 2005; De Witte and Näswall 2003; Feather and Rauter 2004; Hesselink and van Vuuren 1999). However, other market threats follow no clear pattern, which may part. The unemployment rate converged over time; while long-term unemployment rates bifurcated. As a positive indicator of economic conditions, GDP rose steadily.

¹ Liberal regimes are Australia, Canada, Ireland, New Zealand, the United Kingdom, and the United States. The corporatist regimes are Austria, Belgium, Germany, the Netherlands, and Switzerland. Social democratic regimes are Denmark, Finland, Norway, and Sweden. Mediterranean regimes are France, Portugal, Spain, and Italy. Post-socialist regimes are the Czech Republic, Hungary, Poland, Russia, and Slovenia. Firm-coordinated regimes are Japan and South Korea.

The trend for temporary work's share of the labor market is partly attributable to the gradual relaxation of employment protection legislation for temporary work. Despite great scholarly distress about the demise of stable employment, Figure 2.3 shows that legislation protecting permanent work barely changed (Lübke and Erlinghagen 2014). Union membership, the other main source of job protection, continued its slow descent over the decades in all regimes except the persistently high social democratic. Leftist party representation, which typically increases the power resources of labor, increased slightly, suggesting that concerns about the erosion of state job protection are only partly justified.

Figure 2.4 depicts trends in state protections for unemployed workers. Active and passive labor market policies that help workers cope with the aftermath of job loss evince cyclical or stable trends. In the context of workers' increased risk exposure in the form of temporary work and diminished union protection, this could be interpreted as evidence of welfare state retrenchment, as the state has not responded to the encroachment of the external labor market with greater out-of-work protection. This summary of institutional conditions partially confirms the "great risk shift" (Hacker) from states and employers to workers. The story, though, is one of lower job protection and higher labor market segmentation rather than decreased coping resources.

Within the general trend of retrenchment, Japan and Germany exemplify some of the most severe shifts in social policy since 1985, excepting the jarring transition from communism to capitalism experienced by all Central and Eastern European countries. The major policy reforms in Germany between 1997 and 2002 contradicted the basic ideological foundation of the Bismarckian welfare state. In particular, the German government untethered unemployment insurance and skill specificity, broadening the definition of an acceptable job to encompass work

that did not use a worker's existing skills or training (Eichhorst and Marx 2011). The logic of activation, seen in previous policy reforms, reached its apogee with the Hartz reforms of 2002 through 2005, when restrictions and conditions for unemployment benefits were further tightened, and policy focus was redirected away from training initiatives toward immediate employment. Benefit duration for older workers was almost halved, and, in an unprecedented move, means-tested unemployment assistance was combined with general social assistance (Eichhorst and Marx 2011; Jacobi and Kluve 2006; Kemmerling and Bruttel 2006). The rules governing the use and duration of temporary work were relaxed and eventually eliminated altogether.

Overall, this policy mix achieved “flexibility at the margins” while leaving core workers unscathed. The policy outcome that best demonstrates this duality is the mini-job, a centerpiece of the Hartz reforms. Part-time mini-jobs, exempt from some social insurance programs with an earnings cap of 400 euros, were intended to draw into the labor market formerly excluded groups, such women and students. Prevalent in service industries, these jobs allow employer to minimize their labor benefit obligations, an appealing opportunity for employers that ensnares many workers who would otherwise prefer full-time work (Kemmerling and Bruttel 2006).

In Japan, employment protection legislation for full-time permanent workers remained stable during the period of 1985 to 2005, while protection for temporary workers and part-time workers quickly eroded. Most notable are changes in the Worker Dispatching Law. Established in 1985, this law legalized temporary work in a “positive list” of permissible occupations, most of which were female-dominated clerical occupations (Gottfried 2008). In 1996, the list was expanded from 16 to 26 occupations, but the basic structure of the law remained intact. The language of the law was then inverted in 1999, from a list of permissible “positive” occupations

to prohibited “negative” occupations (Shire 2002). This rephrasing released temporary work from the confines of a small subset of occupations, instead carving out a small niche of untouchable occupations.

Policy’s Effect on Job Insecurity

Conditions did not universally deteriorate for workers, although the relative impact of each factor on job insecurity is uncertain. In cross-sectional analyses, comparative researchers draw mixed conclusions about the role of job protections in workers’ assessments of their job security, as Table 2.1 summarizes. Employment protection legislation is, on its face, meant to reduce the threat of job loss through legislative prerequisites for dismissal or layoff. In practice, it may inadvertently increase the threat of job loss, as seen in Anderson and Pontusson’s (2007) research. This counterintuitive finding can be explained by the insider-outsider labor markets that often result from strict employment protection legislation, as Galtier and Gauthier (2003) find for France, Gangl (2003) finds for Spain, France, and Italy, and Dolado, García-Serrano, and Jimeno (2002) for Spain. As Gangl (2004) proposes in his “reluctance-to-hire” hypothesis, “dismissal protection increases fixed labour costs to employers because of the implied restrictions on employer job termination rights” (174). When employees are difficult to fire, employers are reluctant to hire. This creates a protected segment of long-tenured workers alongside a vulnerable segment of precarious workers. However, the non-significant findings of Chung and van Oorschot (2011), Erlinghagen (2008), and Lübke and Erlinghagen (2014) suggest that the high insecurity of precarious workers, added to the high security of permanent workers, may appear in regressions as an insignificant effect of employment protection legislation on perceived job insecurity.

State-sponsored coping mechanisms, designed to stabilize income or facilitate re-employment when the perceived threat of job loss becomes reality, receive mixed support as a source of job insecurity. In research by Anderson and Pontusson (2007) and Lübke and Erlinghagen (2014), active labor market policies fail to influence job insecurity, whereas Chung and van Oorschot (2011) identify an ameliorative effect² of both active and passive labor market policies. Some of the studies in Table 2.1 use a combined measure that asks workers to evaluate their job and employment security. State-sponsored coping mechanisms could be reasonably expected to operate mostly through employability perceptions, an interpretation confirmed by the non-significant finding of active labor market policies in Anderson and Pontusson's research (2007), which asks only about job insecurity.

Market risks, conversely, are repeatedly confirmed as a source of job insecurity. The correlation between national unemployment levels and job insecurity receives strong support and holds to be an international phenomenon (Auer 2005; Auer and Cazes 2003; Erlinghagen 2007; Esser and Olsen 2012; but see Green 2006; Paugam and Zhou 2007). Comparative scholarship from Anderson and Pontusson (2007), Chung and van Oorschot (2011), and Lübke and Erlinghagen (2014) argues that job insecurity is exacerbated by both the static unemployment rate and changes in the unemployment rate. In the absence of a direct threat from the employing organization, indicators of short-term labor market risk such as the absolute and relative unemployment rate provide a rough measure of the probability that one's own job is at risk, leading Chung and van Oorschot to conclude, "...it is economic and labour market forces that drive how individuals perceive their employment insecurity perceptions, rather than labour market institutions" (2011:298).

² Due to the high correlation between active and passive labor market policies, multilevel models often include only one policy type, although the findings usually apply to both.

Defining Job Insecurity

The evidence from cross-sectional research establishes a tentative relationship between institutions and insecurity, but lacks a clear theoretical frame to explain why labor market conditions, especially the unemployment rate, exert a far greater influence on job insecurity than labor market policies. Objective institutional risk and subjective individual risk are clearly linked, but the comparative job insecurity literature lacks a theoretical program to bind institutions to perceptions. This lack of theoretical clarity echoes in conceptual confusion about the definition of insecurity. Only half of the comparative insecurity research listed in Table 2.1 asks exclusively about job insecurity. The other half assess job and employment insecurity simultaneously.

In general, comparative insecurity scholars either hold that job and employment insecurity are distinct concepts with unique impacts on workers' well-being, or that job insecurity and employment insecurity are two facets of a latent variable (Chung and van Oorschot 2011). The debate reflects the conventional association of job insecurity with internal labor markets and employment insecurity with external labor markets. For example, a skilled independent contractor whose career exhibits a great deal of job-hopping would not be considered insecure by this definition, as this worker may be in an objectively insecure job yet also be highly employable. This worker is likely to believe that the most severe repercussions of job loss—prolonged unemployment, income loss, skill degradation—will not befall them. Scholars who argue that “truly” insecure workers feel both job and employment insecurity are likely correct in that this unfortunate group experiences more psychological harm than workers who are only insecure on one dimension, but this approach overlooks the distinct antecedents of job and employment insecurity.

Job insecurity is important to study as something distinct from employment security because job insecurity represents states' and employers' withdrawal from employment obligations in a way that employment insecurity does not. Institutional shifts like deindustrialization, globalization, and shareholder capitalism significantly altered the economic landscape (Cappelli 1999; Morris and Western 1999), such that "the standard employment relationship, in which workers were assumed to work full-time for a particular employer at the employer's place of work, often progressing upward on job ladders in internal labor markets, was eroding" (Kalleberg 2009:3). Job insecurity merits individual attention because it represents a sea-change in the social contract binding employers and employees, workers and the state.

An Organization-Based Definition of Job Insecurity

To understand the institutional determinants of job insecurity, I propose that comparative researchers begin with the definition, well-established in the organizational literature, of job insecurity as a sense of powerlessness to counteract an unpredictable and severe threat to a job (Ashford, Lee, and Bobko 1989; Greenhalgh and Rosenblatt 1984). In Greenhalgh and Rosenblatt's theoretical formula for job insecurity, the primary source of threat is organizational decline. When confronted with the specter of an unpredictable threat, workers who feel helpless will experience job insecurity. "The sense of powerlessness is an important element of job insecurity because it exacerbates the experienced threat" (1984:442).

Job Insecurity as a Reaction to Unpredictable Threats

In the organizational literature, change is the catalyst for job insecurity, a signal that workers should assess the threat to their job and their ability to cope with it (Klandermans and van Vuuren 1999). Organizational change, or the anticipation of such, consistently predicts job insecurity regardless of the country in which the study was conducted (Ashford, Lee, and Bobko

1989). Although few longitudinal studies link organizational change to job insecurity, extant research demonstrates a clear and strong connection. Borg and Elizur (1992) gathered data from over eight thousand white-collar employees working in multinational corporations in several European countries. In the interim between surveys, one company began to lag behind its competitors in product development, leading to increased ratings of job insecurity among employees. Under these new conditions of organizational uncertainty, there was a 36% decrease in the proportion of respondents who rated their jobs as secure. In a study by Jacobson (1987), Israeli public sector employees discovered that their previously secure jobs were threatened with possible elimination due to government cutbacks. Jacobson conducted his study after the workforce reduction plan had already been announced, but no specific jobs had yet been eliminated. At the point of the study, workers were left only with the vague anticipation of redundancy but no specific notice as to whose jobs were under direct threat. At least half of all employees expressed job insecurity.

Büssing's (1999) comparison of blast furnace workers from two steel companies in Germany confirms the psychological harm of persistent uncertainty. One company planned to close part of the plant, taking only some of the workforce, as yet unnamed, to a new plant. The other company had no such instability. Workers in the unstable and ambiguous organizational environment felt lower collective control, a lower expectation of control, and less supervisor support than workers in the stable organization. Mental preparation for the unpredictable possibility of job loss occurs when real stressors exist, as in the form of organizational decline or restructuring.

Dekker and Schaufeli (1995) stress the centrality of uncertainty and anticipation to job insecurity when they state, "Workers in the job-insecure phase have no idea of cope with, simply

because they do not know what to expect” (58). Their research illustrates this point: after departmental dissolution, workers who were redeployed to another part of the company suffered less insecurity than workers in departments that were threatened with potential cutbacks but not eliminated.

Job Insecurity as Powerlessness

A sense of powerlessness is the second crucial component of job insecurity. In the original formulations of job insecurity put forth by Greenhalgh and Rosenblatt (1984) and Ashford, Lee, and Bobko (1989), powerlessness and threat combine in a multiplicative way to create job insecurity. Workers may remain placid when faced with a credible threat if they have the means to cope. Several factors contribute to a sense of powerlessness: a lack of protection (in the form of either unions or employment contracts), lack of clarity about what one must do to maintain job continuity, organizational culture, and dismissal policies.

Locus of control matters importantly for job insecurity and may counteract the negative effects of an unpredictable threat. In Lazarus and Folkman (1984)’s theory of stress and coping, an individual may not interpret an external pressure as a threat if sufficient coping strategies exist. The situation may instead be perceived as a challenge (Berntson and Marklund 2007; Staufenbiel and König 2010). Job insecurity is therefore more than the perception that one’s job is threatened; it is also a sense of powerlessness to adequately address the threat. Causal analysis by Bosman, Buitendach, and Rothman (2005) concludes that workers with an external locus of control express higher job insecurity than workers with an internal locus of control. Näswall, Sverke, and Hellgren (2005) present similar results: workers with both high job insecurity and an external locus of control experience worse mental health outcomes than workers who are high on only one dimension or low on both. Locus of control fails to predict mental health outcomes at

low levels of job insecurity, indicating that locus of control is only activated as input into job insecurity under objectively threatening conditions. Coping strategies need only be activated in times of crisis (Büssing 1999).

Job Insecurity as Loss of a Valued Job

Last, job insecurity's effects are moderated by the value of a job. Though we generally assume work is important to people, its value is not fixed. Individuals may be highly dependent on their jobs when (1) they have low market power due to either a high supply of similarly skilled workers or a low demand for their skills, (2) their family is highly reliant on their income, or (3) a worker lacks an alternative income stream such as unemployment insurance. If workers are unconcerned about job loss, either because of ambivalence, financial independence, or confidence, they are unlikely to experience insecurity (Jacobson 1991). Although job loss carries negative connotations, for some it may be a welcome opportunity for change. If job loss is not interpreted as severe, despite it being unpredictable and uncontrollable, job insecurity is unlikely.

An Institutional Theory of Job Insecurity

Drawing from the organizational theory outlined above, the definition of insecurity as a combination of threat, powerlessness, and job value can be applied to an institutional context. The model for an institutional theory of job insecurity is presented in Figure 2.5, which draws the parallel between the organizational theory and proposed institutional theory.

Market Risks: Unpredictable Threats from the External Labor Market

Though early research posited that threats to employment emanated from the employing organization, unpredictable threats may also originate in external labor markets. In the absence of a direct threat from the organization, labor market indicators of job insecurity, such as the

unemployment rate, provide a quick means of assessing the probability that one's own job is at risk. The correlation between national unemployment levels and workers' subjective job insecurity receives strong support (Auer 2005; Auer and Cazes 2003; Erlinghagen 2007; Esser and Olsen 2012; Paugam and Zhou 2007). Job insecurity has also been found to relate strongly to the long-term unemployment rate (Erlinghagen 2007), suggesting that unemployment affects insecurity when workers believe it may result in a lengthy spell of joblessness, a severe consequence of job loss. A protracted period of unemployment may entail significant income loss and a diminishing probability of finding employment equal to or better than the lost job. Worsening or improving labor market conditions affect insecurity because changes in the labor market imply a shift in the pervasiveness or severity of risk.

Job Protections and Collective Power(lessness)

Market risk is countered by institutional job protections such as state-sanctioned employment protection or union representation, both of which aim to protect jobs from elimination, or at least make the process of job loss orderly and predictable. Labor market policies bolster worker's market power by reducing their dependence on continuous employment, so that the value of a job does not rise to the point that workers will keep their job at any cost. Welfare states regulate, react to, and reinforce labor market structures, impacting the labor market risks to which workers are exposed and the severity of those risks. Welfare states can make career trajectories more predictable and lessen the instability inherent in labor market transitions.

From a power resources perspective, employers' actions are limited by the countervailing power of workers in collusion with left-leaning political parties (Pierson 2000). Power resources theory emphasizes the relative leverage of various groups involved in the employment

relationship: unions, employers, and political parties. Generally employers are more tolerant of change than workers (Polanyi [1944] 2001) and more desirous than workers of employment flexibility that will enable them to adapt to change (Kalleberg 2003). If possible, workers will resist employers' transfer of risks to them; but if workers have little political power, they possess insufficient power to rebuff employers' imposition of risk.

Worker control is bolstered through employment protection legislation and collective bargaining—both strategies that protect jobs. Employment protection legislation dictates the conditions under which employers can reduce their permanent labor force or employ temporary workers. Collective bargaining organizations may lobby for various benefits for their membership: job stability, wage stability, influence over the structure of work, retraining, and the like. Both employment protection legislation and unionization increase workers' power to resist threats.

The relationship between job insecurity and employment protection legislation runs counter to conventional wisdom that job protections, in keeping with their mission, should reduce job insecurity. Instead, stringent rules governing the employment relationship appear to raise job insecurity. How to explain this? First, if economically distressed companies cannot easily implement layoffs, workers are left in a state of chronically threatened employment (Staufenbiel and König 2010). Second, if employers cannot easily adjust their workforce, they may be reluctant to hire new workers unless they can be relatively certain of a worker's abilities (Gangl 2006). This, in turn, causes temporary work to proliferate, as it enables employers to adjust their workforce or screen workers while avoiding the risk of hiring workers on a permanent basis.

Worker Protections and Market Dependence

Risk management resources fall into two categories: job protections and worker protections. Job protections, described above, provide job stability. Worker protections provide employment or economic stability. These are meant to manage risk for workers regardless of their employer, serving to reduce the income shock of unemployment or reduce its duration. Passive labor market policies like unemployment benefits and active labor market policies such as retraining schemes are attached to workers, not jobs.

Unemployment compensation cushions the financial impact of unemployment, thereby bolstering workers' sense of job security. International comparisons reveal a strong correlation between unemployment benefit replacement rate and aggregate job insecurity perceptions (Böckerman 2004; European Commission 2006). Generous unemployment benefits, which stabilize income, function to reduce fear of job loss (Robinson 2000). However, studies that control for both the unemployment rate and the benefit replacement rate conclude that labor market conditions, especially the unemployment rate, exert a far greater influence on job insecurity than expenditure on social welfare (Erlinghagen 2007; Esser and Olsen 2012). In sum, it is unclear whether welfare state spending on social protections has a direct effect on workers' appraisals of insecurity or whether the welfare state operates indirectly, through its effects on labor market conditions.

Although active labor market policies, those which provide training for workers and facilitate mobility, have not been thoroughly explored in connection with job insecurity, existing evidence points to a salutatory effect. As noted by Auer, Berg, and Coulibaly (2004), Danish and British workers experience similar levels of job tenure, yet levels of job security among Danish workers far exceed those of their British counterparts. The Danish welfare state is designed to

promote flexicurity, combining low job tenure with high mobility, a strategy reflected in worker protections that focus on active retraining for the unemployed. Whereas Danish workers enjoy facilitated mobility, British workers lack an unemployment safety net: the incidence of poverty among British unemployed workers in the 1990s, after taxes and transfers, was at 29%. In the same year, only 4.2% of Danish unemployed experienced poverty (Nolan, Hauser, and Zoyem 2000).

Hypotheses

Changes in any of these arenas—market risk, job protections, or worker protections—may impact the risks to which workers are exposed. A reduction in employment protection legislation enables employers to fire individual workers or implement mass layoffs more easily. Looser employment protections may also reduce restrictions on employers' use of temporary contracts. A reduction in unemployment benefits increases the risk of unemployment-related poverty. Cutbacks in retraining programs makes skill acquisition in unemployment more difficult for workers, lessening workers' employability. My hypotheses test the import of various changes in labor markets and institutional protections to job insecurity.

Labor market risk

Hypothesis 1: A rise in the unemployment or long-term unemployment rate also raises job insecurity.

Hypothesis 2: A rise in the share of the labor force employed in temporary work contributes to higher job insecurity.

Hypothesis 3: GDP growth reduces job insecurity.

Job protections

Hypothesis 4: The relaxation of employment protection legislation for permanent work exacerbates job insecurity.

Hypothesis 5: Change in employment protection legislation for temporary work has ambivalent effects.

Hypothesis 6: A decline in union density increases job insecurity.

Hypothesis 7: As the cumulative left party share rises, workers express significantly less job insecurity.

Worker protections

Hypothesis 8: Increases in active or passive labor market spending alleviate job insecurity.

Data and Measures

Data

I use three waves of the International Social Survey Program's Work Orientations Module, conducted in 1989, 1997, and 2005. Table 2.1 shows that comparative research on job insecurity focuses almost entirely on the European case. Though these studies do incorporate a variety of regime types, from the three original typologies of social democratic regimes (Denmark, Finland, Norway, and Sweden), corporatist regimes (Austria, Belgium, Germany, the Netherlands, Switzerland), and liberal regimes (Ireland and the United Kingdom) to post-socialist regimes (the Czech Republic, Hungary, Poland, Russia, and Slovenia) and Mediterranean regimes (France, Italy, Portugal, and Spain), the European case provides a restricted view of change, particularly since the adoption of the Euro in 1999, which encourages similar fiscal responses to macroeconomic shocks. The ISSP broadens the scope of survey data

to also include firm-coordinated regimes (Japan and South Korea) and liberal regimes outside Europe (Australia, Canada, New Zealand, and the United States) and two time points before 1999.

The sample is restricted to non-agricultural employees in dependent employment between the ages of 18 and 65 who were working for pay at the time of the survey. This results in a sample size of 33,936 respondents in 26 countries, though not all countries participated in all three waves of the survey. Country-level sample sizes range from 352 employees in Spain in 1997 to 1,533 employees in Switzerland in 1997.

Measures

To assess job insecurity, workers are asked their level of agreement with the statement “My job is secure.” This simple question avoids the conceptual confusion of double-barreled questions or combined indicators, as exhibited by some of the studies in Table 2.1. Responses are arranged in a 5-point Likert scale ranging from “strongly agree” to “strongly disagree,” with high values corresponding to high job insecurity.

Country-level data are drawn from two sources: the Organization for Economic Cooperation and Development OECD (2014a; 2014b) database and the Comparative Welfare States Dataset (CWS) compiled by Brady, Huber, and Stephens (2014). I include four measures of external labor market risk as indicators of the overall health of the economy: (1) the *unemployment rate* (OECD); (2) the *long-term unemployment rate* (OECD), the percent of unemployed workers who have been out of work for at least six months; (3) the *temporary employment rate* (OECD) as a percentage of the labor force in temporary contracts; and (4) *GDP per capita* in 2005 dollars (CWS).

Job protections include separate indicators of *employment protection legislation* for (1) *permanent* and (2) *temporary* work (OECD), both measured on a scale from 0 to 6 in increasing degrees of strictness; (3) *trade union density* (OECD) is the percentage of workers who are union members; and (4) *cumulative left party share* (CWS) is the average percentage of total seats held by leftist parties in each year since 1946. Worker protections comprise spending per unemployed on (1) *active* and (2) *passive labor market policies*, in 2005 dollars (OECD).

I measure change in all institutional indicators except employment protection legislation as the annual percent change averaged over 1, 3, and 5 years, following the analytic strategy of Lübke and Erlinghagen (2014). The inclusion of a variety of time spans is intended to test whether immediate or long-term institutional developments matter most for job insecurity. Because legislative changes to employment policy occur abruptly and infrequently, average annual percent change is not a useful indicator. Instead, I create an ordinal variable that categorizes change in legislation according to its standard deviation from zero at increments of 3, 5, and 10 years. The recalibrated variable contains three categories: reduced EPL, increased EPL, and no change.

To control for individual differences, the analysis incorporates fixed effects for individual-level variables shown to predict job insecurity: gender, age, full-time status (Dixon, Fullerton, and Robertson 2013; but see Erlinghagen 2007 and Green 2009), sector of employment (Anderson and Pontusson 2007; Burgoon and Dekker 2010; Clark and Postel-Vinay 2005; Dekker 2010), union membership (Aaronson and Sullivan 1998; Bender and Sloane 1999), and occupational class (Mau, Mewes, and Schöneck 2012; Näswall and De Witte 2003). Information on temporary work, another important predictor of job insecurity (De Witte and Näswall 2003), is unavailable in the ISSP, hence its omission. Education also predicts job

insecurity (Fullerton and Wallace 2007), but the use of idiosyncratic codes across countries in survey year 1989 meant this variable could only be coded as missing for 1989. If education were included, all countries in year 1989 would be removed from analyses due to missing data on an independent variable. Because country-level variables are the primary interest, education is omitted.

Multi-Level Modeling

The regime literature shows that labor markets are governed by the state according to distinct logics that exert pressure on workers' subjective experience in the labor market. These between-cluster differences exist independently of the occupational and demographic composition of labor markets (Andreß and Heien 2001; Mughan 2007), suggesting the need for a multilevel model, useful when individuals share similarities on a higher-level dimension such as country. I analyze the institutional determinants of job insecurity using multilevel mixed-effects ordered logistic regression with country-level random effects³. Hierarchical generalized linear modeling accounts for individual and country differences simultaneously, while ordered logistic regression retains the rank order of the dependent variable without assuming equal intervals between categories (Long 1997). With surveys spaced eight years apart and non-nested clusters, cross-section time-series methods are not appropriate. Following Cameron and Miller's (2013) recommendation for dealing with non-nested clusters, I cluster the data on the country dimension and include year fixed effects.

Similar studies that use the ISSP collapse response categories into a binary variable (Erlinghagen 2008; Esser and Olsen 2012), but no natural cutpoint exists between secure and

³ Mean-variance adaptive Gauss-Hermite quadrature, the default integration method random-effects multilevel models in Stata, does not converge. Instead, the preferred integration method is mode-curvature adaptive Gauss-Hermite quadrature (Hartzel 2001).

insecure workers, making the cutpoint somewhat arbitrary. Therefore, I retain all response categories and use ordinal regression to calculate the cumulative probability that a worker will choose each response. Over M categories of the dependent variable, the cumulative logit is represented by the formula:

$$\eta_m = \log \left(\frac{Prob(R \leq m)}{Prob(R > m)} \right)$$

Assuming proportional odds, we can develop a single model that applies at each level of the dependent variable for individual i in country j :

$$\eta_{mij} = \beta_{0j} + \sum_{q=1}^Q \beta_{qj} X_{qij} + \sum_{m=2}^{M-1} D_{mij} \delta_m$$

where δ_m is the cutpoint between categories and D_{mij} is a dummy variable set to 1 if $m = m$ and 0 otherwise. At the higher level, the standard random intercept model applies:

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

To comprehensively assess change in institutional variables yet respect the potentially significant distortions that a small number of countries and collinearity between country-level variables can wreak on an analysis, I model each country-level variable separately. Each model includes individual-level controls, a control for the static effect of each country-level variable, and an indicator of institutional change, resulting in 38 total models (10 country-level change

variables and four time spans; 1-year change not calculated for either type of employment legislation). For clarity of presentation, only the findings for institutional change are presented.

Results

Tables 2.2 through 2.4 present the multilevel ordered logit models of job insecurity⁴. Models are sorted by hypotheses: Table 2.2 displays estimates for market risks, Table 2.3 presents models for job protections, and Table 2.4 shows the models for worker protections. The first column of results estimates the effects of percent change over the previous year; the second through fourth columns provide estimates for average yearly change across 3, 5, and 10 years (the 10-year column only pertains to employment protection legislation). Employment protection legislation is unlike the other variables in that average annual change is recoded into a set of dummy variables that indicate an increase, decrease, and no change in EPL. In the table, the referent is a decrease in the strength of legislation. The first row of each model presents estimates for the absolute level of the independent variable; the second row shows relative change.

Table 2.2 explores the effect of market risk on job insecurity. Among the absolute variables, the unemployment rate and GDP significantly predict job insecurity in most of the models. Neither the long-term unemployment rate nor the proportion of the labor force in temporary contracts influences job insecurity. Looking at changes in these risks, short-term increases in the unemployment rate and long-term unemployment rate elevate job insecurity. An average increase in either variable over the previous 1, 3, and 5 years raises job insecurity, as predicted by Hypothesis 1. As forecast in Hypothesis 3, economic growth lowers job insecurity,

⁴ Results for individual-level controls, not presented, mostly align with previous findings. Public sector employment, union membership, occupational class, and gender are all significant predictors of job insecurity. The only anomalous finding is full-time status, which fails to reach significance.

shown by the negative effect of average GDP change in each model. For the cluster of hypotheses concerning market risk, three of four are supported. Overall, and consistent with the results of Chung and van Oorschot (2011), an increase in market risks raises job insecurity, while economic growth lowers it.

Only temporary work does not hold up as a predictor of job insecurity, contrary to Hypothesis 2. The unexpected null effect of temporary work may indicate that changes in labor market composition might operate indirectly through direct indicators of job loss likelihood such as the unemployment rate. More probable is that, when workers determine how likely they are to lose their jobs, their potential subsequent employment options do not figure into this mental calculation.

Table 2.3 show models for absolute and relative levels of job protections: the unionization rate, cumulative left party share, employment protection legislation for permanent work, and employment protection legislation for temporary work. In only two of the fourteen models does the absolute degree of job protection reach significance. Looking at the relative change in these variables, only one out of four job protection hypotheses receive support, partially validating a power resources perspective of job insecurity. Whether employment protection legislation for permanent work is strengthened or remains unchanged, workers in these countries do not express lower job insecurity than workers in countries where legislation is relaxed, contrary to Hypothesis 4.

Compared to countries that lowered restrictions on temporary work, tighter legislation over the previous 5 years is associated with lower job insecurity. To understand this effect, it helps to refer to Figure 2.3. Employment protection legislation for temporary work was relaxed in countries where already-stringent policies led to rigid labor markets with permanent workers

in core jobs and temporary workers left in the periphery, as predicted by Gangl's reluctance to hire hypothesis (2006). In this situation, weaker governance of temporary work reinforces labor market rigidity as long as regulations governing permanent work remains strict. Overall, however, Hypothesis 5 receives little support. In contradiction of Hypothesis 6, a decline in union density does not cause workers to be more concerned about job loss, nor do changes in employment protection legislation have any noticeable effect on insecurity. However, in support of Hypothesis 7, the gain of left party seats is associated with lower job insecurity.

The two hypotheses regarding worker protections are not supported, as Table 2.4 shows, invalidating Hypothesis 8. Only the static level of passive labor market policies exerts any predictive power over job insecurity, and active labor market policies have no effect. Workers' economic dependence on their job may figure into their sense of job insecurity, but this effect is independent of changes in the social safety net available to workers.

Conclusion

Sociologists and political scientists have documented significant changes in labor markets and states' governance of market risks over the past few decades. Yet comparative job insecurity research generally neglects the influence of change on workers' perceptions of their job insecurity. Though organizational psychologists provide ample evidence of the destabilizing and insecurity-inducing effects of organizational change, other fields of study have not yet extrapolated their findings to an institutional context. Drawing from the core organizational definition of job insecurity as unpredictable and uncontrollable job loss, this article applies the premises of organizational theory to broad changes in markets and states. Overall, I find a strong influence of market shifts on job insecurity and a limited role for changes in both worker protections and job protections.

This article tests the relative effects of unpredictability and powerlessness on job insecurity in 25 capitalist economies using country-level data matched with individual-level survey data. I find that changes in unpredictable market threats drive job insecurity, far more so than the protections offered by the state that augment the power resources of labor, such as union prevalence or employment protection legislation. Power resources theory is partly validated: an increasing share of left party representation in government appears to alleviate job insecurity. However, power resources seem to impact job insecurity mostly through the structural location of workers. Job insecurity is lower among workers in class positions with high market power and among workers who are represented by collective bargaining associations (Dixon, Fullerton, and Robertson 2013; Wright 2000). Conversely, the institutions surrounding individual class and union membership do not filter down to individual assessments of job insecurity. Reducing workers' dependence on the market does not decrease job insecurity, indicating that concerns about job loss are not fueled by the strength of the welfare state. Active and passive labor market policies are important economic supports to workers who lose their jobs, but these welfare state provisions fail to reassure workers that their jobs are safe.

Placing my findings in the context of other comparative job insecurity research, this article affirms the conclusions of Lübke and Erlinghagen (2014), Dixon, Fullerton, and Robertson (2013), and Chung and van Oorschot (2011): job insecurity depends on labor market risk, not states' strategies to manage those risks. The power resources of workers may influence job insecurity, but this is a secondary effect far behind market risk. Power resources theory can offer some insight into the institution-insecurity relationship, but leaves much unaccounted for.

To address this theoretical gap, I developed an institutional theory of job insecurity that drew from the core premises of organizational job insecurity research. Just as in organizational

research, institutional change triggers job insecurity. With the consistent negative impact of economic contractions and rising unemployment, the findings suggest the need for a theory of job insecurity rooted in market risk. The importance of short-term market shifts strongly recommends a theory of comparative job insecurity rooted in unpredictable labor markets rather than welfare state institutions.

These findings should not be interpreted to mean that the steady retrenchment of welfare states and the proliferation of flexible employment do not matter to workers, for two reasons. First, state protections and labor market composition figure prominently in anxiety about job loss (Anderson and Pontusson 2007) and perceived employability (Lübke and Erlinghagen 2014). Second, though change appears not to affect workers in aggregate, when temporary workers are modeled separately from permanent workers, results show that precarious workers suffer a disproportionate share of the consequences of institutional change (Lübke and Erlinghagen 2014). Future comparative research would do well to further develop a theory of job insecurity that articulates the psychological process by which institutional shifts activate insecurity. We may need a more fine-grained analysis to separate those who are harmed by labor market change from those who are unaffected.

Given the transition from the relative economic stability of the mid-20th century to the current age of precarity, the importance of external labor market conditions to insecurity research cannot be overstated. As long as the threat of unemployment persists—and in a capitalist economy, it almost certainly will—the concerns of Marx and Durkheim will remain just as relevant to the sociological project it was in sociology's nascence.

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Table 2.1. Summary of Previous Research Findings on Institutional Predictors of Job Insecurity

Author	Definition of Job Insecurity	Countries in Dataset	EPL/ Change	ALMP/ Change	PLMP/ Change	Unemploy- ment Rate/ Change	Union Density/ Change	GDP/ Change
Anderson & Pontusson (2007)	"My job is secure"	Canada, Denmark, France, Germany, Great Britain, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland	-	n.s.		+/+		
Carr & Chung (2014)	(a) "My job is secure" (b) "How difficult or easy would it be for you to get a similar or better job with another employer, if you had to leave your current job?"	Bulgaria, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovenia, Slovakia, Spain, Sweden, Switzerland, the United Kingdom				n.s.		+
Chung & van Oorschot (2011)	"How likely is it that during the next 12 months you will be unemployed and looking for work for at least four consecutive weeks?"	Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Latvia, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Slovenia and Slovakia	n.s.	-	-	+/+		/+

Table 2.1 (*Continued*)

Author	Definition of Job Insecurity	Countries in Dataset	EPL/ Change	ALMP/ Change	PLMP/ Change	Unemploy- ment Rate/ Change	Union Density/ Change	GDP/ Change
Dixon, Fullerton, & Robertson (2013)	(a) "How confident would you say you are in your ability to keep your job in the coming months?" (b) "Would you say that you are [very confident, fairly confident, not very confident, not at all confident] in having a job in 2 years' time?"	Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom				+	-	
Erlinghagen (2008)	"My job is secure"	Austria, Belgium, the Czech Republic, Denmark, France, Finland, Germany, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, and the United Kingdom	n.s.	n.s. ³		+ ⁴		/n.s.
Esser & Olsen (2012)	"My job is secure"	Austria, Belgium, the Czech Republic, Denmark, France, Finland, Germany, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom	n.s.		n.s.	+	-	

Table 2.1 (*Continued*)

Author	Definition of Job Insecurity	Countries in Dataset	EPL/ Change	ALMP/ Change	PLMP/ Change	Unemploy- ment Rate/ Change	Union Density/ Change	GDP/ Change
Lubke & Erlinghagen (2014)	(a) "My job is secure" (b) "How difficult or easy would it be for you to get a similar or better job with another employer, if you had to leave your current job?"	Belgium, the Czech Republic, Denmark, Estonia, France, Finland, Germany, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom	n.s./n.s.	n.s./-		+/+		-/-

Table 2.2. Estimated Effects of Average Change in Market Risks on Job Insecurity at 1-, 3-, and 5-Year Increments

	1	3	5
Unemployment rate	0.059*** (-0.018)	0.049*** (-0.017)	0.047** (-0.019)
Δ Unemployment rate	0.004** (-0.002)	0.009*** (-0.003)	0.012*** (-0.004)
Observations	23,627	23,204	23,204
Number of groups	25	25	25
Long-term unemployment rate	0.005 (-0.004)	0.006 (-0.006)	0.004 (-0.003)
Δ Long-term unemployment rate	0.008*** (-0.001)	0.015** (-0.007)	0.022*** (-0.006)
Observations	20,110	19,221	18,409
Number of groups	22	22	21
Temporary employment rate	-0.006 (-0.014)	0.001 (-0.009)	-0.006 (-0.010)
Δ Temporary employment rate	0.004 (-0.008)	0.011 (-0.012)	0.006 (-0.017)
Observations	15,359	13,879	12,674
Number of groups	20	19	17
GDP	-0.021** (0.010)	-0.029*** (0.010)	-0.031*** (0.008)
Δ GDP	-0.064*** (0.013)	-0.126*** (0.031)	-0.129*** (0.031)
Observations	23,627	23,027	23,027
Number of groups	25	25	25

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 2.3. Estimated Effects of Average Change in Job Protections on Job Insecurity at 1, 3-, and 5-Year Increments (3-, 5-, and 10-Year Increments for Employment Protection Legislation)

	1	3	5	10
Unionization rate	-0.004	-0.007	-0.003	-
	-0.005	-0.005	-0.005	
Δ Unionization rate	-0.010	-0.004	-0.046	-
	-0.011	-0.027	-0.033	
Observations	21,871	21,397	20,977	-
Number of groups	24	24	24	
Cumulative left party share	0.001	0.003	0.004	-
	-0.008	-0.008	-0.007	
Δ Cumulative left party share	-0.024**	-0.023***	-0.027	-
	-0.010	-0.009	-0.017	
Observations	14,674	14,674	14,674	-
Number of groups	16	16	16	
EPL, permanent work	-	0.046	0.046	0.031
		(0.091)	(0.085)	(0.095)
No change in EPL, permanent work	-	-0.042	0.043	0.095
		(0.161)	(0.203)	(0.324)
Increase in EPL, permanent work	-	-0.127	-0.026	0.168
		(0.177)	(0.228)	(0.332)
Observations		21,448	21,448	21,448
Number of groups		23	23	23
EPL, temporary work	-	-0.029	-0.020	-0.099*
		(0.045)	(0.044)	(0.055)
Δ No change in EPL, temporary work	-	-0.100	0.025	-0.077
		(0.202)	(0.159)	(0.277)
Δ Increase in EPL, temporary work	-	-0.351	-0.390***	-0.208
		(0.231)	(0.098)	(0.221)
Observations		21,448	21,448	21,448
Number of groups		23	23	23

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 2.4. Estimated Effects of Average Change in Worker Protections on Job Insecurity at 1-, 3-, and 5-Year Increments

	1	3	5
Active labor market policies	-0.019 (-0.018)	-0.020 (-0.024)	-0.006 (-0.021)
Δ Active labor market policies	0.004 (-0.004)	-0.002 (-0.006)	-0.008 (-0.007)
Observations	21,530	20,405	20,064
Number of groups	23	21	20
Passive labor market policies	-0.028*** (-0.009)	-0.031*** (-0.009)	-0.024** (-0.009)
Δ Passive labor market policies	-0.001 (-0.005)	0.003 (-0.008)	-0.008 (-0.009)
Observations	21,841	21,448	21,448
Number of groups	24	23	23

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 2.1. Average Job Insecurity in Four Regimes from 1989-2005

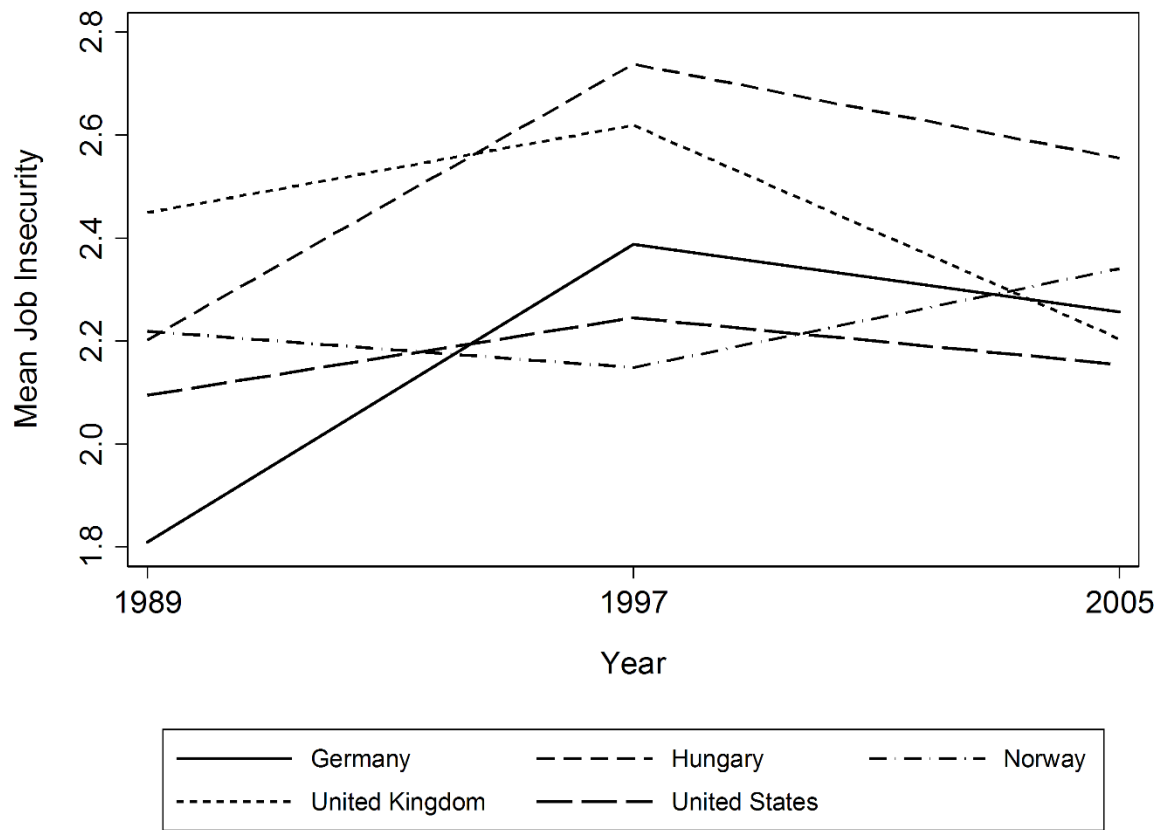


Figure 2.2. Trends in Market Risk in Six Regimes, 1989-2005

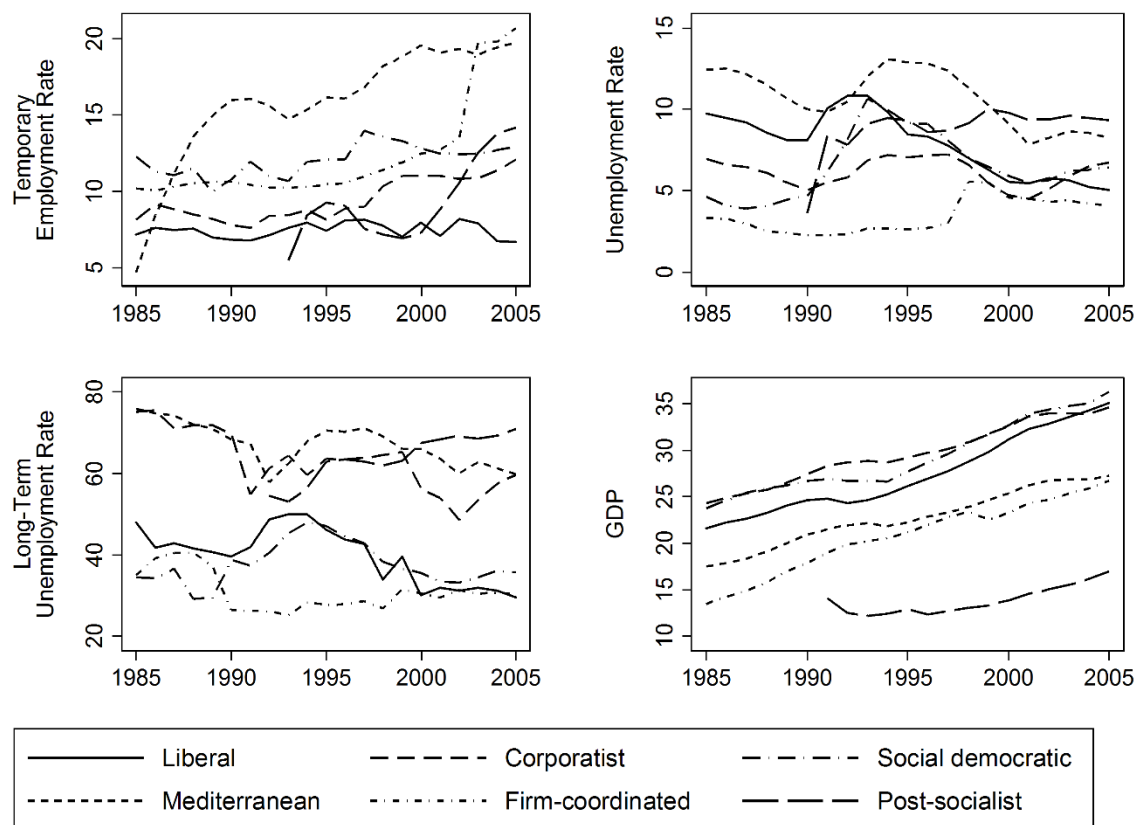


Figure 2.3. Trends in Institutional Job Protections in Six Regimes, 1989-2005

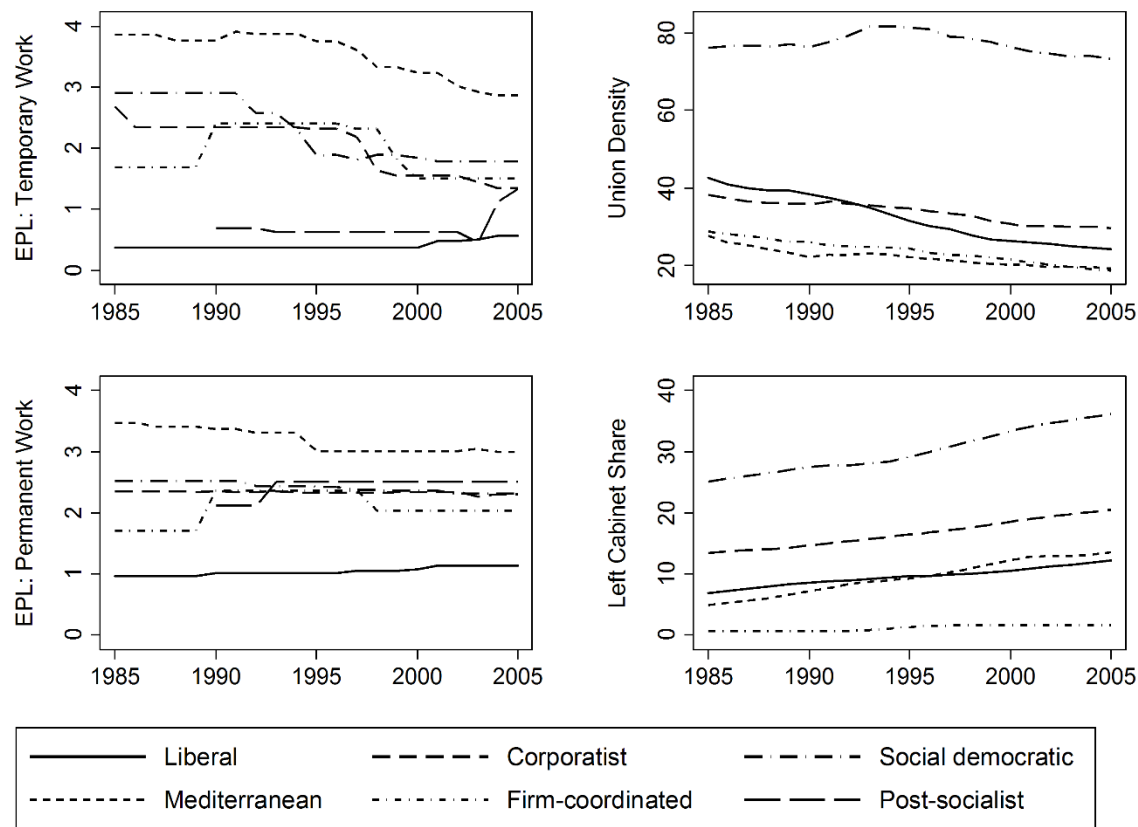


Figure 2.4. Trends in Institutional Worker Protections in Six Regimes, 1989-2005

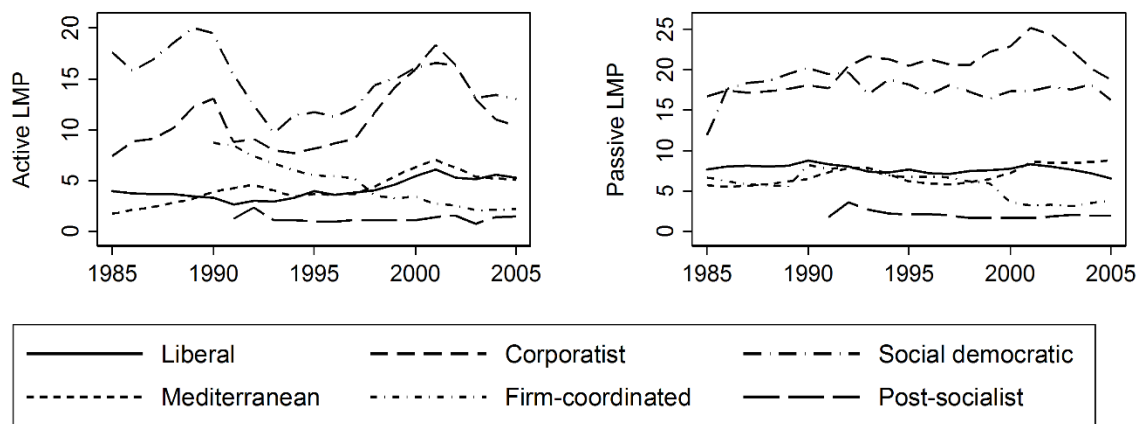
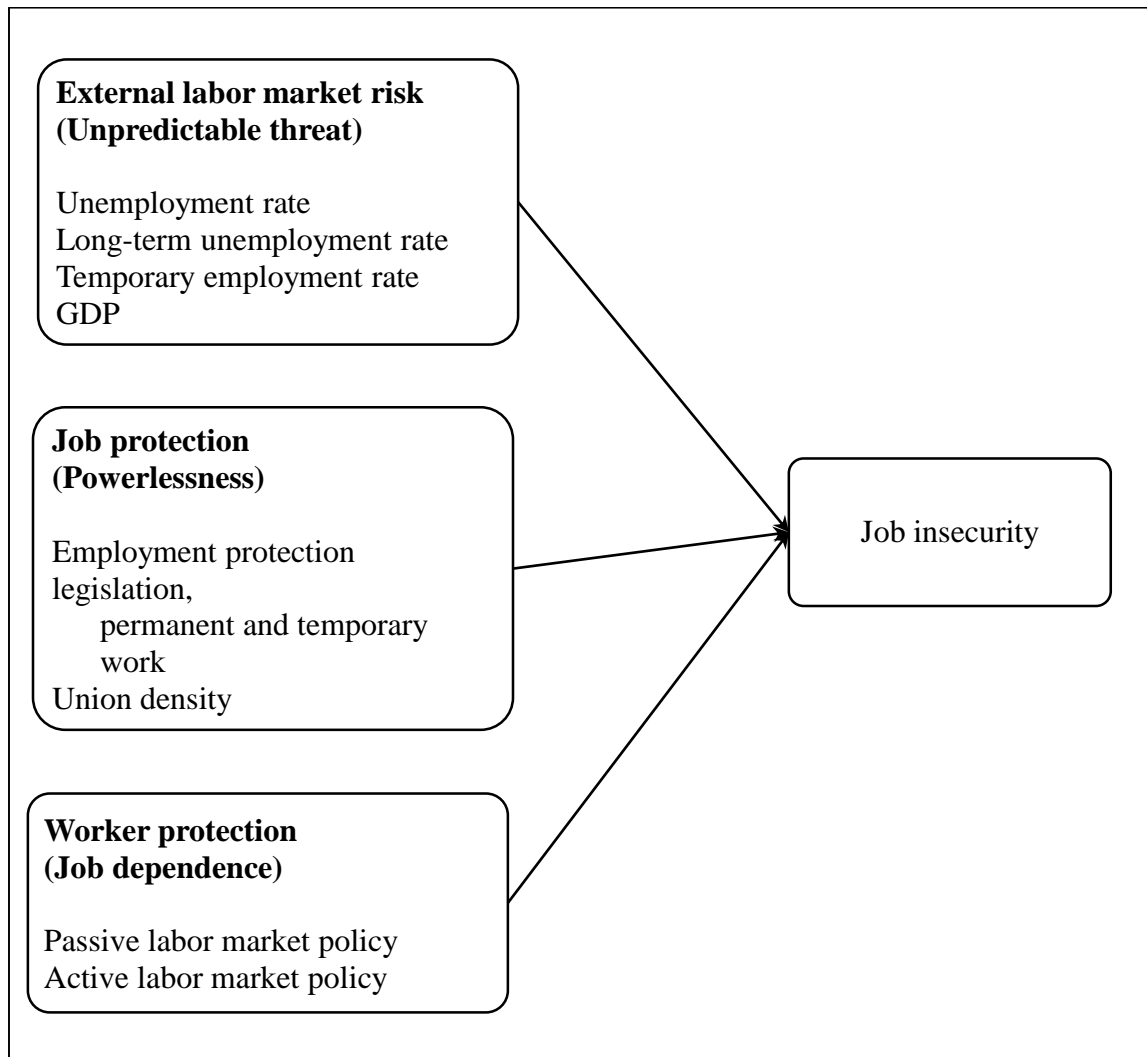


Figure 2.5. An Institutional Model of Job Insecurity



CHAPTER 3. THE WORRIED WORKER: WELFARE STATE POLICY AND AFFECTIVE INSECURITY

Introduction

Anxiety about job loss, termed affective insecurity in the scholarly literature, is endemic to capitalist economies, even in countries with a robust social safety net and flexible labor markets (Green 2009; Richter, Näswall, Bernhard-Oettel, and Sverke 2013). Over the past forty years, the democratization of displacement (Aaronson and Sullivan 1998; Burchell 1999; Cappelli 1999; King 2000) in response to global economic shocks—deindustrialization, globalization, welfare state retrenchment, and precarious work—has created a climate of affective insecurity that suffuses the modern psychological experience of employment. Not only are employees concerned they might lose their jobs, they are also highly anxious that they might not easily find new ones (Anderson and Pontusson 2007; Chung and van Oorschot 2011).

In the nascent stages of insecurity research, threats were assumed to emanate from the employing organization (Ashford, Lee, and Bobko 1989; Greenhalgh and Rosenblatt 1984; Jacobson 1991). Yet, while employees are embedded in internal labor markets, they are also embedded in external labor markets that contain their own threats independent of the workplace. Few workers are entirely shielded from external labor market conditions, meaning that threats may originate beyond an organization's boundaries. This conclusion accords with the well-documented and internationally robust finding that the unemployment rate strongly predicts job insecurity (Anderson and Pontusson 2007; Erlinghagen 2007; Green 2009).

Workers also possess coping resources beyond their own human capital. Despite recent political leanings toward austerity, the welfare state still offers workers an array of employment protections and income supports that, ideally, address the most prevalent labor market risks, though countries vary widely in their labor market policy configurations. Anderson and Pontusson (2007) and Chung and van Oorschot (2011) specify three types of policies influential over workers' insecurity perceptions: employment protection legislation, active labor market policies, and unemployment benefits. Employment protection legislation establishes hiring and firing practices, protecting workers from job loss; active labor market policies facilitate labor market matching by serving as an employment intermediary or providing skills training; and unemployment benefits mitigate income shocks induced by job loss. What all employment policies have in common is their function as institutionalized risk management strategies.

How might these policies influence affective insecurity? Labor market policies either manage the threat of job loss or provide resources to help workers cope with realized threats, lessening unpredictability and uncontrollability. These precursors have long been recognized by experimental psychologists as the primary determinants of fear (Mineka and Kihlstrom 1978; Seligman 1968). When faced with an unpredictable and uncontrollable threat, workers may respond with anxiety because appropriate coping strategies cannot be deployed against a threat with an uncertain arrival date, and available coping strategies may prove to be insufficient to contain or counteract the threat. Thus, the policy determinants of job and employment insecurity may apply just as well to affective insecurity. Any policy that increases situational clarity and control over employment outcomes may reduce affective insecurity.

However, policies may operate on affect through the mediating influence of cognitions. The literature identifies two psychological precursors to affective insecurity. The first is job

insecurity, or “perceived powerlessness to maintain the desired continuity in a threatened job situation” (Greenhalgh and Rosenblatt 1984:438). The second, employment insecurity⁵, is defined as “a low probability of [quickly] finding another job with more or less equivalent characteristics” (Anderson and Pontusson 2007:215). Both job insecurity and employment insecurity are cognitive evaluations of risk with pernicious, pervasive effects on psychosomatic health, not just affective insecurity. Employees who perceive their jobs are insecure report general poor psychosomatic health (Ashford, Lee, and Bobko 1989; De Witte 1999; Dekker and Schaufeli 1995; Ferrie, Shipley, Stansfeld, and Marmot 2002; Kuhnert and Palmer 1991); high blood pressure (Barling and Kelloway 1996); depression (Burgard, Brand, and House 2009; Rocha, Hause Crowell, and McCarter 2006); and high alcohol consumption (Marchand, Parent-Lamarche, and Blanc 2011). Employment insecurity is associated with low overall psychosomatic well-being (Berntson and Marklund 2007; Kinnunen, Mäkikangas, Mauno, Siponen, and Nätti 2011); job exhaustion (Kinnunen et al. 2011); and diminished life satisfaction (Green 2011). Despite the lack of empirical attention paid to affective insecurity, the general psychological harm done by job and employment insecurity suggests worry about job loss will be similarly affected.

In the insecurity literature, these three concepts are in a tangle. Job and employment insecurity are often combined in a single indicator, obscuring their unique effects (Carr and Chung 2014; Chung and van Oorschot 2011; Lübke and Erlinghagen 2014), while job insecurity and affective insecurity are frequently treated as synonyms (Barling and Kelloway 1996;

⁵ Employment insecurity is often called “perceived employability” in the literature, so named to distinguish it from objective employability, which refers to transferable human or social capital useful to a job search in an external labor market. Unlike job insecurity, in which the degree of security is apparent, the term “perceived employability” is neutral, requiring a qualifier such as “high” or “low.” To avoid the overuse of modifiers, I use the term “employment insecurity,” with the acknowledgement that this construct commonly goes by another name.

Mughan 2007; Sverke and Hellgren 2002). Scholars who have taken to disentangling these concepts demonstrate that job, employment, and affective insecurity are distinct concepts with separate predictors and outcomes (Ashford, Lee, and Bobko 1989; De Cuyper, Sulea, Philippaers, Fischmann, Iliescu, and De Witte 2014; Huang, Lee, Ashford, Zhenxiong, and Xiaopeng 2010; Huang, Niu, Lee, and Ashford 2012; Kalyal, Berntson, Baraldi, and Näswall 2010; Staufenbiel and König 2011). In brief, job insecurity and employment insecurity are cognitions; affective insecurity is an emotion. Job insecurity pertains to internal labor markets; employment insecurity pertains to external labor markets.

In this article, I examine whether labor market policies operate directly on affective insecurity or indirectly through the subjective experiences of job and employment insecurity. State policies such as employment protection legislation are designed to reduce job insecurity by tempering situational demands (Anderson and Pontusson 2007), whereas active and passive labor market policies alleviate employment insecurity by helping workers cope with threat (Anderson and Pontusson 2007; Chung and van Oorschot 2011; Mau, Mewes, and Schöneck 2012). Labor market policies may, conversely, get straight at workers' worry about job loss by reducing unpredictability and uncontrollability. I test this theory with internationally comparable survey data from the International Social Survey Program's (ISSP) Work Orientations Module, administered in 2005, supplemented with country-level labor market indicators from the Organization for Economic Cooperation and Development (OECD). The most important finding is that affective insecurity declines as spending on active and passive labor market policies rises. These policies have a direct effect on affective insecurity, unmediated by job or employment insecurity, which indicates that affective insecurity merits inclusion in the comparative literature as an important type of insecurity in its own right.

Untangling Definitions of Insecurity

Given the global cultural significance of worry about job loss, scholars of comparative insecurity have been surprisingly silent on the topic. By far, job insecurity—a worker’s cognitive belief that job continuity is threatened—has received the most academic attention. Part of this lopsidedness is a result of conceptual confusion: the concept of insecurity has not achieved the clarity Greenhalgh and Rosenblatt (1984) sought to establish thirty years ago. For example, some studies of job insecurity actually measure affective insecurity (Böckerman 2004; Geishecker, Riedl, and Frijters 2012; Sverke and Hellgren 2002). The other cause of this oversight is the intense focus on organizationally relevant outcomes such as job satisfaction (Davy, Kinicki, and Scheck 1997; De Witte and Näswall 2003; Huang et al. 2010; Näswall, Sverke, and Hellgren 2005); organizational commitment and work withdrawal (Borg and Elizur 1992; Dekker and Schaufeli 1995; Huang et al. 2010; Ito and Brotheridge 2001; Kalyal, Berntson, Baraldi, and Näswall 2010; Rosenblatt, Talmud, and Ruvio 1999); and turnover intention (Rosenblatt, Talmud, and Ruvio 1999; Staufenbiel and König 2010). This privileges the organization as the locus of stress and establishes workers’ orientations toward their employers as the primary outcome of interest.

The scholars who have taken up the task of disentangling these concepts put forth three arguments: (1) affective insecurity and job insecurity are conceptually distinct (Ashford, Lee, and Bobko 1989; Borg and Elizur 1992; Staufenbiel and König 2011); (2) affective insecurity is a product of both job insecurity *and* employment insecurity (Anderson and Pontusson 2007); and (3) the concepts of job and employment insecurity should not be combined in a single indicator for policy research (Anderson and Pontusson 2007; Lübke and Erlinghagen 2014). I will explore each of these arguments below.

Against a Combined Indicator of Job and Employment Insecurity for Policy Research

Between comparative researchers, a divide has emerged regarding the nature of insecurity. At the core of this disharmony is uncertainty about what constitutes “true” insecurity. On one side of the debate, researchers argue that truly insecure workers are those who suffer both job and employment insecurity. Chung and van Oorschot explain the rationale behind this position:

The difference between job and employment security is that the former focuses on keeping a current position with one employer, whereas the latter could entail greater mobility within the labour market. Thus workers can still have employment security when the chances of losing their jobs are high but the chance of finding another position relatively quickly is also high. (2011:289)

This argument is valid in that workers who experience a prolonged bout of unemployment after being fired or laid off are in a worse position than workers with marketable skills who can quickly find a new job with another employer. Both may be in threatened jobs, but the long-term career outlook for the employable worker is considerably sunnier than for the unemployable worker whose employment continuity is entirely dependent on stability of their job.

For policy research, a combined indicator is problematic because policies generally do not target job stability and employability simultaneously. For example, employment protection legislation should act on job insecurity because it aims to reduce the incidence of job loss by restricting the reasons for which employers can fire workers or hire workers into precarious positions. The goal of active labor market policy, in comparison, is to improve the job opportunities of unemployed workers, a goal relevant to employment insecurity. Clearly, these policies are oriented toward different populations: employment protection legislations toward the employed, active labor market policy toward the unemployed. Theoretically, it is unclear how active labor market policy might impact a worker’s perception that their job is threatened, so

when Chung and van Oorschot (2011) find that this policy significantly reduces combined insecurity, one wonders if this effect could be entirely attributed to workers' belief that they could easily find another job.

On the other side of the debate, comparative researchers advocate a multidimensional definition of insecurity comprising separate indicators for job and employment insecurity. The foundation for this perspective is the work of Anderson and Pontusson (2007), whose formula contains job insecurity and employment insecurity—both defined in the same way as Chung and van Oorschot (2011). Of the six studies compiled in Table 3.1, three use a combined indicator of job and employment insecurity; four use a multidimensional indicator of job and employment insecurity (Dixon, Fullerton, and Robertson [2013] hedge their bets by using both a multidimensional and combined indicator). Clearly, the comparative literature is far from consensus on the definition of insecurity, but the evidence shows that a combined indicator may not be appropriate for comparative policy research. Conversely, Anderson and Pontusson (2007) and Lübke and Erlinghagen (2014) make a convincing case to treat job and employment insecurity as unique constructs.

The Conceptual Distinction of Affective Insecurity and Cognitive Insecurity

Job and employment insecurity both refer to a cognitive evaluation of an event's probable occurrence. In their critique of a purely cognitive measure of insecurity, Huang et al quip, "This theory and measure implicitly portray individuals as 'probability calculators.' This calculative, cognitive portrayal seems quite distinct from the emotional experience of being worried or emotionally concerned about a change to or the loss of one's job" (2010:24). A principal components analysis by Borg and Elizur (1992) empirically differentiates job insecurity from affective insecurity. For the component of job insecurity, factor loadings are high for statements

such as “I believe that my job is secure” and “In my opinion I will be employed for a long time in my present job.” Items such as “I am concerned about the possibility of being dismissed” and “The possibility of losing my job puts a lot of strain on me” load on the dimension of affective insecurity.

The distinctiveness of job and affective insecurity is replicated in work by Huang et al. (2010), Huang, Niu, Lee, and Ashford (2012), Bosman, Buitendach, and Rothman (2005), and Staufienbiel and König (2011). The other primary irritant of affective insecurity is employment insecurity—one’s perceived marketability in an external labor market—which exhibits a unique effect on affective insecurity, separable from job insecurity. At the comparative level, the only existing multivariate analysis, by Anderson and Pontusson (2007), establishes job insecurity and employment insecurity as separate predictors of affective insecurity. In sum, these studies firmly caution against conflating job loss cognitions with emotions toward job loss.

Insecurity in Comparative Context

As expected, affective insecurity varies widely across advanced economies. In 2005, only 9.4% of Flemish workers expressed high worry about job loss, whereas 45.2% of Spanish workers felt highly worried about the security of their jobs (Green 2009). Job and employment insecurity show similar disparities between countries. For example, 13.5% of Swedish workers believe their jobs are at risk, while, in comparison, almost one-third of French workers perceive their jobs are threatened. Turning now to employment insecurity, workers perceive much greater risk in external than internal labor markets. At the low end of the employment insecurity spectrum are workers in the United States, 37.5% of whom think they may have trouble replacing a lost job. At the other end of the spectrum, 62.6% of Japanese workers predict difficulty in finding new employment (all percentages from Green 2009).

This heterogeneity strongly suggests that the personal experience of insecurity responds to broad labor market conditions. In a comparative study of advanced economies, affective insecurity reflects both the unemployment rate and the strength of unemployment benefits (Anderson and Pontusson 2007). Comparative studies also show job and employment insecurity mirror labor market characteristics, particularly the unemployment rate (Anderson and Pontusson 2007; Chung and van Oorschot 2011; Dixon, Fullerton, and Robertson 2013; Erlinghagen 2008; Esser and Olsen 2012). Both job and employment insecurity worsen as the unemployment rate rises, indicating that external labor market conditions serve as a national barometer of threat.

Against the threat of unemployment is the counterpoise of labor market policies. Scholars have so far isolated three policies influential over insecurity: employment protection legislation, passive labor market policy, and active labor market policy. What follows is an elaboration on each policy's effect on insecurity. Though employment protection legislation, active labor market policy, and passive labor market policy have been linked to job and employment insecurity, how they relate to affective insecurity remains an open question. Because of the dearth of research on affective insecurity, policy effects will mostly focus on job and employment insecurity, with the assumption that these results similarly apply to affective insecurity.

Employment Protection Legislation: Reducing Threat

Employment protection legislation (EPL) regulates dismissal of individual regular workers, the use of temporary workers, and collective dismissals (OECD 2004). By establishing predictable conditions for the termination of regular workers and permissible uses of temporary workers, EPL regulates the threat of job loss. In practice, EPL often concentrates the threat of job loss among vulnerable groups. This contradiction between the intent and reality of EPL may be

attributable to what Gangl (2004) labels the “reluctance-to-hire” hypothesis: Strict legislation reduces employers’ ability to fire workers but also makes them more reluctant to hire new employees (Clark and Postel-Vinay 2005), turning instead to temporary workers to avoid the high costs of permanent workers. Permanent workers enjoy stable employment at the cost of highly unstable employment for everyone else.

Due to these contradictory effects, most research concludes that the strictness of employment protection legislation weakly impacts perceptions of job insecurity (Böckerman 2004; Chung and van Oorschot 2011; Erlinghagen 2008; Esser and Olsen 2012; Robinson 2000). With the unintentional creation of rigid labor markets, employment protection legislation may actually increase job insecurity among precariously employed workers. Lübke and Erlinghagen (2014) confirm EPL’s polarizing effects on job insecurity: “workers with fixed-term contracts benefit less from increased EPL than workers with unlimited contracts. The negative interaction suggests that the tendency to react to an increased EPL with a decreased perception of the likelihood of job loss does not apply for workers with fixed-term contract” (331). For temporary workers in rigid labor markets, where fixed-term work seldom leads to a long-term position, job insecurity is worse than among temporary workers in flexible labor markets, where the boundaries between temporary and permanent work are more porous. However, Chung and van Oorschot (2011) find that strict EPL narrows the insecurity gap between permanent and temporary workers. Overall, though EPL is meant to reduce the threat of job loss, it is not clear that the policy achieves the desired outcome. In light of conflicting evidence, the hypothesis will be based on the intent of the policy: to reduce threat.

Passive and Active Labor Market Policy: Coping with Unemployment

Passive labor market policies (PLMP) such as unemployment benefits and early retirement schemes help workers cope with job loss by mitigating the economic impact of unemployment. Of the few studies that link PLMP to insecurity, the results are mixed. Using a combined indicator of job and employment insecurity, Chung and van Oorschot (2011) associate increased PLMP spending with lower insecurity, measured as both job and employment insecurity. Esser and Olsen (2012), however, isolate job insecurity and find a null effect of unemployment benefits. Last, Anderson and Pontusson (2007) model affective insecurity as a function of unemployment benefits and conclude that PLMP reduces worry about job loss. Unemployment benefits likely shape affective insecurity more than job insecurity because the fear of job loss is addressed by unemployment benefits, but unemployment benefits have little bearing on the probability of job loss.

Active labor market policies (ALMP) facilitate labor market matching through a variety of services such as job placement, re-training schemes, hiring incentives for private sector employers, or public sector job creation. The efficacy of ALMP as a coping strategy is illustrated by the OECD (2004); it is found to reduce unemployment duration and increase unemployment-to-employment transitions. These policies may exert their greatest influence over employment insecurity, as programs such as job search assistance and skills training boost objective employability.

This proposed relationship receives support from Anderson and Pontusson (2007), who uncover a negative relationship between the percent of GDP per unemployed spent on active labor market policies and perceived employment insecurity. Active labor market policies, designed to either augment workers' skill sets through retraining initiatives or aid jobseekers in

locating employment, alleviate employment insecurity but exert a negligible influence on job insecurity. That labor market policies impact insecurity is unsurprising, considering these policies are designed to manage the risks of employment in a capitalist economy. Risk-management policies center on three goals: reduce the risk of unemployment (EPL), mitigate the negative consequences of unemployment (PLMP), and facilitate movement out of unemployment (ALMP).

The hypotheses are depicted in Figure 3.1 and 3.2. Figure 3.1 presents the model linking EPL to affective insecurity through the mediating pathway of job insecurity; Figure 3.2 links ALMP and PLMP to affective insecurity through the mediating pathway of employment insecurity. Solid lines represent direct effects of policy on affective insecurity. Dashed lines represent mediation of policy and affective insecurity by either job or employment insecurity. The unemployment rate accounts for labor market risk, broadly construed, and is expected to have a direct impact on all three types of insecurity. Active and passive labor market policies may immediately stimulate affective insecurity or the path may be intercepted by employment insecurity. The route from employment protection legislation to affective insecurity may also either be direct or circuitous, through job insecurity.

Data and Measures

Data

This study uses the 2005 Work Orientations Module of the International Social Survey Program (ISSP) supplemented by country-level data gathered by the Organization for Economic Cooperation and Development (OECD). Included in the analysis are the advanced capitalist economies of Australia, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Japan, New Zealand, Norway, Portugal, South Korea, Spain,

Sweden, Switzerland, the United Kingdom, and the United States. The unit of analysis is the individual. The sample is limited to individuals aged 18 to 65, working for pay at least 15 hours per week during the survey period.

The ISSP is coordinated to allow cross-national comparisons of workers' views of their current employment and future prospects. The survey is designed as a collaborative effort among all participating countries, the purpose being to gather "interculturally comparable" data (Braun and Uher 2003). A cross-national design is crucial for a study of this nature; otherwise, methodological artefacts could be damagingly influential. The ISSP has demonstrated itself to be a quality dataset for comparative research (Brooks and Manza 2006; Green 2009; Olsen, Kalleberg, and Nesheim 2010; Svallfors 1997).

With regard to the risks inherent in labor markets, the year 2005 was moderate for the "age of precarity," marked by disintegrating employer obligations and an increase in nonstandard work (Kalleberg 2009). Unemployment, averaging 6.6% for OECD countries, was neither significantly higher nor lower than unemployment rates from the 1980s through 2010, which ranged from a low of 5.6% in 2007 to a high of 8.3% in 2010 and averaged 6.7% from 1996 to 2004. Subjective employment insecurity varies with the economic climate: workers believe themselves to be more employable in periods of low unemployment than high (Berntson, Sverke, and Marklund 2006). As the survey does not occur during a global economic downturn or boom, models are neither too conservative nor generous in their predictions.

Measures of Labor Market Insecurity

The dependent variable is *affective job insecurity*, measured by the question "To what extent, if at all, do you worry about the possibility of losing your job?" Responses are fixed in a four-point Likert scale: "I worry a great deal," "I worry to some extent," "I worry a little," and "I

don't worry at all." To reflect the directionality of the hypotheses that job and employment insecurity increase anxiety, codes are reversed such that higher numbers indicate greater worry.

Job insecurity is measured by a five-point Likert scale, ranging from "strongly disagree" to "strongly agree," in response to the statement "My job is secure." To measure *employment insecurity*, I use a question worded, "How difficult or easy do you think it would be for you to find a job at least as good as your current one?" with an array of answers from "very difficult" to "very easy." These straightforward assessments avoid the ambiguity of questions with multiple components sometimes used in job and employment insecurity research. Schmidt (1999) and Chung and van Oorschot (2011), for example, each create a combined measure comprising potential job loss within the next year and ease of finding a job comparable to the current one. These aggregate indicators are useful as broad indicators of insecurity but obscure the specific paths to worry that are of interest here. In regressions, both job and employment insecurity are treated as interval variables because, as mediators, they are both dependent and independent variables. To treat them as ordinal would raise the number of parameters to a level that would destabilize the estimates.

Measures of Institutional Risk Management

Three types of policies are proposed to affect perceived employment insecurity: active labor market policies, passive labor market policies, and employment protection legislation. Active and passive labor market policies are measured by spending per unemployed, standardized to 2005 U.S. dollars. The original figures for spending per unemployed are divided by one thousand, rescaling them to a similar order of magnitude as other variables in the models. Active labor market policies (ALMP) consist of recruitment incentives for employers, training, incentive schemes such as relocation allowance, and other related policies. Passive labor market

policies (PLMP) are here limited to unemployment benefits; early retirement benefits are omitted because they pertain only to labor force withdrawal. Employment protection legislation (EPL) is “a set of rules governing the hiring and firing process” (OECD 2004:64) for collective dismissals, firing of individual regular workers, and the use of temporary work. The index ranges from 1, the least strict legislation, to 6, the most strict.

I control for overall labor market risk with the unemployment rate—the percent of the civilian labor force age 18 to 65 who are not working but are actively seeking work—lagged by one year. As a measure of objective risk, the unemployment rate has proven reliable, as its variation across time and countries is mirrored by changes in aggregate job insecurity (see Schmidt [1999] for temporal variation; see Green [2009] for international variation).

Individual-Level Variables

Based on previous psychological, sociological, and economic studies, I control for several individual-level variables shown to predict either job insecurity or employment insecurity: union membership, spousal employment, public sector employment, education, gender, and age. *Union membership* should lessen job insecurity, given that unions advocate for such job features (Freeman and Medoff 1984). However, the protection offered by unions may be offset by their concentration in declining industries (Dekker and Schaufeli 1995; Green, Felstead, and Burchell 2000). As an alternative to state-sponsored income support, the *presence of a full-time employed spouse* can stabilize income, decreasing worry about job loss. This claim receives mixed support. Members of dual-earner couples receive no psychological relief from their spouse’s employment in Anderson and Pontusson’s research (2007), while Clark and Postel-Vinay’s (2005) research provides weak support.

Public-sector employment is associated with lower job insecurity than private-sector employment (Erlinghagen 2008). The correlation between public sector employment and employment insecurity is obscure, but Anderson and Pontusson (2007) theorize that public-sector employment may raise expectations of job quality relative to private-sector workers.

A categorical measure of *educational level* measures workers' skills. Education is classified as less than secondary education, higher secondary degree, above higher secondary, and university degree. Including education as a categorical rather than interval variable allows for the nonlinear association of education and skills.

Occupational class is measured by the Erikson, Goldthorpe, and Portocarero (EGP) class schema (Mau, Mewes, and Schöneck 2012; Näswall and De Witte 2003). Five of the EGP classes are included: highly skilled professionals, administrators, and managers (labeled high controllers in the EGP categories); technicians, lower-grade professionals and administrators (low controllers); clerical workers (routine non-manual); low-skill service and manual workers (semi-unskilled manual); and the anchor category of skilled workers and manual supervisors (skilled manual) (Evans and Mills 1998).

Methods

This study uses multilevel random-intercept path analysis with an ordinal dependent variable. This method addresses various assumptions. First, this model accounts for the problem of within-country clustering, present when data contains individuals nested within countries (Raudenbush and Bryk 2002). Second, the dependent variable is non-linear and ordered on a four-point Likert scale, indicating the propriety of ordinal probit regression.

Ordinal probit regression is subject to its own assumptions: the proportional odds (or parallel regression) assumption requires a uniform cumulative odds ratio among all pairs of

adjacent outcome groups. Violation of this assumption would suggest an inconsistent relationship between outcome categories. A likelihood-ratio test of the pooled data fails to reject the null model of proportional odds (Long and Freese 2006), indicating the propriety of ordinal probit regression.

A multilevel mediation model, where a country-level fixed effect is mediated by an individual-level variable, is modeled using the random-intercept model identified by Preacher, Zhang, and Zyphur (2011), with individual i nested in country j . Here, Y represents affective insecurity, M is the mediating variable (job or employment insecurity), and X is the country-level variable (EPL, ALMP, or PLMP).

$$M_{ij} = \beta_{M0j} + e_{Mij}$$

$$\beta_{M0j} = \gamma_{M00} + \gamma_{M01}X_j + u_{M0j}$$

$$Y_{ij} = \beta_{Y0j} + \beta_{Y1j}(M_{ij} - M_{.j}) + e_{Yij}$$

$$\beta_{Y0j} = \gamma_{Y00} + \gamma_{Y01}X_j + \gamma_{Y02}M_{.j} + u_{Y0j}$$

$$\beta_{Y1j} = \beta_{Y10}$$

Of particular interest is the variable $M_{.j}$, the cluster mean of M_{ij} . Because X is measured at the country level, its effect on the coefficient M is strictly a between-level effect. Country-level variables, being constant within country, cannot be used to test the mediation of M_{ij} on X_j . The mediation effect is therefore technically the effect of the country-level X on the random intercept of M , from which the mean random intercept is then subtracted in the estimation of Y_{ij} (i.e., M is

grand-mean centered). The indirect effect of policy through insecurity is calculated according to Preacher's specification (2011):

$$I = \gamma_{M01} * \gamma_{Y02}$$

in which the effect of X on M is multiplied by the effect of M on Y .

With only 20 countries in the dataset, a random-coefficient model cannot be estimated because the number of model parameters would exceed the number of countries in the dataset, a situation that may generate unstable or biased estimates (Bauer and Sterba 2011; Bryan and Jenkins 2013). The effect size of the mediators is assessed with a significance test computed with Delta method standard errors.

Estimates are modeled using a Bayes estimator with noninformative priors, in which the posterior distribution is obtained with Markov Chain Monte Carlo estimation and convergence is reached when the potential scale reduction of two parallel chains falls below 1.1, the standard for convergence using the Gelman-Rubin diagnostic criterion. Bayesian analysis is not based on the assumption of normally distributed data, favorable to large sample sizes, thereby circumventing approximation issues endemic to small sample sizes in frequentist analysis.

As previously noted, the small number of countries ($N=20$) restricts the number of parameters allowable in a multilevel model, and the high correlation between active and passive labor market policies ($r=.718$) would muddy interpretation of their individual effects. In acknowledgement of these limitations, I create three models—for active labor market policies, employment protection legislation, and passive labor market policies—of institutional risk management, each of which also contains individual-level covariates and the unemployment rate as a measure of institutionalized risk.

Results

I first explore the scope of insecurity in advanced economies. Table 3.2 displays descriptive statistics for each type of insecurity by country. Looking first at affective insecurity, there are large differences in its distribution: 16.3% of Portuguese workers worry a great deal about job loss, followed at a distance by Spain and France at around 11.0% and Germany at 9.4%. Between 7.1% percent and 8.2% of workers in Hungary, the Czech Republic, and Japan are very worried about job loss. Among workers in Australia, the United Kingdom, the United States, Norway, Sweden, New Zealand, Canada, Switzerland, Finland, and South Korea, the incidence of extreme affective insecurity ranges from 3.6% to 5.8%. Irish, Danish, and Belgian workers are the least trammled by worry. No more than 2.5% of workers in these countries are worried a great deal about the prospect of losing their job.

At the other end of the scale, the distribution of workers who “don’t worry at all” exhibits greater variability, from 66.6% of Irish workers to a mere 9.0% of Czech workers. Beside Ireland, the least anxious workers are found in the United States, Belgium, Canada, Denmark, Finland, New Zealand, Norway, and Sweden. In each of these countries, more than half of workers express no affective insecurity at all. Workers in Australia, France, Japan, Switzerland, and the United Kingdom follow closely at 41.5% to 48.2% of workers who do not worry at all about job loss. Between one-fifth and one-third of Hungarian, German, South Korean, Portuguese, and Spanish workers do not worry about job loss.

Table 3.2 also shows average job and employment insecurity within each country. The response scale for these variables ranges from 1 to 5, in order of increasing insecurity. Workers in post-socialist countries (the Czech Republic and Hungary) and countries where labor markets are coordinated mostly by large firms (South Korea and Japan) are, on average, the most

insecure on both dimensions. Workers in sparsely regulated labor markets (for example, Ireland, the United States, and the United Kingdom), in comparison, tend toward low job and employment insecurity. The characteristics of these countries, and others included in the sample, are summarized in Table 3.3. For those familiar with European labor markets, the case of Spain will immediately stand out because of the relatively low average job and employment insecurity in a notoriously rigid labor market. This counterintuitive finding may be attributable to the characteristics of the sample, which is restricted only to those who work more than 15 hours a week. Workers with the most tenuous hold on the labor market are excluded deliberately since I cannot identify which workers are voluntarily and involuntarily employed part-time. A strong assumption of the job insecurity literature is that workers highly value work. Those who are ambivalent about employment may perceive threats and coping resources differently from workers who rely heavily on paid employment.

Bivariate Correlations between Country-Level Covariates

To understand the interaction between policies and insecurity, Figure 3.3 graphs of the country-level bivariate correlations of each type of insecurity and its related policy predictor. Employment protection legislation is correlated with job insecurity and affective insecurity; active and passive labor market policies are correlated with employment and affective insecurity. From the bivariate correlations in these two figures, the overarching message is that affective insecurity is affected more by policy than are either type of cognitive insecurity. Affective insecurity is moderately correlated with all three policies ($|r|=.485$ to $.576$), whereas the correlation with cognitive insecurity, both job and employment, is weak to moderate ($|r|=.201$ to $.365$).

Counterintuitively, employment protection legislation appears to raise affective and job insecurity but, in line with expectations, workers in countries that spend more per unemployed on passive and active labor market policies enjoy lower employment insecurity and affective insecurity. Overall, a flexible labor market coupled with a strong social safety net, a trade-off labeled “flexicurity” in the literature, appears to minimize all three types of insecurity (Madsen 2003). However, the low job and employment insecurity expressed by workers in countries with a sparse social safety net suggests that flexible labor markets, in and of themselves, may lower cognitive insecurity.

Based on this preliminary overview of summary statistics and correlations, the evidence validates the relevance of labor market policies to the three types of job insecurity. These bivariate correlations motivate further inquiry into the particulars of these relationships, driven by the following questions: Do policies exert a direct effect on worry about job loss, or are they filtered through workers’ perception of risk? The latter half of this question, answered affirmatively, would verify a mediation model in which risk perceptions—job insecurity and employment insecurity—intervene between policy and affective insecurity. This paper now addresses this question.

Country-Level Ordered Logit Models

Multilevel mediation models are compiled in Tables 3.4 and 3.5. Model 1 in Table 3.4 tests the mediating effect of job insecurity on the relationship between employment protection legislation and affective insecurity. Models 2 and 3 in Table 3.5 test whether employment insecurity mediates between affective insecurity and active labor market policy (Model 2) or passive labor market policy (Model 3). For simplicity’s sake, individual-level controls are not presented for mediating variables.

Given that within-level regressors show roughly the same effect across all three models, I will here discuss their general impact on affective insecurity. At the individual level, both job and employment insecurity are positively associated with worry about job loss, although the effect is weaker than job insecurity. Controls for union membership, sector of employment, education, and age consistent impact affective insecurity across all three models. Union members and private sector workers are more worried than workers who are, respectively, not union members nor employed in the private sector. The greater probability of worry faced by private-sector employees matches intuitive conclusions, as private-sector jobs offer lower objective job security than public-sector jobs. Less intuitive is the association of union membership with increased worry. The relationship can potentially be explained by several means. If a worker loses their job, they may lose the perquisites attendant on union membership, adding to the anxiety of potential job loss. Jobs available to union members may also be of better quality than jobs held by non-union labor (temporary workers, for example, generally lack union representation), causing protected workers to be concerned that they will lose access to good jobs. Or this may be an issue of self-selection, in that insecure workers choose to join unions.

Education in general reduces worry, with the worry gap between the least educated workers and everyone else growing at each level of educational attainment. Class fails to exert much of an effect on affective insecurity, except that professionals and managers are less worried than skilled craftspeople. The probability of high worry significantly decreases with age and with the presence of a full-time employed spouse, but gender is an unreliable predictor. The results so far confirm that workers' subjective assessments of internal and external labor market insecurity determines their anxiety about hypothetical job loss. Having explored the predictive capacity of individual-level covariates, I now turn to the multilevel mediation coefficients

Looking first at employment protection legislation, presented in Model 1 of Table 3.4, neither policy nor the unemployment rate relate to cognitive or affective insecurity, contrary to the hypothesis. Thus, neither the “perverse effects” nor “job protections” argument can be discarded. Employment protection legislation may advertently exacerbate worry about job loss because rigid labor markets also tend to be segmented labor markets, but these unstable jobs exist alongside highly stable ones. The intraclass correlation coefficient, calculated for a multilevel ordinal probit model by assigning $\pi^2/3$ as the individual-level variance ($s^2_{\text{between}}=.158$), reveals that 4.6% of the total variance in affective insecurity is attributable to differences between countries, with the remainder attributable to differences between workers.

Unexpectedly, workers who are, in aggregate, more insecure about both their job and employment prospects are less worried on average relative to other countries, all else equal. No ready explanation presents itself for this finding. This unusual finding should not overshadow the importance of the individual-level relationships, however. Job insecurity and employment insecurity are strong predictors of affective insecurity at the individual level.

In Model 2, the predictors account for 3.9% of the total variance between countries ($s^2_{\text{between}}=.134$), whereas in Model 3, they explain 4.0% of the variance ($s^2_{\text{between}}=.136$). Taken together, Models 2 and 3 demonstrate an important role for labor market policies that are designed to reduce the duration or financial impact of unemployment on workers’ emotional response to potential job loss, suggesting that labor market policies are a coping resource that acts directly on anxiety. This direct effect of policy on affective insecurity negates the value of a mediation model. Coping resources do not reduce worry about job loss by making workers feel more employable or less likely to lose their jobs. Rather, the social safety net reassures workers that, when confronted with threats from the labor market, they will receive help.

Active and passive labor market policies appear to operate directly on affective insecurity, without mediation by employment insecurity, as evidenced by the insignificant test of indirect effects in Models 2 and 3⁶ (Table 3.5). Because a mediation model is a poor fit for the data, the model is re-estimated without mediating effects (results not shown). From this reduced model, the marginal effects of active and passive labor market policy are calculated and the results presented in Figures 3.4 and 3.5.

From the graphs, it is clear that both active and passive labor market policies effectively raise the probability that workers do not worry at all about job loss. Looking first at ALMP (Figure 3.4), a change from -3 to -2 standard deviations below the mean increases by 7.1% the probability that workers do not worry at all about job loss, an effect that decreases monotonically as spending per unemployed grows. In comparison, a change from 2 to 3 standard deviations only raises the probability of by 2.6% that workers do not worry at all about job loss.

It seems that increased spending in an already weak welfare state has more impact on the probability of not worrying about job loss than the same level of increase in a strong welfare state. However, ALMP has hardly any effect on the probability that workers will worry a great deal about job loss. For the most worried workers, welfare state spending on re-employment initiatives fails to relieve their anxiety. Increased spending on ALMP reduces the probability that workers will worry a little about job loss, mostly because these workers grow less anxious as welfare state spending grows, shifting into the category of workers who don't worry at all. All told, the emotional benefits of welfare state expansion flow to those who are already the least burdened by worry.

⁶ Denmark offers far higher passive and active labor market policies than other countries in the sample, raising concerns about the potentially high leverage of this case. A leverage versus residual squared plot fails to confirm this country as unduly influential in either Model 2 or 3 (results not shown), and models run without Denmark yield similar results.

The salutary effect of increased PLMP spending, shown in Figure 3.5, is even greater. At the lowest level of PLMP, raising spending by one standard deviation boosts the probability by 10.6% that workers do not worry at all about job loss. These newly relieved workers appear to come from the ranks of those who worry a little about job loss, as evidenced by the negative effect of spending increases. Those who worry to some extent receive some emotional benefit from higher spending, but, again, welfare state spending increases fail to alter the probability that a worker will worry a great deal about job loss. As with the case of ALMP, the beneficial effects welfare state expansion taper off at higher levels of spending.

Discussion

This analysis frames affective insecurity as a comparative issue, using survey data from workers in 20 advanced economies in 2005. Results disconfirm the usefulness of a mediation model, instead revealing a direct effect of active and passive labor market policy on affective insecurity. Although policies were hypothesized to work through cognition, this is not the case here. In terms of both indirect and direct effects, employment protection legislation generally fails to offer any predictive value. Active and passive labor market policy, on the other hand, do significantly predict affective insecurity but not through the mediating channel of cognitive insecurity. Instead, affective insecurity links directly to these two policies.

Conclusion

Affective insecurity captures the emotional zeitgeist of the age of precarity and austerity in advanced capitalist countries. Given its cultural significance, this concept is neglected in the comparative literature, an unwarranted omission in light of the results presented here. This study identifies affective insecurity as a unique concept, separate from other types of insecurity. With hypotheses derived from organizational research, which proposes that cognitive insecurities such

as job and employment insecurity precede affective insecurity, my findings indicate that this relationship holds true at the individual level but falls apart at the comparative level.

There are several lessons to be learned from this study. First, affective insecurity is similar to, but not synonymous with, job and employment insecurity. The emotional response to threat is qualitatively different from the cognitive assessment of labor market threat. People are not just, in the words of Huang et al., “probability calculators.” They respond with fear when faced with many labor market threats and few coping resources, and this fear is not adequately captured by instruments that ask workers to assess their chances of job loss or re-employment. This study supports the parsing of insecurity into job insecurity, employment insecurity, and affective insecurity. Based on my findings, studies that combine these concepts may obscure our understanding of workers’ insecurity by conflating its components. Despite studies that argue for combining these measures (Dixon, Fullerton, and Robertson 2013), these results support a multifaceted definition of risk perceptions such as those put forth by Green (2009), Lübke and Erlinghagen (2014), and Huang et al. (2010).

Second, employment protection legislation is unrelated to affective insecurity. The present findings align with Böckerman (2004), Erlinghagen (2008), and Robinson (2000), all of whom find little connection between employment protection legislation and job insecurity. This lack of connection applies to affective insecurity as well. As previously noted, this may be attributable to contradictory effects of legislation that result in a net null effect. Strong employment protection legislation correlates positively with the proportion of the labor force in temporary employment and also positively correlates with average job tenure. The ambiguity evident in the “reluctance-to-hire” hypothesis could plausibly cause statistical insignificance in a

multilevel analysis. The attitudes of workers in unstable employment might cancel out those of workers in stable employment.

Third, policy can alleviate anxiety, particularly insofar as it provides financial coping resources workers may otherwise lack. The results clearly support the idea that welfare states are more successful at providing coping strategies than at containing labor market risk. The coincidence of unemployment benefit generosity and active labor market policy spending ($p=.718$) indicates that these two policy types are best considered as part of a complementary policy system rather than as separate policies that happen to overlap. In practice, these two policies are often linked through activation strategies: unemployment benefit receipt is contingent on active job search (a process often monitored by a Public Employment Service) or participation in training programs (Immervoll and Scarpetta 2012).

This study does have some obvious limitations. First, the negative coefficient for both job insecurity and employment insecurity at the between level is a perplexing issue. This may be attributed to the overall poor fit of a mediation model. Alternatively, affective and cognitive insecurity may exert reciprocal effects at the country level, which necessitates a non-recursive model. This seems a highly plausible explanation, one that can explain the lack of mediation yet respect the close relationship between these concepts.

In sum, this study offers further justification for the importance of an adequate social safety net: it reduces workers' persistent fear of unemployment. Based on this research, there are two main avenues by which affective insecurity can be relieved. First, states can help workers maintain their marketability. By helping workers hone their skills or find a job, the state can ensure career continuity for workers, reduce the likelihood of skills mismatch between workers' human capital and job tasks, or at least minimize the length of unemployment. When

unemployment does occur, the state can help ensure income continuity, allowing workers to approach their job search confidently, not desperately. A country with a complementary set of labor market policies designed to help workers cope with labor market risks can minimize anxiety among the workforce. Labor turnover is an expected and necessary feature of an evolving labor market. Fear of job loss, however, is not a requisite experience of modern employment.

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Table 3.1. Definitions of Insecurity Used in the Literature

Author	Definition of Job Insecurity	Job Insecurity	Employment Insecurity	Combined (Job and Employment) Insecurity	Affective Insecurity
Anderson & Pontusson (2007)	"My job is secure"	x	x		x
Carr & Chung (2014)	(a) "My job is secure" (b) "How difficult or easy would it be for you to get a similar or better job with another employer, if you had to leave your current job?"			x	
Chung & van Oorschot (2011)	"How likely is it that during the next 12 months you will be unemployed and looking for work for at least four consecutive weeks?"			x	
Dixon, Fullerton, & Robertson (2013)	(a) "How confident would you say you are in your ability to keep your job in the coming months?" (b) "Would you say that you are [very confident, fairly confident, not very confident, not at all confident] in having a job in 2 years' time?"	x	x	x	
Green (2009)	(a) "My job is secure" (b) "How difficult or easy would it be for you to find a job at least as good as your current one?" (c) "To what extent, if at all, do you worry about the possibility of losing your job?"	x	x		x
Lubke & Erlinghagen (2014)	(a) "My job is secure" (b) "How difficult or easy would it be for you to get a similar or better job with another employer, if you had to leave your current job?"	x	x		

Table 3.2. Country-Aggregated Descriptive Statistics for Three Types of Insecurity, 2005 ISSP

Country	N	Percent Distribution				Means and Standard Deviations (1=low 5=high)			
		Affective Job Insecurity				Job Insecurity		Employment Insecurity	
		I Don't Worry at All	I Worry a Little	I Worry to Some Extent	I Worry a Great Deal	Mean	S.D.	Mean	S.D.
Australia	808	47.77	33.04	14.23	4.95	2.34	1.06	3.22	1.17
Belgium	601	56.07	35.11	6.82	2.00	2.29	0.97	3.56	0.98
Canada	412	50.73	32.04	13.11	4.13	2.31	1.06	3.22	1.15
Czech Republic	490	8.98	52.24	30.82	7.96	2.64	0.96	3.72	1.03
Denmark	827	59.01	30.71	7.74	2.54	2.03	1.15	3.04	1.15
Finland	487	57.91	31.01	6.57	4.52	2.52	1.15	3.41	1.07
France	864	42.01	33.91	12.73	11.34	2.60	1.38	3.40	1.05
Germany	615	28.29	34.80	27.48	9.43	2.28	1.09	3.89	0.91
Hungary	367	31.34	46.59	13.90	8.17	2.53	1.02	3.74	1.07
Ireland	383	66.58	24.28	7.83	1.31	2.01	1.01	3.07	1.29
Japan	325	41.54	33.54	17.85	7.08	2.46	1.44	3.82	1.16
New Zealand	598	55.18	30.60	10.54	3.68	2.30	1.05	3.23	1.10
Norway	683	59.88	24.45	10.54	5.12	2.35	1.01	3.29	1.04
Portugal	766	23.37	40.08	20.23	16.32	2.38	1.21	3.63	0.99
South Korea	508	23.43	50.00	23.03	3.54	2.68	1.09	3.55	1.10
Spain	389	22.11	32.39	34.96	10.54	2.26	1.12	3.13	1.00
Sweden	641	59.28	24.96	11.39	4.37	2.30	1.02	3.45	0.98
Switzerland	514	47.86	30.74	15.56	5.84	2.31	1.05	3.58	1.06
United Kingdom	355	48.17	29.86	18.03	3.94	2.21	0.97	3.12	1.15
United States	717	54.11	26.78	14.78	4.32	2.20	1.05	2.89	1.27

Table 3.3. Descriptive Statistics for Labor Market Policies and Risks

Country	EPL ^a	ALMP ^b	PLMP ^b	Unemployment Rate
Australia	1.42	5.04	7.49	5.39
Belgium	1.81	9.19	20.25	8.41
Canada	0.92	3.17	6.16	7.18
Czech Republic	3.31	1.27	1.22	8.33
Denmark	2.13	21.18	30.40	5.20
Finland	2.17	6.60	13.83	8.85
France	2.47	7.19	12.76	8.32
Germany	2.87	5.27	11.04	10.34
Hungary	2.00	1.85	2.20	6.16
Ireland	1.44	10.55	13.58	4.58
Japan	1.70	2.88	5.02	4.71
New Zealand	1.56	4.68	5.35	4.03
Norway	2.33	14.66	10.17	4.48
Portugal	4.42	3.45	6.59	6.69
South Korea	2.37	1.48	2.50	3.67
Spain	2.36	4.80	9.06	11.00
Sweden	2.61	9.64	10.67	6.63
Switzerland	1.60	10.61	13.39	4.15
United Kingdom	1.20	6.05	2.53	4.71
United States	0.26	2.25	4.18	5.53

Notes:

a: Scale ranges from 0 to 6, in order of increasing strictness

b: Measured as spending per unemployed divided by 1000

Table 3.4. Mediation Effects of Job Insecurity between EPL and Affective Insecurity, Ordinal Logistic Regression

		Model 1 (EPL)	
		β	S.E.
<i>Individual-Level Predictors</i>			
Affective Insecurity on	Job Insecurity	0.440***	0.010
	Employment Insecurity	0.156***	0.010
	Union Member	0.112***	0.028
	Private Sector	0.088**	0.027
	University	-0.203***	0.039
	Above Higher Secondary	-0.130**	0.036
	Higher Secondary	-0.086**	0.034
	High Controllers	0.042	0.049
	Low Controllers	0.018	0.038
	Routine Nonmanual	0.017	0.041
	Semi-Unskilled Manual	0.086*	0.038
	Male	-0.020	0.024
	Age	-0.002*	0.001
	Spouse Employed Full-Time	-0.051*	0.023
Residual Variances	Job Insecurity ¹	1.191***	0.016
<i>Country-Level Predictors</i>			
Affective Insecurity on	Job Insecurity	-0.480**	0.173
	EPL	0.149	0.137
	Unemployment Rate	0.028	0.050
Job Insecurity on	EPL	0.080	0.060
	Unemployment Rate	-0.008	0.024
Intercepts	Job Insecurity	2.016***	0.154
Thresholds	τ_1	-0.224	0.157
	τ_2	0.891***	0.158
	τ_3	1.797***	0.159
Residual Variances	Job Insecurity	0.031***	0.015
	Affective Insecurity	0.158***	0.079
Indirect effects		-0.035	0.033
<i>N</i>		11083	
<i>Countries</i>		20	

1. Model also includes individual-level controls for job insecurity

Bayesian p-values: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table 3.5. Mediation Effects of Employment Insecurity between Active/Passive Labor Market Policies and Affective Insecurity, Ordinal Logistic Regression

		Model 2 (ALMP)		Model 3 (PLMP)	
		β	S.E.	β	S.E.
<i>Individual-Level</i>					
<i>Predictors</i>					
Affective Insecurity on	Job Insecurity	0.439***	0.010	0.440***	0.010
	Employment Insecurity	0.154***	0.011	0.155***	0.011
	Union Member	0.117***	0.029	0.116***	0.027
	Private Sector	0.082**	0.026	0.080**	0.026
	University	-0.209***	0.037	-0.205***	0.038
	Above Higher				
	Secondary	-0.131***	0.037	-0.127***	0.035
	Higher Secondary	-0.078*	0.034	-0.078*	0.033
	High Controllers	0.053	0.049	0.044	0.049
	Low Controllers	0.017	0.039	0.014	0.039
	Routine Nonmanual	0.013	0.040	0.008	0.042
	Semi-Unskilled Manual	0.088*	0.038	0.083*	0.038
	Male	-0.006*	0.022	-0.007	0.024
	Age	-0.003**	0.001	-0.003**	0.001
	Spouse Employed Full-Time	-0.048*	0.022	-0.048*	0.023
	Employment Insecurity ¹	1.127***	0.016	1.125***	0.015
<i>Residual Variances</i>					
<i>Country-Level Predictors</i>					
Affective Insecurity on	Employment Insecurity Policy	-0.287**	0.116	-0.323**	0.118
	Model 2: ALMP				
	Model 3: PLMP	-0.053***	0.017	-0.037**	0.013
	Unemployment Rate	0.034	0.042	0.067	0.044
Employment Insecurity on	Policy				
	Model 2: ALMP				
	Model 3: PLMP	-0.024	0.014	-0.014	0.011
	Unemployment Rate	0.018	0.031	0.035	0.035
Intercepts	Employment Insecurity	2.829***	0.245	2.644***	0.251
Thresholds	τ_1	-0.125***	0.033	0.028	0.137
	τ_2	0.989***	0.032	1.143***	0.137
	τ_3	1.892***	0.033	2.044***	0.138
Residual Variances	Employment Insecurity	0.084***	0.038	0.093***	0.045
	Affective Insecurity	0.134***	0.058	0.136***	0.067
Indirect effects		0.006	0.005	0.004	0.004
<i>N</i>		11296		11296	
<i>Countries</i>		20		20	

1. Model also includes individual-level controls for job insecurity
Bayesian p-values: *** p<0.001, ** p<0.01, * p<0.05

Figure 3.1. An Institutional Model of Affective Insecurity, Mediated by Job Insecurity

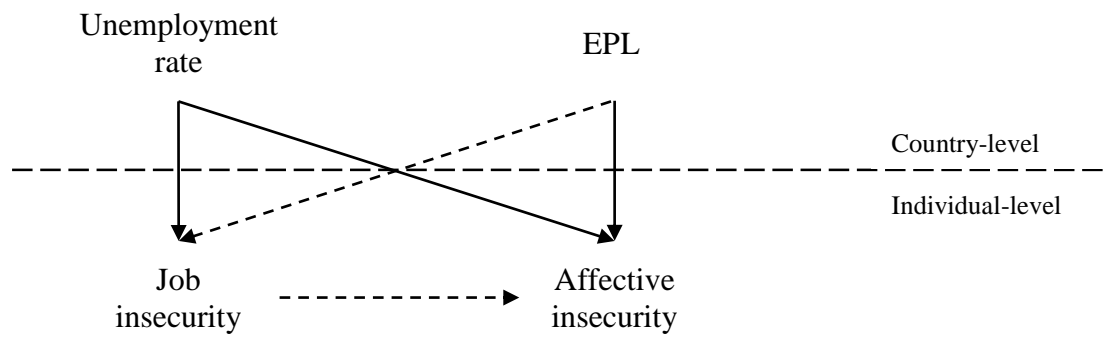


Figure 3.2. An Institutional Model of Affective Insecurity, Mediated by Employment Insecurity

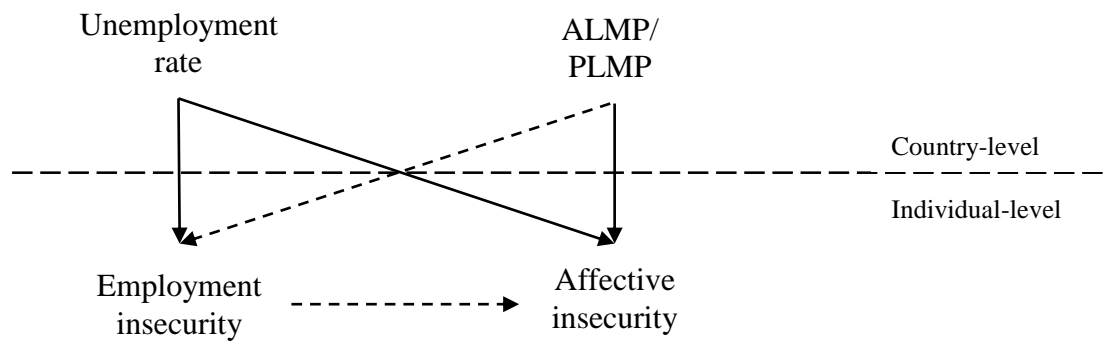


Figure 3.3. Bivariate Correlations between Labor Market Policies and Affective, Job, and Employment Insecurity

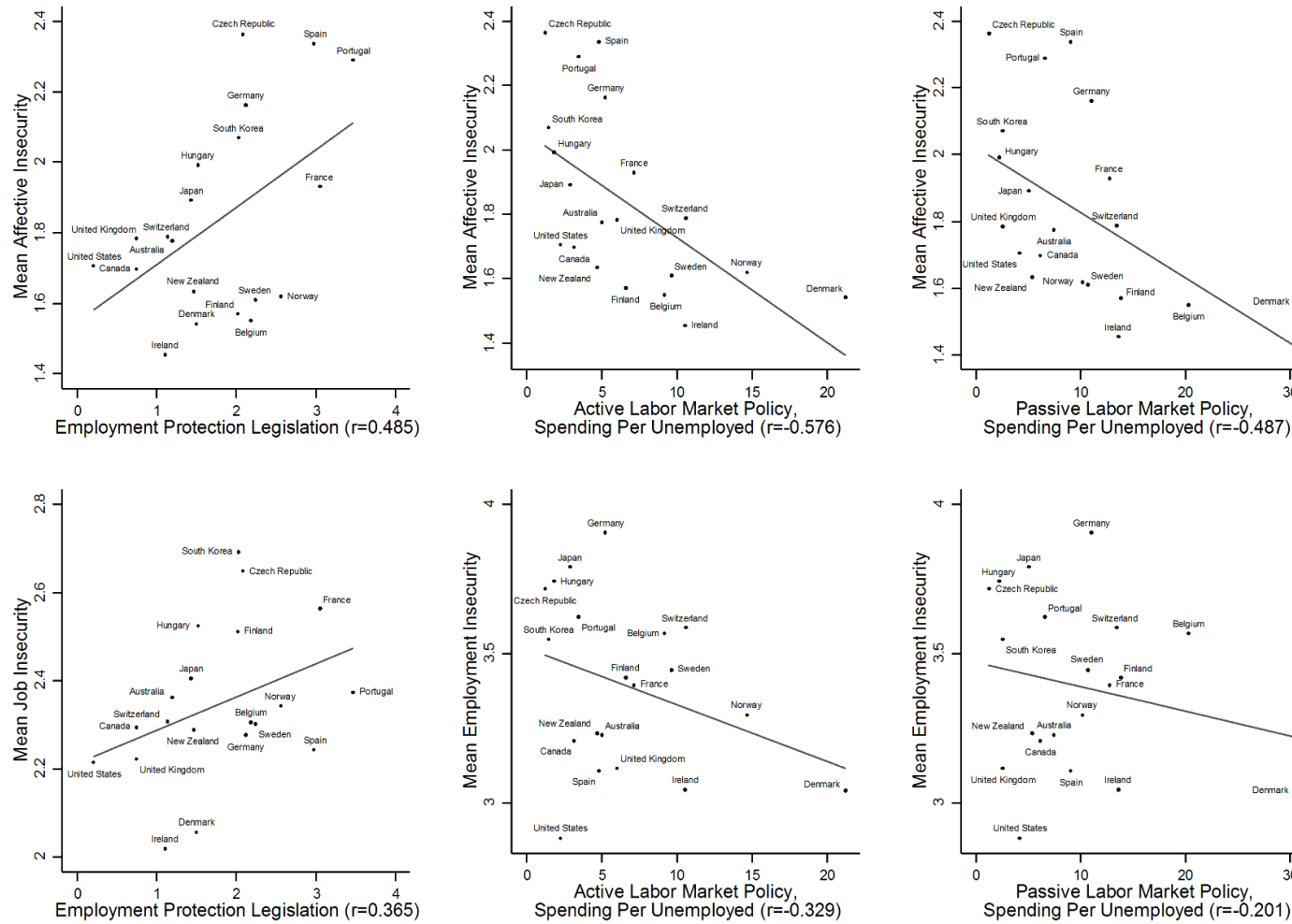


Figure 3.4. Change in Predicted Probability of Affective Insecurity for Each Standard Deviation Change in Active Labor Market Policy

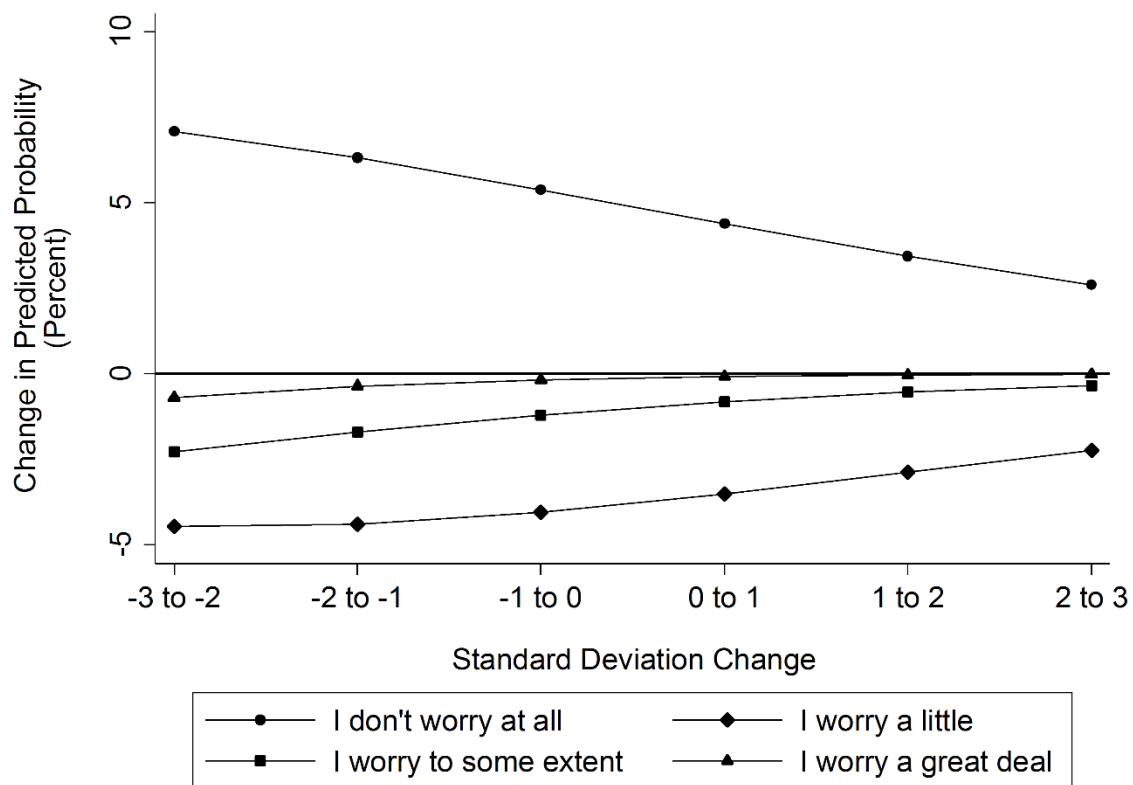
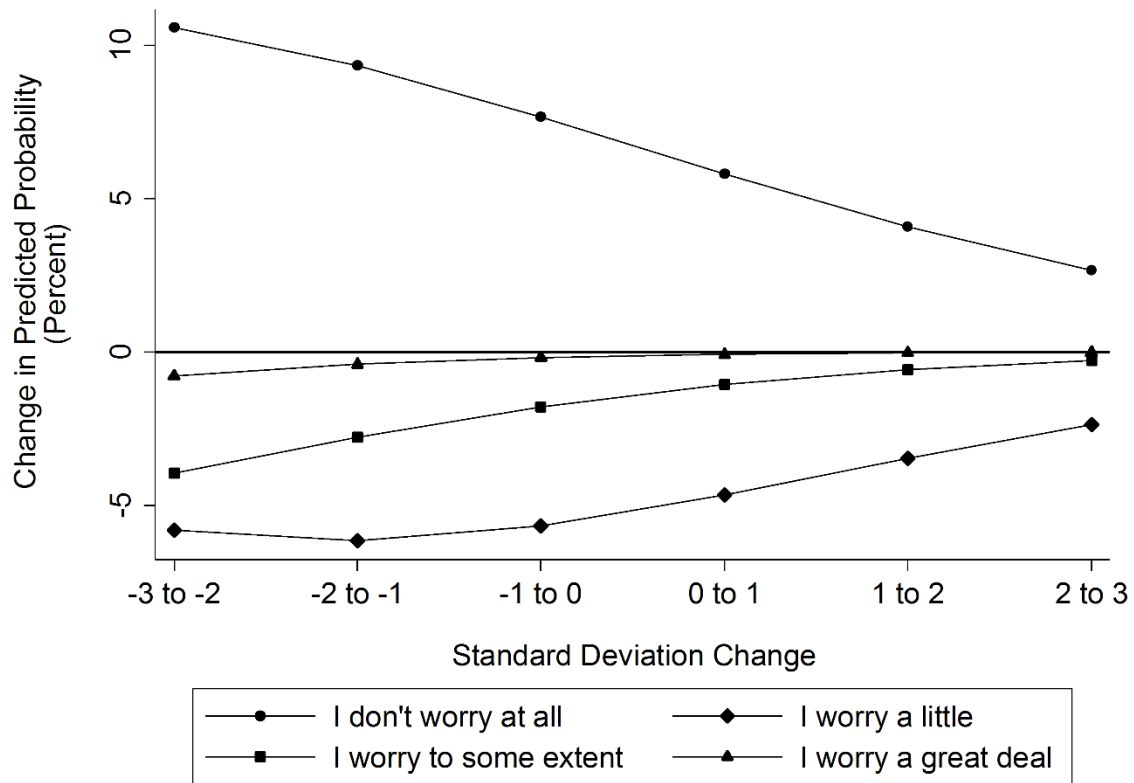


Figure 3.5. Change in Predicted Probability of Affective Insecurity for Each Standard Deviation Change in Passive Labor Market Policy



CHAPTER 4. THE RELATIVE APPEAL OF TEMPORARY WORK AND UNEMPLOYMENT IN ADVANCED ECONOMIES

“...for most job seekers the most meaningful question to ask is not whether a standard job is better than a contingent one, but whether a contingent job is better than no job.” (Yu 2012:737)

Introduction

If you were a worker who had to decide between a temporary job and unemployment, which would you choose? With 12% of dependent employees⁷ in fixed-term contracts and an average unemployment rate of 8% across OECD countries, this is no trivial hypothetical exercise for many workers. These labor market situations represent two of the most salient risks workers currently face in advanced economies: job insecurity in the form of precarious work—“the uncertainty, instability, and insecurity of work in which employees bear the risks of work (as opposed to businesses or the government)” (Kalleberg and Marsden 2008:271) (see also Auer and Cazes 2003; Blanchard and Landier 2002; Booth, Dolado, and Frank 2002; OECD 2002) and income insecurity born of discontinuous labor market participation (Gallie, Jacobs, and Paugam 2004; Immervoll and O'Donoghue 2004; Nolan, Hauser, and Zoyem 2000; Ransome 1995).

How workers evaluate the relative risk of insecure labor market conditions should be a central concern of comparative labor market theory, as a defining function of the modern welfare state is to manage labor market risks (Beck 2000; Crouch and Keune 2012; Iversen 2005; Iversen and Cusack 2000). Your answer to the question posed above will depend heavily on the country in which you live and your labor market position within that country.

⁷ Dependent employees are employed by someone else (i.e., not self-employed).

Despite our extensive knowledge on the objective qualities of precarious work and unemployment across advanced economies, we know precious little about workers' subjective evaluation of these risks in a comparative institutional context. The job choice literature has so far been primarily concerned with the disincentive effects of unemployment insurance (Atkinson and Micklewright 1991; ILO 2004; Pedersen and Smith 2002). Within this discourse, one issue has been long abandoned as a foregone conclusion: "As an empirical matter workers who lose primary-sector jobs appear to be very unlikely to accept stopgap jobs in the secondary sector..." (Bulow and Summers 1986:404). As prototypical secondary sector work, temporary jobs—featuring low possibility for promotion, average pay lower than permanent work, few retraining opportunities, and instability—are generally described as stigmatized, low-skill, dead-end jobs. Unemployment is theorized to provide a more reliable pathway to permanent employment than temporary work.

This research examines the taken for granted "empirical matter" that temporary work is universally shunned by currently employed workers. I argue that preferences for temporary work over unemployment depend on a worker's labor market position within a particular configuration of policies and markets. Specifically, I propose that human capital and union membership matter in flexible markets and protected labor market status matters in rigid labor markets. In countries where temporary work is not sequestered in peripheral labor markets, human capital may provide access to permanent work, while union membership provides job security that workers will be loath to relinquish in the absence of state protections. Protected status in inflexible labor markets tips the balance of workers' preferences toward unemployment for two related reasons: protected workers prefer to avoid marginalized work, and their access to unemployment insurance allows them time to search for a preferable job.

To examine the influence of states and markets over risk preferences, Muffels (2008) outlines two approaches that simultaneously consider the state-market nexus. Typological approaches group relevant policy and labor market dimensions into meaningful clusters, while an elemental approach models labor market outcomes as a result of separate policies. In practice, these methods yield similar conclusions. The typological approach, popularized by Esping-Andersen's "Three Worlds of Welfare Capitalism" and Hall and Soskice's Varieties of Capitalism perspective, has proven robust. Welfare regimes, based on Esping-Andersen's work, categorize nation-states according to the beneficiaries and extent of the social safety net (Esping-Andersen 1990). Production regimes, developed by Hall and Soskice, classify nation-states into coordinated and liberal regimes according to the skills firms require for production and the institutions that encourage workers to acquire those skills (Hall and Soskice 2001). In recognition of the complementarity of these typologies, many researchers now use a hybrid of the two (Estevez-Abe, Iversen, and Soskice 2001). This hybrid typology seems a useful approach to understanding the manifold policies and labor market factors influential over workers' employment preferences.

Willingness to accept temporary work over unemployment is assessed using ordered logistic regression. This statistical method allows me to establish the relative odds of feeling favorable toward temporary work between protected and unprotected groups and between workers with varying levels of human capital. My empirical analyses take into account a variety of institutional configurations by using the typological approaches generated by Esping-Andersen (1990) and Hall and Soskice (1999). Comparative analyses are conducted using the 2005 wave of the Work Orientations Module of the International Social Survey Program (ISSP).

This study complements the wealth of comparative research on the mobility pathways of temporary work and unemployment. Knowing how workers evaluate temporary jobs can yield insight into the types of jobs workers are willing to take, an issue that matters importantly considering the trend toward employers' increased use of nonstandard forms of employment over the past several decades (Emmenegger, Häusermann, Palier, and Seelieb-Kaiser 2012; Kalleberg 2009; OECD 2002; Standing 2009). If workers who are unable to preserve permanent positions prefer to forgo temporary work in favor of unemployment, we must ask why workers evaluate temporary work as a riskier prospect than unemployment.

The Relative Risk of Unemployment and Temporary Work in Advanced Economies

Temporary work and unemployment both contain the potential for immediate and lasting damage to workers' economic standing and job prospects. Gangl (2006) terms these persistent disadvantages "scar effects." Although the term originally pertained to unemployment, it easily applies to temporary work. Like unemployment, temporary work may impart long-term negative effects on career growth: both may limit opportunities for wage growth, skill development, and continuous employment (OECD 2002). Also like unemployment, temporary workers often do not fare as well as their permanent counterparts in their earnings or poverty rates (Cervini Plá and Ramos 2012; Debels 2008).

In their scar effects, direct comparisons of temporary work and unemployment are surprisingly rare, given the prevalence and repercussions of each. As Yu (2012) notes, this comparison represents the actual situation workers are likely to face: "When assessing the impact of contingent employment...making comparisons with standard employment is misleading because many of those accepting a contingent job do not have a regular full-time job as an alternative" (738). A handful of recent studies from various countries provide a first glimpse of

the relative risks of temporary work and unemployment. In the Netherlands, unemployed workers initially move into permanent work at a higher rate than temporary workers, but this advantage dissipates as temporary workers gain tenure in their jobs. Unemployed workers who transition directly into permanent work also earn less than workers who enter permanent work through temporary work (de Graaf-Zijl, van den Berg, and Heyma 2011). For the Dutch, temporary work offers long-term advantages over unemployment.

In comparison, Yu (2012) finds this advantage reversed for Japanese workers. Among workers previously employed in permanent work, the odds of transitioning into permanent employment are 31% lower for temporary workers than for unemployed workers, a situation exacerbated for workers with low prior occupational status. Temporary work exacts a heavier toll on men's careers than women's, reducing by 62% the odds of achieving permanent status compared to the jobless, a finding partly explicable by the structure of employment in Japan, where women are less likely to hold a permanent job in the first place. For men who aspire to regain a permanent position, joblessness proves a more reliable route to that end than precarious work. Temporary work is more hindrance than boon.

Gebel (2013) offers a multi-country assessment of the United Kingdom, Switzerland, and Germany (subdivided into East and West due to persistent economic and labor market differences between these regions). Temporary work provides better outcomes than unemployment in West Germany and the UK. Within a year, almost half of all previously unemployed British workers who accept temporary work subsequently gain permanent employment. One-third of West German workers follow this same career path over the course of a year. In contrast, only 39% of British workers and 25% of West German workers transition directly from unemployment to permanent employment within a year. Temporary workers also

enjoy a slight advantage over unemployed workers in East Germany. In all three cases, temporary work helps workers re-integrate into the permanent workforce and yields persistent wage gains over those who enter permanent work directly from unemployment. In Switzerland, temporary work and unemployment yield equivalent outcomes.

Institutional Components of Labor Market Risk

The international differences in the relative risks of temporary work and unemployment reflect distinct logics of labor market oversight. The literatures on unemployment and temporary work both point to an interconnected suite of influential welfare state and labor market features: employment protection legislation that determines labor market rigidity; unemployment insurance that stabilizes income during unemployment, and skill formation systems that promote either specific or general skills (DiPrete, de Graaf, Luijkx, Tåhlin, and Blossfeld 1997; DiPrete, Goux, Maurin, and Quesnel-Vallee 2006; Estevez-Abe, Iversen, and Soskice 2001; Gangl 2008). These three policy areas are expected to jointly guide workers preferences toward temporary work and unemployment.

Employment Protection Legislation: Temporary Work as Bridge or Trap

Strict employment protection legislation makes dismissal of permanent workers costly and complex (OECD 2004). As a result, strict employment legislation for permanent work tends to increase the incidence of temporary work, as shown in Figure 4.1. These differences explain why Spain, a country with some of the strongest protections for permanent workers, consistently employed one-third of its labor force in temporary jobs from the early 1990s until recently, when Spain implemented new laws to address this dynamic. In comparison, the laissez-faire United States rarely employs more than 5% of its labor force in temporary work. When permanent workers benefit from strong employment legislation, employers use temporary work as a way to

maintain numerical flexibility while avoiding the costs of dismissal⁸ (Gebel and Giesecke 2011), relegating temporary workers to peripheral labor markets. In flexible labor markets, temporary work is not a primary source of labor market segmentation. It is a potential bridge to permanent work when used as a screening tool.

The accumulated research across various countries supports the “bridge or trap” perspective: temporary work is either a bridge to permanent work or a trap of precarity (see, for example, Booth, Francesconi, and Frank [2000] for Britain; Güell and Petrongolo [2001] for Spain; Korpi and Levin [2001] for Sweden; Blanchard and Landier [2002] for France; Madsen [2003] for Denmark, and Passet [2003] for Japan). Temporary work provides employers with a buffer of numerically flexible workers who can be hired and fired as needed (Kalleberg 2000). Temporary work may also be used as a screen to reduce transaction costs, providing employers with a low-risk mechanism of evaluating a worker’s productivity (Emmenegger, Häusermann, Palier, and Seelieb-Kaiser 2012). From the “bridge or trap” perspective, temporary employment is either a transitional period between unemployment and permanent employment or a prolonged period of unstable work interspersed with unemployment (de Graaf-Zijl, van den Berg, and Heyma 2011; Gash 2008; McGinnity, Mertens, and Gundert 2005). When temporary jobs are used as buffers, they are likely to be traps; temporary jobs that screen potential permanent employees provide a bridge from unemployment into permanent work.

Human Capital and Bridge or Trap Effects

Research suggests that the association of rigid labor with trap effects and flexible labor markets with bridge effects may not hold across all skill levels. Temporary work in rigid labor

⁸ The procedural and monetary costs of dismissing a temporary workers are, by comparison, minimal. Temporary workers often do not receive severance pay and the time-limited nature of their employment means employers can simply let a contract lapse rather than fire a worker.

markets is not exclusively a buffer: according to Portugal and Varejão (2010), fixed-term contracts are used as a screen for highly educated workers. The buffering function of temporary work applies predominantly to workers with low educational levels. This correlation is not exclusive to Mediterranean regimes, however. The OECD (2002) chronicles a general disadvantage for temporary workers with low education across advanced economies.

High human capital reduces labor market flows into temporary work but does not increase labor market flows out of temporary work, as Amuedo-Dorantes (2000) reports. Research from the OECD (2002) confirms highly educated workers are actually less likely to transition from temporary to permanent work than less-educated workers. Debels provides insight into this seeming paradox: “after having worked in a temporary job...men and women in higher occupations (professionals, legislators, and managers) exhibit lower risks of becoming unemployed. Because temporary workers in the higher occupations also have a lower hazard of moving into a permanent job, this means that they tend to keep their temporary job longer” (2008:65). This strongly suggests that temporary jobs may be good jobs for highly skilled workers, a distinction often overlooked in a literature that tends to equate temporary jobs with bad jobs.

At high skill levels, temporary work may be best explained by the theory of boundaryless careers, “career paths [that] involve sequences of job opportunities that go beyond the boundaries of single employment settings” (DeFillippi and Arthur 1996:307), a perspective on temporary work first championed by Marler, Woodard, and Milkovich (2002). From this view, highly skilled workers voluntarily choose temporary work to leverage marketable skills and build networks that span organizations (de Jong, De Cuyper, De Witte, Silla, and Bernhard-Oettel 2009). This line of reasoning receives further support from Comi and Grasseni (2012), whose

analysis of nine European countries reveals that the wage gap between temporary workers and permanent workers narrows as education rises.

Vocational training systems may also impact workers' amenability to temporary work. Educational systems with a strong vocational training component are most developed in the northern postindustrial countries of continental Europe (Iversen and Stephens 2008). Vocational skills are usually acquired through education, meaning that workers with a secondary education possess the greatest skill specificity of all educational levels (Busemeyer 2009). Corporatist countries such as Germany and Switzerland, both Bismarckian welfare states, link benefits to occupational status (Arts and Gelissen 2002). Workers with an occupational affiliation receive strong job protections and ample income security to cushion the impact of labor market turbulence, and skilled craft workers are especially favored. Scandinavian countries encourage industry-specific vocational skills, but these workers do not form a protected group of insiders as in the aforementioned continental European countries. In either case, workers with high technical skills may face limited re-employment opportunities.

To the extent that workers try to find new jobs that use the greatest proportion of their current skill set, workers with vocational skills should show a greater inclination for unemployment. By opting for unemployment, workers with idiosyncratic skills can maximize the time they can spend finding a good match. It therefore behooves workers with specialized skills to first enter unemployment, where they might seek an appropriate fit, than accept a temporary job where many of their skills might go forever underutilized (Pollmann-Schult and Büchel 2005; Sloane, Battu, and Seaman 1999).

The State of Unemployment

Both employment protection legislation and unemployment benefits mitigate labor market risk. Employment protection legislation guards against job loss and establishes financial recompense for dismissal, ensuring economic security through constant employment or severance pay, while unemployment benefits directly address economic insecurity. When both employment and unemployment protection are low, workers must form their own personal buffers against job insecurity by investing in general, transferable skills (Diprete et al. 1997) or relying on an employed spouse to provide income security during the job search.

Under most employment protection legislation, temporary workers are ineligible for severance pay, a system that often bases remuneration on tenure. The failure of unemployment insurance to adequately cover temporary workers leaves them vulnerable to income insecurity. Bismarckian, occupation-based systems in particular are susceptible to dualization, as are firm-coordinated economies (Palier 2012; Peng 2012). Full-time, continuously employed workers in these systems receive ample coverage; marginalized groups such as temporary workers, women, and low-skill workers must rely on means-tested benefits for income support (Grimshaw and Rubery 1997).

The “selective job search” hypothesis explains the pull effects of unemployment in terms of welfare-state transfers that allow workers to extend their search until they find a job matching their skills and other preferences. High unemployment benefits of long duration are associated with high unemployment rates and inflated long-term unemployment partly because workers have the luxury of seeking a job that fits their skills and expectations (European Commission 2006; Gangl 2008; Nickell 1997). There is evidence this strategy pays off. West German benefit recipients did experience longer unemployment spells but ultimately found jobs that properly

applied their existing skills (Pollmann-Schult and Büchel 2005). When employment and unemployment protections are both lacking, workers must quickly find new employment, but often at the cost of a skill mismatch (Marimon and Zilibotti 1999).

Identifying Labor Market Insiders Using Regime Theory

Welfare state policies, in their ideal form, correct for labor market risk such as skill mismatch, unemployment-based poverty, and labor market mobility. In reality, these systems imperfectly address market failures and sometimes introduce new risks, as seen in the explosion of temporary work in Spain after the labor market reforms of the 1980s. Rarely are all workers equally exposed to risk. Unprotected workers are often doubly disadvantaged in that the welfare state often pegs unemployment insurance, the main source of economic security for many unemployed labor force participants, to job security. To understand who is privileged and who is marginalized, “an adequate conceptual scheme for distinguishing stratification outcomes must make use of both labor market and welfare state dimensions while recognizing that these two institutional axes are fundamentally linked.” (Diprete et al. 1997:321).

Schröder (2008) provides empirical reinforcement for and expansion of the welfare production regime typology, using a variety of measures: income inequality, skill specificity, employment protection legislation, collective bargaining coverage, and welfare spending. A hierarchical cluster analysis reveals that capitalist economies group together into discernible families of Anglo-American, Scandinavian, and continental European countries, with Japan and, to a lesser degree, Mediterranean countries forming unique clusters. The combined welfare production regime typology yields six categories of advanced economies: liberal (Australia, Canada, New Zealand, the United Kingdom, and the United States); social democratic (Denmark, Finland, Norway, Sweden); corporatist (Germany, Belgium, and Switzerland);

Mediterranean (Portugal and Spain); firm-coordinated (Japan and South Korea); and post-socialist (the Czech Republic and Hungary).

Häusermann and Schwander (2012) apply regime theory to good effect to identify labor market insiders. In liberal regimes, “outsiderness is more clearly biased toward the low-skilled” (2012: 22). The lack of coordination between educational systems and employers, coupled with the individualization of risk, also leads to stratification by educational attainment because employers mainly use education as a screen for skilled positions (Estevez-Abe, Iversen, and Soskice 2001). Social democratic regimes exhibit the least labor market segmentation, but to the extent that it does exist, it disadvantages women. Kroos and Gottschall (2012) also discover that the welfare state exaggerates insider-outsider differences in corporatist regimes, a situation explicable by the occupation-based system of benefits. Mediterranean regimes, while also characterized by an insider-outsider labor market, cleave along the lines of sector or firm size (Ferrera 2010). As Bossaert (2005) finds, about three-quarters of public sector employees in Mediterranean regimes enjoy a legally protected right to life-long employment.

Firm-coordinated regimes starkly divide insiders—adult male workers in large enterprises—from outsiders. Employment and income security, usually legislated by the state, is in this instance established by firms. This combination of firm-based employment protection and a male-breadwinner employment model culminates in the concentration of employment instability and poverty among youth and women (Peng 2012), and job security among full-time employees, usually men. In post-socialist countries, a strong union presence hinders the conversion of temporary contracts into permanent jobs, creating an insider-outsider labor market that privileges union members (Baranowska and Gebel 2008) with job security, but fiscal limitations on welfare state development provide little income security.

Hypotheses

Because of the tight links between welfare states and labor markets, my hypotheses are presented holistically, to emphasize that workers' employment preferences are a product of a complex institutional system.

Overall, I predict protected groups will be highly averse to temporary work. Unionized workers in liberal, social democratic, and post-socialist regimes are expected to show greater resistance to temporary work than non-unionized workers. In Mediterranean regimes, aversion to temporary work is predicted to be greater among public sector than private sector workers. Full-time workers in firm-coordinated regimes are predicted to express more distaste for temporary work than part-time workers.

In flexible labor markets such as liberal and social democratic regimes, neither of which are stratified according to contract status, temporary work may help workers find purchase in the labor market. I therefore predict that amenability to temporary work rises with education. Corporatist regimes are characterized by strong systems of institutionalized vocational training, tight links between vocational training and occupation, and unemployment benefits linked to occupational status. In this regime, workers with vocational education in highly skilled craft occupations should prefer unemployment more strongly than workers in other occupations. In rigid labor markets, highly educated workers are expected to express more favorable attitudes toward temporary work than those with low education.

Data and Variables

Data

This research project uses the 2005 wave of the International Social Survey Program's (ISSP) Work Orientations Module. The ISSP is a collaborative international research program, a

primary goal of which is to make cross-national surveys as comparable as possible. The ISSP attempts to ensure that concepts carry a similar meaning in each translation of the survey. This by no means eliminates the possibility that concepts are understood differently across nations (Hult and Svallfors 2002), but this confounding factor is given special attention in the drafting of the survey, reducing the chance that any finding of international differences is an artifact of research design (Uher 2000). The ISSP, designed to capture people's subjective evaluations of various socially-relevant topics, has become a popular dataset for comparative analyses of attitudes because of its breadth and consistency (Brooks and Manza 2006a; Brooks and Manza 2006b; Erlinghagen 2008; Olsen, Kalleberg, and Nesheim 2010).

The analytic sample is restricted to non-agricultural workers ages 18 to 65 who are working at least part-time in dependent employment⁹ at the time of the survey. Of the total sample, 11,108 cases are eligible for inclusion in the analysis. The ISSP encompasses a broad range of political and economic configurations, including the commonly recognized welfare production regimes. Representatives of the corporatist regimes are Germany, the Netherlands, Switzerland, and Belgium. Canada, The United States, the United Kingdom, Australia and New Zealand compose the liberal regimes. The firm-coordinated regimes are Japan and South Korea. Hungary and the Czech Republic represent post-socialist regimes. Mediterranean regimes include Spain and Portugal¹⁰. The social democratic regimes consist of Norway, Denmark, Finland, and Sweden. In all countries, respondents are chosen using random sampling. Based on

⁹ Results are not consistent if self-employed workers are in the sample.

¹⁰ Although France is among the countries in the ISSP, it is not included in the analyses because its classification is uncertain. Estevez-Abe, Iversen, and Soskice (2001) categorize France with Japan as a firm-specific skill system, whereas Iversen and Stephens (2008) classify France with Italy as a mixed regime due to weak unions and vocational education. Huber and Stephens (2001) rank France as a Christian democratic welfare production regime, whereas Esping-Andersen (1999) argues that France's status as a Christian democratic regime is contested because "French social policy has [unlike the religious foundations of other conservative regimes] been guided primarily by a republican, anti-clerical spirit. France's...membership in the conservative regime is...problematic in that familism is less dominant. Yet, both welfare systems display strong corporatist traits." (82)

comparisons with census data for each country, the ISSP sample appears to be representative of the total adult population in several countries (Scholz, Harkness, and Faß 2008).

Some questions in the analysis ask respondents to provide sensitive or speculative information. Questions about income and future events display a high incidence of missing data. Of the total sample, 2.4% of respondents were missing data about their preference for temporary work. Given that data are missing at random, I used multiple imputation by chained equations to create 10 datasets with missing data estimates. Imputed data cannot be treated as a single dataset because imputed data, generated using the existing data, artificially reduces standard errors (White, Royston, and Wood 2011). Model estimates are therefore calculated according to Rubin's rules, which provides a coefficient averaged over imputations and a variance that accounts for the within- and between-imputation variance (Schafer and Olsen 1998).

Variables

The dependent variable in this study, *workers' preference for temporary work over unemployment*, is measured by respondents' disagreement or agreement with the statement, "In order to avoid unemployment I would be willing to accept temporary employment." Higher scores indicate a higher willingness to accept temporary work rather than enter unemployment. The phrasing of this question relates more accurately to actual future behaviors than questions that ask about each situation separately. According to Ajzen and Fishbein's research on behavior intentions in choice situations, "if a subject has to choose between two mutually exclusive behaviors it is predicted that the algebraic difference between his two attitude scores on the respective behaviors will provide a higher correlation with the behavioral choice than the attitude toward any one of the two acts alone" (1969:404). Insofar as we are interested in workers' risk preferences because of their ability to predict actual choices, the power of the model is improved

by use of a survey question that asks respondents to compare the desirability of two alternative and mutually exclusive outcomes.

Labor market insiders are identified by several variables that encompass the protected statuses outlined in the hypotheses: employment status (full-time or part-time), sector (private or public), and union membership. Educational attainment is measured by an ordinal variable—higher secondary education, above higher secondary education, and university degree completed—anchored by the lowest educational category, less than secondary education. I convert the occupations used by the ISSP into the class schema developed by Erikson, Goldthorpe, and Portocarero (1979) using codes developed by Ganzeboom and Treiman (1996) and translated into Stata programming language by Hendrickx (2004). This schema groups workers according to exposure to similar labor market risks (Häusermann and Schwander 2012). Class categories are “*high controllers*,” made up of highly skilled professionals, administrators, and managers; “*low controllers*,” which includes technicians, lower-grade professionals and administrators; a *routine non-manual* class of clerical workers; “*semi-unskilled manual*,” comprising low-skill service and manual workers; and the anchor category of “*skilled manual*,” made up of skilled workers and manual supervisors (Evans and Mills 1998). Agricultural workers are excluded due to small sample sizes in most nations. This schema has been used to good effect in previous studies of workers’ perceptions, such as Mau, Mewes, and Schöneck (2012).

Demographic controls for age and gender account for potential stigma effects of temporary work. Temporary work contradicts a male breadwinner model of employment derived from hegemonic ideals of masculinity (Henson and Krasas Rogers 2001), implying that male workers should attach greater stigma to temporary work than women. Prime age workers’ desire

for and expectation of job stability may also generate an aversion to temporary work (Manski and Straub 2000). In addition, workers' preferences may depend on access to alternative income sources such as spousal income, although this alone is unlikely to fully compensate for a lost job but may provide sufficient income during a job search (Seitchik 1991). This "added worker effect," whereby wives escalate their labor force participation in response to a husband's unemployment (Stephens Jr. 2002), suggests spousal employment may influence employment choices. Respondents are counted as having an employed spouse if their partner works full-time.

One limitation of the ISSP is the lack of information about workers' contract status. The 2005 ISSP Work Orientations module does not ask respondents whether they are currently employed in a temporary or permanent job. This omission is irremediable for the purposes of this study, but I account for this through two variables that assess workers' subjective perceptions of their job stability. The first, *job security*, asks workers how strongly they agree or disagree that their job is secure. The second, *promotion opportunities*, asks workers whether their opportunities for advancement are high, using the same agreement scale. Both of these variables are dichotomized into workers who are secure on these dimension and those who feel either insecure or ambivalent. Multiple studies confirm that temporary workers feel greater job insecurity (Burgoon and Dekker 2010; Erlinghagen 2008; Hesselink and van Vuuren 1999; Maurin and Postel-Vinay 2005). The relationship between temporary status and perceived advancement prospects is underexplored, but it stands to reason that permanent workers would perceive better career opportunities in an internal labor market than temporary workers.

Methods

The goal of this study is to establish how individual characteristics vary in their ability to predict risk preferences across regimes. To estimate individual-level predictors, I model each

regime type individually. Ordinal logistic regression proved unsuitable because several independent variables violate the proportional odds assumption, which dictates that independent variables exert a uniform effect at each value of the dependent variable (Long 1997). For example, the slope of the regression line for gender should be the same for predicting the probability of strong agreement as it is for strong disagreement. To relax this assumption, I employ generalized ordered logistic regression.

This model relaxes the proportional odds assumption only for problematic independent variables. The equation for the predicted probabilities at each level of the dependent variable is

$$P(Y_i > j) = g(X\beta_j) = \frac{\exp(\alpha_j + X_i\beta_j)}{1 + [\exp(\alpha_j + X_i\beta_j)]}, \quad j = 1, 2, \dots, M - 1$$

as compared to the ordered logit model, in which β is the same across all j . Violation of the proportional odds assumption sometimes indicates that a multinomial logit model should be used. However, the partial proportional odds model deals with violations while retaining the ordinal nature of the dependent variable, a strategy that minimizes the number of parameters estimated in the model. For variables that violate assumptions, a partial proportional odds model estimates a unique coefficient at each level of the dependent variable.

$$P(Y_i = 1) = 1 - g(X_i\beta_1)$$

$$P(Y_i = j) = g(X_i\beta_{j-1}) - g(X_i\beta_j) \quad j = 2, \dots, M - 1$$

$$P(Y_i = M) = g(X_i\beta_{M-1})$$

To estimate the partial proportional odds model, I use Williams' *gologit2* program, implemented in Stata. Interpretation of the coefficients is the same as an ordered logistic model, in that “positive coefficients indicate that higher values on the explanatory variable make it more likely that the respondent will be in a higher category of Y than the current one, whereas negative coefficients indicate that higher values on the explanatory variable increase the likelihood of being in the current or a lower category” (Williams 2006:63). In the analyses, the most frequent violators of the proportional odds assumption are education, gender, and union membership.

Because a generalized ordered logit model estimates separate slopes for each level of the dependent variable, the output looks slightly different from an ordered logit model. For most variables, a single coefficient applies across all levels of the dependent variable. For variables that violate the parallel regression assumption, this coefficient in the first section of the results table refers only to the lowest level of the dependent variable, “strongly disagree.” These coefficients are noted with the superscript “sd.” The subsequent sections of the table provide coefficients for higher response categories of the dependent variable for those predictors with non-parallel lines.

I use average marginal effects to analyze differences between groups, a method that treats everyone in the dataset as if they held the same characteristic on the predictor of interest¹¹, and calculates the average difference between this group and the same population set to another value of the predictor. For example, respondents are first treated as if they are all union members, then treated as if none of them are. The average marginal effect is the difference between these groups. This method acknowledges the clustering of worker characteristics—for example, the

¹¹ As compared to the marginal effects at the mean (MEM), which calculates the derivative based on the average for all group members ($x=\bar{x}$).

tight link between gender, service occupations, and part-time status—that would otherwise be ignored by calculating marginal effects at the mean of each variable. Thus, marginal effects are not based on the “average person.” Given the prevalence of non-linear predictors, this method would also be based on nonsensical values like the average gender of a worker. Average marginal effects account for these idiosyncrasies better than other methods (Cameron and Trivedi 2010).

Results

Before addressing the regression results, it will be helpful to establish regime differences in workers’ risk preferences. Table 4.1 presents descriptive statistics of the unimputed data. Workers in firm-coordinated regimes show, by far, the greatest aversion to temporary work, with 20.8% strongly disagreeing they would accept temporary work to avoid unemployment. Strong disagreement among the other five regimes stands at less than 11%. On the other end of the scale, the Mediterranean regimes show the greatest inclination to strongly agree that they will accept temporary work, at 13.5%; the lowest percentage is in post-socialist regimes. Figure 4.2 displays cumulative percentages of all regimes.

Combining workers who agree or strongly agree they would take temporary work, 73% of workers in liberal and corporatist regimes would accept temporary work to avoid unemployment. Sixty-three percent of workers in social democratic regimes agree that they would take a temporary job, followed by post-socialist and Mediterranean regimes, at 59% and 58% of workers. Workers in firm-coordinated regimes expressed the lowest agreement by far, with only 40% agreeing or strongly agreeing that temporary work would be a preferable alternative to unemployment.

The main question of interest is how individual-level predictors of employment preferences vary by welfare production regime. To this end, six sets of regression results are presented, one for each regime. Table 4.2 displays odds ratios for liberal, corporatist, social democratic, Mediterranean, firm-coordinated, and post-socialist regimes. Because multiple imputation generates repeated point estimates for each variable and the variance contains both within-imputation and between-imputation components, a single probability density function cannot be established. By extension, likelihood-ratio tests cannot be performed on imputed data. Instead, I conduct Wald tests for each set of predictors: (1) human capital (variables *education* and *class*); (2) protected statuses (*full-time status*, *sector*, and *union membership*); and (3) demographic traits (*gender*, *age*, and *spousal employment*).

Human Capital

In liberal, corporatist, social democratic, and Mediterranean regimes, Wald tests show a joint effect of educational level and class on risk preferences, although no individual coefficients reach significance in Mediterranean regimes. In liberal regimes, workers express more positive attitudes toward temporary work with each increment of achievement. Relative to workers with the lowest educational level, workers with more education show greater willingness to accept temporary work, a gap that grows as education increases. In social democratic regimes, education infracts the parallel regression assumption. It makes no difference for the odds of strongly disagreeing, but significant differences appear in higher response categories. University-educated workers consistently fall into higher categories of agreement than the least educated workers, and their odds of feeling more positively than the least educated workers grows more pronounced as the positivity of response categories increases. Differences between the other three educational categories are inconsistently significant. In corporatist regimes, workers who

have completed a secondary degree with no further education express more resistance to temporary work than workers with lower educational levels. For instance, the inverse odds ratio of these workers expressing a negative rather than a neutral or positive evaluation of temporary work is 1.59 times that of the least-educated workers. No other educational categories differ significantly from the lowest level of educational attainment. In sum, the coefficients for formal education mostly conform to predictions. The effects of class, on the other hand, are mostly insignificant.

To convey the effects of human capital on risk preferences, Figure 4.3 presents the average marginal effects of education. Values less than zero indicate a more negative view of temporary work than the least-educated workers; values greater than zero denote more favorable attitudes than workers with the lowest educational level. A clear S-shaped trend emerges in liberal regimes: workers with the lowest educational levels view temporary work more negatively than workers at all higher educational levels, a gap that grows as education increases. If everyone in liberal regimes had a university degree, the probability would be 2.3% lower that workers would be strongly disinclined to take temporary work; the probability of disagreement 6.5% lower; neutrality 4.4% lower; agreement 3.6% higher; and strong agreement 9.7% higher than if all workers had less than a secondary education. Overall, education enhances the propensity to prefer temporary work over unemployment in liberal regimes.

The effect of education shows a similar trend in social democratic regimes, albeit less patterned. In the likelihood of strongly disagreeing or agreeing, there is little difference between the minimum and maximum educational levels. The most pronounced difference appears at the extreme positive end of the scale, where a university degree raises the probability of strongly agreeing that temporary work is a preferable alternative to unemployment by a considerable

12.8%. If all workers had more than a postsecondary education, the probability would rise by 11.8%, while a secondary degree raises the probability by 9.3%.

Significant average marginal effects of education in corporatist regimes appear only for secondary education. If all workers in the sample earned a secondary degree, compared to the entire sample having no secondary degree, the probability of strong disagreement would be elevated by 1.6%, disagreement by 3.9%, and neutrality by 3.6%. The probability of both agreement and strong agreement would decline by a respective 3.3% and 5.8%.

In Mediterranean regimes, the marginal effect of education is minimal and primarily impacts the probability of feeling neutral toward temporary work compared to unemployment. post-socialist regimes exhibit no discernible trend with few significant differences between the lowest educational level and higher levels of achievement. One notable point: If the workforce all had university degrees, the probability of a strong propensity toward temporary work would escalate by 13.9%. Educational differences in firm-coordinated regimes are also minimal, except that the probability of strongly favorable attitudes toward temporary work would drop by 11.5% if everyone had a post-secondary degree compared to no secondary degree.

Protected Workers

In alignment with predictions, full-time status increases aversion to temporary work only in firm-coordinated regimes; private sector workers show a greater inclination to accept temporary work than public sector workers in Mediterranean regimes; and union membership matters only for workers in liberal and social democratic regimes. Contrary to expectations, union membership fails to predict risk preferences in post-socialist regimes. Joint tests of significance reveal that protected status influences risk preferences in liberal, firm-coordinated, and post-socialist regimes.

Figure 4.4 shows the average marginal effects of union membership. In corporatist, social democratic, and firm-coordinated regimes, marginal effects are not significant at any level of agreement. Union members in liberal regimes are generally disinclined toward temporary work compared to non-members. If the entire sample of workers in liberal regimes were to be unionized, the predicted probability of strongly disagreeing would be 1.3% higher; the probability of disagreeing 3.7% higher. Workers would be 5.4% less likely to strongly agree to accept temporary work to avoid unemployment.

In Mediterranean regimes, unionizing the workforce would make no difference at the poles of the scale. It would, however, raise disagreement or neutrality by 4.7% and 4.6% respectively and lower the probability of agreeing by 7.6%. Unionizing the post-socialist workforce would impact only the expressions of neutrality or agreement. A unionized workforce would be 10.5% less likely to feel neutral about temporary work than a non-union workforce and 12.6% more likely to agree that temporary work is preferable to unemployment.

The average marginal effects of full-time status fail to reach significance at any level of the dependent variable in liberal, corporatist, social democratic, and post-socialist regimes, as shown in Figure 4.5. Conversely, if all workers in the sample of firm-coordinated regimes were employed full-time, the predicted probability of strong disagreement would be 15.3% higher than if everyone were employed part-time. Agreement to take temporary work would plunge by 8.5% and strong agreement by 6.2%. Workers in Mediterranean regimes would be 9.6% more likely to disagree that they would prefer temporary work to unemployment if all workers were full-time employees.

Figure 4.6 depicts the average marginal effect of sector by regime. In all regimes except the Mediterranean, privatizing the entire workforce would make no significant difference in

workers' propensity to accept temporary work over unemployment. In Mediterranean regimes, differences between private and public sector employment appear at the extremes of the response scale. If all workers were employed in the private sector, strong aversion to temporary work would decrease by 4.5% and strong inclination would increase by 6.8%.

Demographic and Household Predictors

Gender and age reliably predict workers' amenability to temporary work in all regimes, although employment preferences are unaffected by the presence of an employed spouse. The effect of gender uniformly pushes men toward more negative evaluations of temporary work than women. The gender gap is greatest in corporatist regimes and lowest in liberal regimes. Regimes cluster into three categories: inverse odds ratios in liberal, social democratic, and post-socialist regimes are around 1.40; in Mediterranean and firm-coordinated regimes, inverse odds ratios fall near 1.50; and corporatist regimes display this greatest gender gap with an inverse odds ratio of 1.60.

As workers age, their expressed willingness to take temporary employment decreases, although this effect is non-monotonic in firm-coordinated and post-socialist regimes. In the latter regime, workers move away from strong agreement as they age. In expressions of negativity or neutrality, age exerts no significant effect. Only in firm-coordinated regimes does age exert a positive effect on preferences for temporary work. Workers in firm-coordinated regimes grow less likely as they age to strongly disagree that they would take temporary work to avoid unemployment, but they become more likely to strongly agree.

Conclusion

Through a cross-national analysis of workers' relative preferences for temporary work or unemployment, this study adds to the emerging literature that reframes precarious work in terms

of its quality relative to unemployment. Inspired by the recent research of Yu (2012), Gebel (2013) and de Graaf-Zijl, van den Berg, and Heyma (2011), this study offers a novel approach to job choice that focuses on the subjective evaluation of precarious employment relative to unemployment. Social scientists have tended to compare temporary work to permanent work, an approach that shows temporary work's inferior quality on dimensions such as pay, autonomy, career prospects, and skill development—all important indictments of the marginalization of non-standard workers—but does not capture the actual decisions workers face. Using regime theory, a categorization of the various logics governing state-market interactions, I demonstrate that workers are not all equally averse to temporary work. Workers' preferences depend on their labor market position within a particular welfare production regime.

Results mostly confirm the hypotheses. Human capital has no bearing on preferences for temporary work or unemployment in firm-coordinated or post-socialist regimes. For workers in these regimes, labor market rigidity appears to supersede human capital as a determinant of risk preferences. The bridge hypothesis receives support in social democratic and liberal regimes: higher educational levels are associated with more positive attitudes toward temporary work. In corporatist regimes, possession of vocational education generates an aversion to temporary work and a strong preference for unemployment, in support of the “selective job search” hypothesis. Having protected labor market status generates aversion to temporary work in every regime.

My results conform to the “bridge or trap” theory of temporary work. Human capital, in the form of education, increases workers' propensity to prefer temporary work over unemployment, but only in flexible labor markets. Conversely, human capital fails to influence workers' preference for temporary work or unemployment when labor market stratification creates a mobility gap between permanent and temporary jobs. This finding also provides

conditional support for a boundaryless career perspective on job choice. Temporary jobs, especially for highly educated workers, can be voluntarily chosen, good jobs that offer high pay and autonomy (de Jong et al. 2009; Kalleberg, Reskin, and Hudson 2000). In flexible labor markets, highly educated workers can leverage their skills to build broad networks and easily find new work. For workers with low educational attainment in flexible labor markets, temporary work does not offer this advantage.

Given that temporary jobs may provide entry into permanent jobs and are unlikely to be a trap for workers with college degrees, workers with high skill levels in these regimes are most inclined to take temporary work. For this group, the quality of temporary work may be high enough to outweigh concerns about the limited duration of the job. However, this study also highlights the limited usefulness of boundaryless career theory. Its tenets hold up well in flexible labor markets, but receive little support in rigid ones. As hypothesized, amenability to temporary work rises with educational attainment in liberal and social democratic regimes, both of which contain the most flexible labor markets in the sample of countries. The “self-insurance” effect is most pronounced in liberal regimes, which, not coincidentally, offers low levels of both job and unemployment protection¹².

Flexible labor markets also contain pitfalls for workers. The laxness of state-sponsored job protection leaves employees heavily reliant on collective bargaining to maintain market power. Despite differences in union prevalence and power in social democratic and liberal regimes, both regime types tend to exclude temporary workers from collective bargaining coverage (Goslinga and Sverke 2003). If unions are a buffer against precarity, the protection of

¹² Remember, job protection refers to maintaining employment with the same employer, employment protection entails steady employment, not necessarily with a single employer, and unemployment protection refers to income stability during periods of unemployment.

temporary work and vulnerable demographic groups is anathema to their core mission (Bender and Sloane 1999; Galtier and Gauthier 2003; Esping-Andersen 1996). In that case, unions are more likely to resist temporary work than incorporate temporary workers into their ranks.

My results also partially support a “selective job search” view of job choice. It appears to be relevant only in regimes where unemployment protection is conditional on employment status. According to my estimates, labor market insiders in rigid labor markets condemn temporary work far more so than labor market outsiders. Public sector workers in Mediterranean regimes, full-time workers in firm-coordinated regimes, and vocational workers in corporatist regimes all express greater disinclination toward temporary work than outsiders. In these regimes, unemployment benefits given to workers with firm- or occupation-specific skills may impel workers toward unemployment.

This study also broadens the applicability of regime theory to issues of job choice. Extant research has repeatedly demonstrated that welfare production regimes mold policy preferences (Andreß and Heien 2001; Brooks and Manza 2006b; Svalfors 1997). Significantly less research uses the perspective of welfare production regimes as a frame for labor market preferences. Using a comparative institutional perspective, Gallie (2007) finds that welfare regimes explain part of the variation in job values¹³. Various other attitudes toward work have been analyzed from a regime perspective: commitment to employment (Hult and Svalfors 2002), inequality and redistribution (Svalfors 1997), and perceived job insecurity (Green 2009). Through this research, regime theory has also proven a useful frame to explain how the quality of temporary work compared to unemployment translates into personal willingness to take temporary work.

¹³ However, Gallie finds the production regime typology less useful for explaining international variation in work values. A comparison of Denmark, Finland, Germany, Great Britain, and Sweden revealed that Scandinavian countries formed an identifiable cluster, while Germany, generally classified with Scandinavia as a coordinated regime, shows greater similarity to Great Britain.

Limitations

One obvious limitation of this study is the lack of information about workers' contract status. The 2005 ISSP Work Orientations module does not ask respondents whether they are currently employed in a temporary or permanent job. This absence is managed as far as possible by controlling for perceived job security and promotion prospects. If temporary workers are, by virtue of their familiarity with or acclimation to contract work, more amenable to future temporary jobs, we should see an elevated preference for temporary work over unemployment in regimes with a high proportion of temporary workers. Rather, the opposite trend appears: in regimes where temporary work is prevalent, workers are generally *more* averse to temporary employment, in keeping with the “temporary work as trap” scenario.

Implications

Several policy suggestions can be derived from these results. First, workers may deliberately avoid poor-quality temporary jobs that are sequestered in secondary labor markets, a situation that cannot be fixed by only addressing job quality without attending to labor market rigidity. Welfare production regimes with flexible labor markets can effectively entice workers to take temporary jobs as long as those temporary jobs are of comparable quality to permanent work. In regimes where temporary work correlates with poor-quality, dead-end work, workers may opt for unemployment in the hopes of quickly locating permanent work. Dickerson and Green (2012) demonstrate that workers often overestimate their employability, a perceptual bias that can cause them to elect unemployment based on the inflated belief that it will be short-lived. In regimes with rigid labor markets and dead-end temporary jobs, workers who choose unemployment over temporary work may find themselves unable to re-enter employment as easily as they first expected. On a large enough scale, this perceptual inaccuracy can inflate the

unemployment rate, as workers opt for unemployment instead of unstable work that might soon throw them into unemployment anyway.

Significant regime differences in the predictors of temporary work indicate the need for policy refinements in certain countries if states want to encourage workers to voluntarily take temporary jobs. In regimes based on a logic of egalitarianism and full employment such as the Scandinavian countries, income and job protections are not reserved for a protected segment of permanent workers. A commitment to full employment requires employability initiatives designed to improve employment security for all workers, including temporary ones. A twofold approach that combines job quality and protected flexibility (also called “flexicurity”) increases the appeal of temporary work and reduces the propensity for workers to languish in unemployment by coupling benefits to retraining and job search. Universal income- and employment-enhancing policies are a resource-intensive approach to improving the appeal of temporary work—an important caveat to the Scandinavian approach. An alternative, low-road strategy would be to simply erase job and unemployment protections for all workers, an approach the United States pursues with vigor. By making unemployment especially unattractive, workers will be motivated to accept any job regardless of permanency or quality. The effects of such widespread risk among workers will result either in higher spending on means-tested benefits or higher poverty. The optimal solution, tenable for the greatest number of states and their citizenry, lies somewhere in between.

This study suggests several future avenues for research. Gender differences in risk preferences merits further exploration. In the regressions, gender emerged as the only predictor that was consistently significant across regimes. Regardless of the level of labor market flexibility or income support from the welfare state, men are universally more averse to

temporary work than women. The feminization and stigma of temporary work, the location of temporary work in outsider markets, and men's greater accumulation of unemployment insurance all offer potential explanations for this phenomenon. Scholars can enrich our understanding of job choice by exploring why gender is a constant factor in every institutional configuration.

Most importantly, future research should continue to explore job choice as a relative risk assessment conditioned by institutions that shape the comparative appeal of available employment alternatives. Knowing how workers evaluate temporary jobs can yield insight into the types of jobs workers are willing to take, an issue that matters importantly considering the trend toward employers' increased use of nonstandard forms of employment over the past several decades. If workers who are unable to procure permanent positions prefer to forgo temporary work in favor of unemployment, we must ask why workers evaluate temporary work as a riskier prospect than unemployment. For workers who avoid temporary work in favor of unemployment, are they pushed out of the labor force by poor-quality temporary jobs in peripheral labor markets or pulled out by generous welfare policies that decommodify workers?

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Table 4.1. Frequencies and Means by Welfare Production Regime

	Liberal	Corporatist	Social democratic	Mediterranean	Firm- coordinated	Post-socialist
<i>Prefer temporary work to unemployment</i>						
Strongly disagree	3.51	3.55	7.23	10.55	20.76	9.75
Disagree	11.90	10.10	13.16	14.94	20.76	12.63
Neither nor	11.69	12.92	16.90	16.17	18.30	18.88
Agree	56.95	59.62	45.72	39.69	26.66	46.75
Strongly agree	15.95	13.82	16.99	18.64	13.51	12.00
<i>Class</i>						
Skilled manual & supervisors	10.96	16.71	10.90	12.48	14.65	23.92
High controllers	16.38	9.35	13.63	10.40	9.69	5.70
Low controllers	39.84	37.76	38.24	27.38	26.63	24.54
Routine non-manual	16.59	18.06	17.97	23.27	28.21	21.31
Semi-unskilled manual	16.23	18.12	19.26	26.46	20.82	24.54
<i>Educational Attainment</i>						
Less than secondary	18.86	49.12	23.44	55.20	11.02	46.96
Higher secondary	21.71	18.47	24.97	10.30	35.35	33.71
Above higher secondary	31.32	20.47	24.73	12.48	21.07	11.40
University	28.11	11.94	26.86	22.01	32.57	7.93
<i>Employment Status</i>						
Part-time	20.60	24.71	12.30	13.26	17.80	3.84
Full-time	79.40	75.29	87.70	86.74	82.20	96.16
<i>Sector</i>						
Private	67.06	71.59	53.52	69.13	87.29	68.40
Public	32.94	28.41	46.48	30.87	12.71	31.60
<i>Union membership</i>						
Not union member	72.27	65.88	24.57	82.00	78.21	83.40
Union member	27.73	34.12	75.43	18.00	21.79	16.60
<i>My job is secure</i>						
Disagree/Neutral	29.82	33.29	31.97	38.22	50.73	47.34
Agree	70.18	66.71	68.03	61.78	49.27	52.66

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Table 4.1 (*Continued*)

	Liberal	Corporatist	Social democratic	Mediterranean	Firm- coordinated	Post-socialist
<i>My opportunities for advancement are high</i>						
Disagree/Neutral	69.56	73.53	81.99	74.70	78.33	86.99
Agree	30.44	26.47	18.01	25.30	21.67	13.01
<i>Gender</i>						
Female	52.98	47.00	52.75	53.51	42.01	53.53
Male	47.02	53.00	47.25	46.49	57.99	46.47
<i>Age</i>						
Mean	41.40	40.41	43.12	39.44	39.96	40.44
SD	11.67	11.25	11.12	10.73	11.09	10.53
<i>Employed spouse</i>						
Not employed/employed part-time	58.69	55.65	43.99	53.85	67.55	49.32
Employed full-time	41.31	44.35	56.01	46.15	32.45	50.68
<i>N</i>	3394	1700	2487	2067	826	807

Table 4.2. Partial Proportional Odds Models of Preference for Temporary Work over Unemployment, Odds Ratios

	Liberal	Corporatist	Social democratic	Mediterranean	Firm- coordinated	Post- socialist
<i>Class (ref: Skilled manual)</i>						
High controllers	1.007 (0.161)	1.255 (0.339)	1.557** (0.262)	0.973 (0.237)	1.363 (0.383)	0.808 (0.274)
Low controllers	0.973 (0.138)	1.494* (0.249)	1.438 (0.270)	0.937 (0.168)	1.330 (0.349)	1.186 (0.284)
Routine non-manual	0.831 (0.130)	1.393 (0.258)	1.333 (0.209)	1.433 (0.391)	0.897 (0.285)	1.246 (0.312)
Semi-skilled manual	0.885 (0.135)	0.768 (0.129)	1.084 (0.159)	1.086 (0.175)	1.467 (0.343)	1.311 (0.292)
<i>Education (ref. Less than secondary)</i>						
Higher secondary	1.452** (0.171)	0.617*** (0.085)	1.153 ^{sd} (0.300)	0.597 (0.181)	0.711 (0.179)	0.868 (0.161)
Above higher secondary	1.656*** (0.179)	0.918 (0.145)	0.952 ^{sd} (0.227)	0.954 (0.231)	0.572 (0.164)	0.586 (0.174)
University	1.995*** (0.259)	1.337 (0.290)	1.498 ^{sd} (0.395)	1.047 (0.166)	0.600 (0.173)	1.712 (0.640)
Wald test	0.000	0.000	0.004	0.007	0.523	0.187
<i>Protected statuses</i>						
Full-time status	0.778 (0.236)	0.914 (0.118)	1.013 (0.120)	0.685 (0.191)	0.541*** (0.100)	0.680 (0.215)
Private sector	0.933 (0.086)	1.092 (0.130)	1.048 (0.086)	1.598* (0.324)	0.861 (0.172)	1.109 (0.190)
Union member	0.680*** (0.063)	0.805 (0.090)	0.804* (0.075)	1.182 (0.222)	1.031 (0.171)	1.737 ^{sd} (0.653)
Wald test	0.000	0.173	0.079	0.172	0.010	0.042

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Table 4.2 (*Continued*)

	Liberal	Corporatist	Social democratic	Mediterranean	Firm- coordinated	Post- socialist
<i>Job perceptions</i>						
Job security	1.167 (0.099)	0.918 (0.102)	0.839* (0.069)	0.818 ^{sd} (0.147)	0.964 ^{sd} (0.149)	0.689* (0.100)
Advancement opportunities	0.939 (0.085)	0.846 (0.109)	1.142 (0.123)	1.173 (0.127)	0.910 (0.142)	1.094 (0.250)
Wald test	0.170	0.254	0.068	0.019	0.994	0.035
<i>Demographic traits</i>						
Male	0.720*** (0.066)	0.625*** (0.080)	0.986 ^{sd} (0.164)	0.672* (0.116)	0.666** (0.098)	0.713* (0.118)
Age	0.992* (0.004)	0.988* (0.005)	0.973*** (0.003)	0.982 ^{sd**} (0.007)	0.980 ^{sd*} (0.009)	1.001 ^{sd} (0.012)
Spouse employed full- time	0.930 (0.075)	1.081 (0.122)	0.943 (0.073)	0.865 (0.083)	0.876 (0.128)	1.251 (0.188)
Wald test	0.000	0.000	0.000	0.060	0.000	0.009
<i>γ Disagree</i>						
Higher secondary	—	—	1.277 (0.162)	—	—	—
Above higher secondary	—	—	0.889 (0.134)	—	—	—
University	—	—	1.583** (0.277)	—	—	—
Union member	—	—	—	—	—	0.965 (0.249)
Job security	—	—	—	0.757* (0.099)	0.992 (0.133)	—
Male	—	—	0.713** (0.081)	—	—	—
Age	—	—	—	0.987* (0.005)	1.003 (0.007)	1.001 (0.009)

(Continued on next page)

Table 4.2 (*Continued*)

	Liberal	Corporatist	Social democratic	Mediterranean	Firm- coordinated	Post- socialist
<i>γ Neither nor</i>						
Higher secondary	—	—	1.282* (0.152)	—	—	—
Above higher secondary	—	—	1.228 (0.159)	—	—	—
University	—	—	1.665*** (0.223)	—	—	—
Union member	—	—	—	—	—	1.369 (0.305)
Job security	—	—	—	1.009 (0.113)	0.988 (0.131)	—
Male	—	—	0.624*** (0.062)	—	—	—
Age	—	—	—	0.983*** (0.005)	1.017* (0.007)	0.995 (0.008)
<i>γ Agree</i>						
Higher secondary	—	—	1.455 (0.332)	—	—	—
Above higher secondary	—	—	1.868** (0.403)	—	—	—
University	—	—	1.881** (0.454)	—	—	—
Union member	—	—	—	—	—	0.630 (0.257)
Job security	—	—	—	1.220 (0.170)	1.024 (0.195)	—
Male	—	—	0.778* (0.094)	—	—	—

(*Continued on next page*)

Table 4.2 (*Continued*)

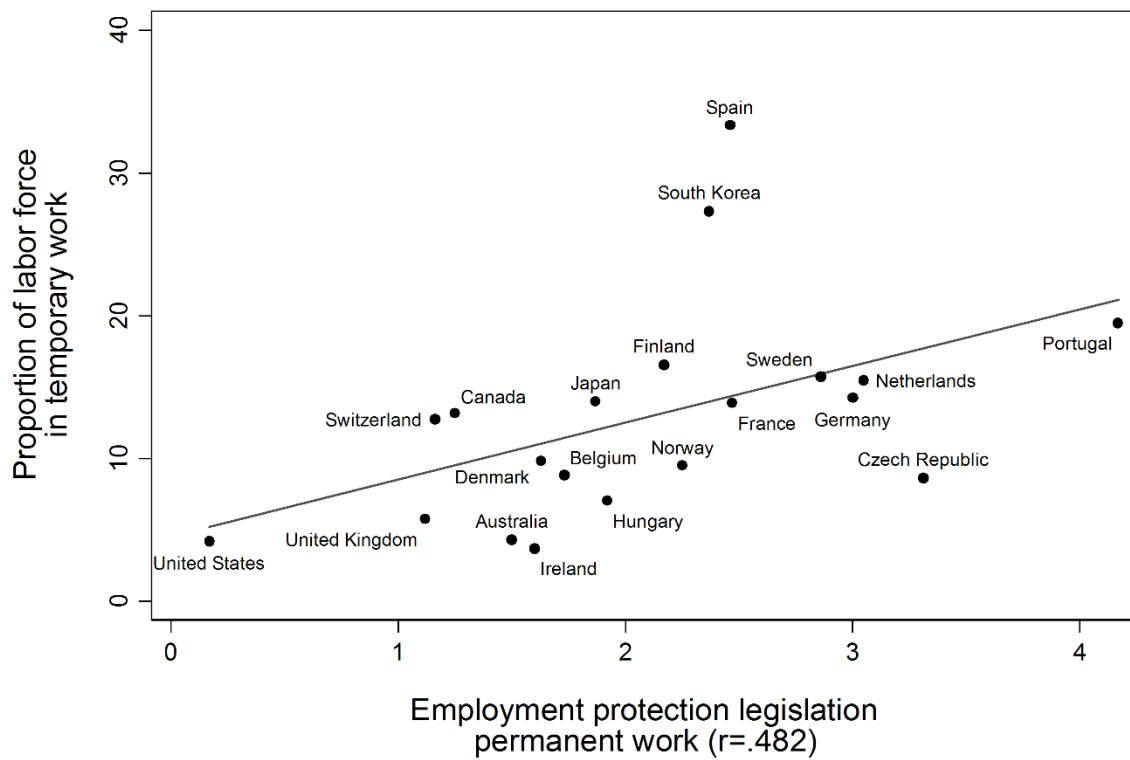
	Liberal	Corporatist	Social democratic	Mediterranean	Firm- coordinated	Post- socialist
Age	—	—	—	0.987* (0.006)	1.026* (0.011)	0.964*** (0.011)
<i>N</i>	3394	1700	2487	2067	826	807

Exponentiated coefficients; Standard errors in parentheses

sd = indicates a model that violates the parallel regression assumption; coefficients in first section of the table refer only to workers who strongly disagree that they would take temporary work. Subsequent panels provide regression coefficients for other values of the dependent variable.

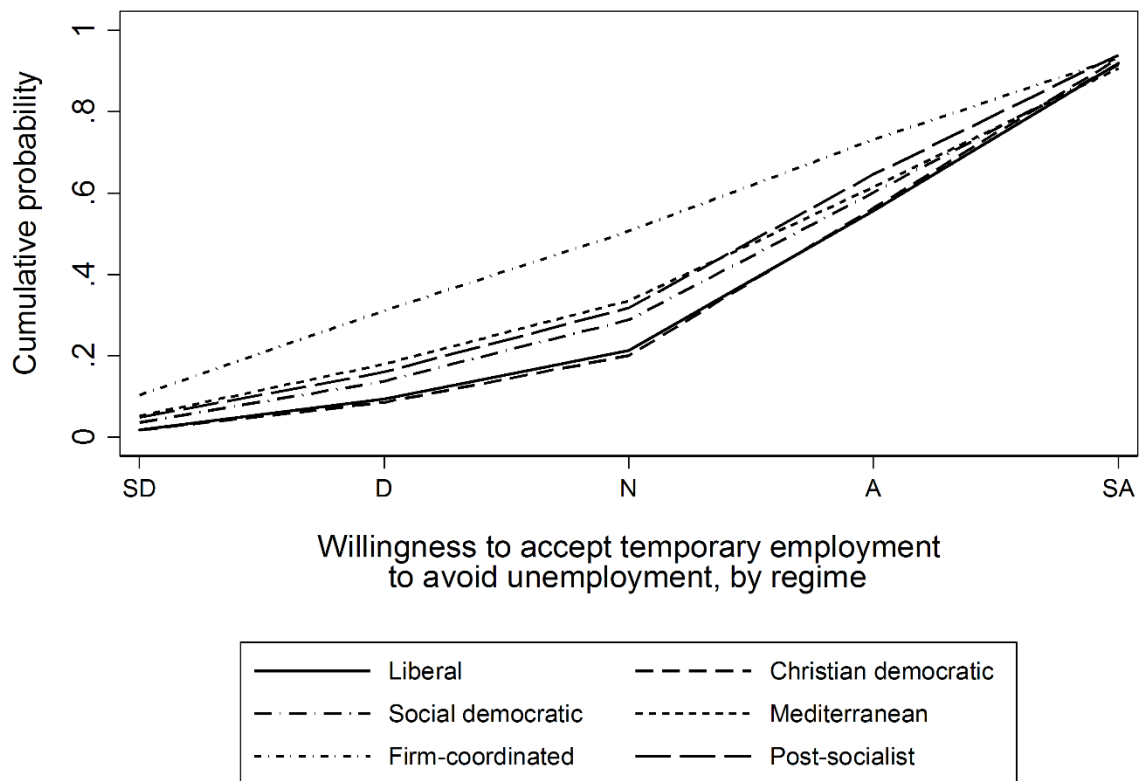
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 4.1. Bivariate Correlation between the Prevalence of Temporary Work and the Strength of EPL for Permanent Work



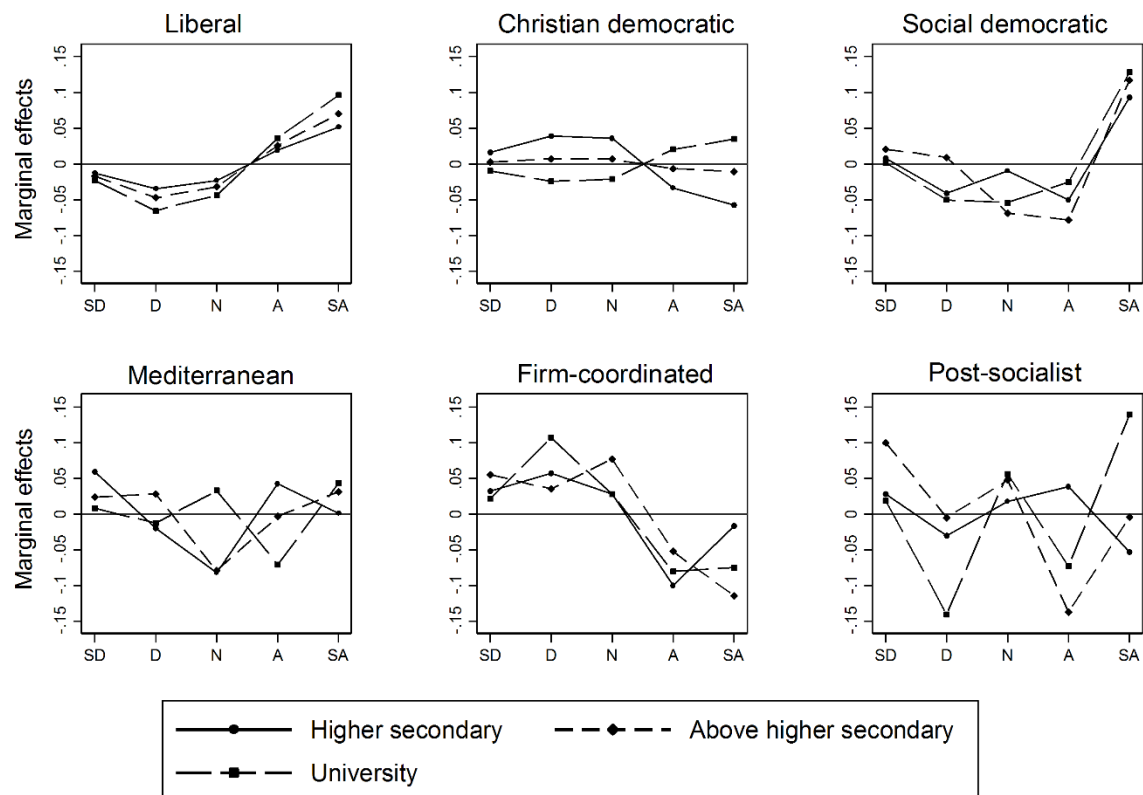
Source: OECD.Stat (<http://www.oecd-ilibrary.org/statistics>)

Figure 4.2. Cumulative Probability of Response to Statement “In order to avoid unemployment I would be willing to accept temporary employment.”



X-axis key: SD=Strongly disagree D=Disagree N=Neither/nor A=Agree SA=Strongly agree

Figure 4.3. Average Marginal Effects of Education



X-axis key: SD=Strongly disagree D=Disagree N=Neither/nor A=Agree SA=Strongly agree

Figure 4.4. Average Marginal Effects of Union Membership

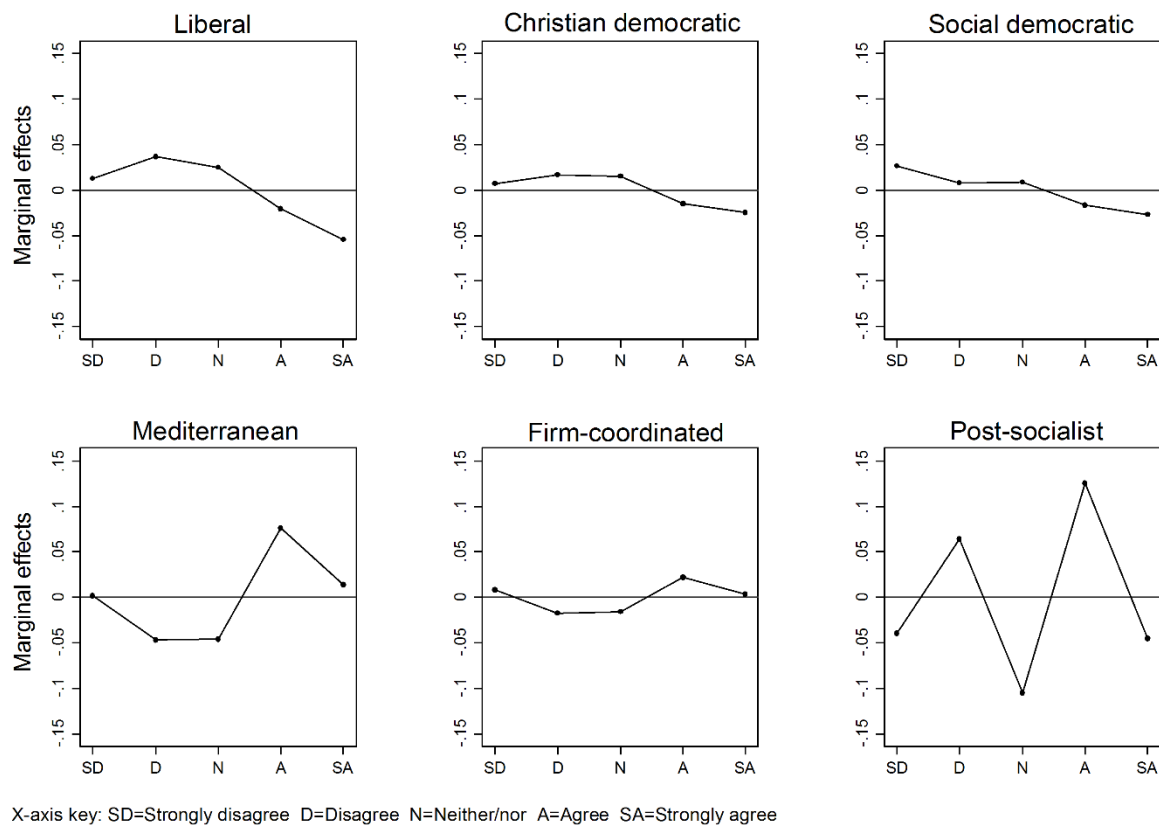


Figure 4.5. Average Marginal Effects of Full-Time Employment

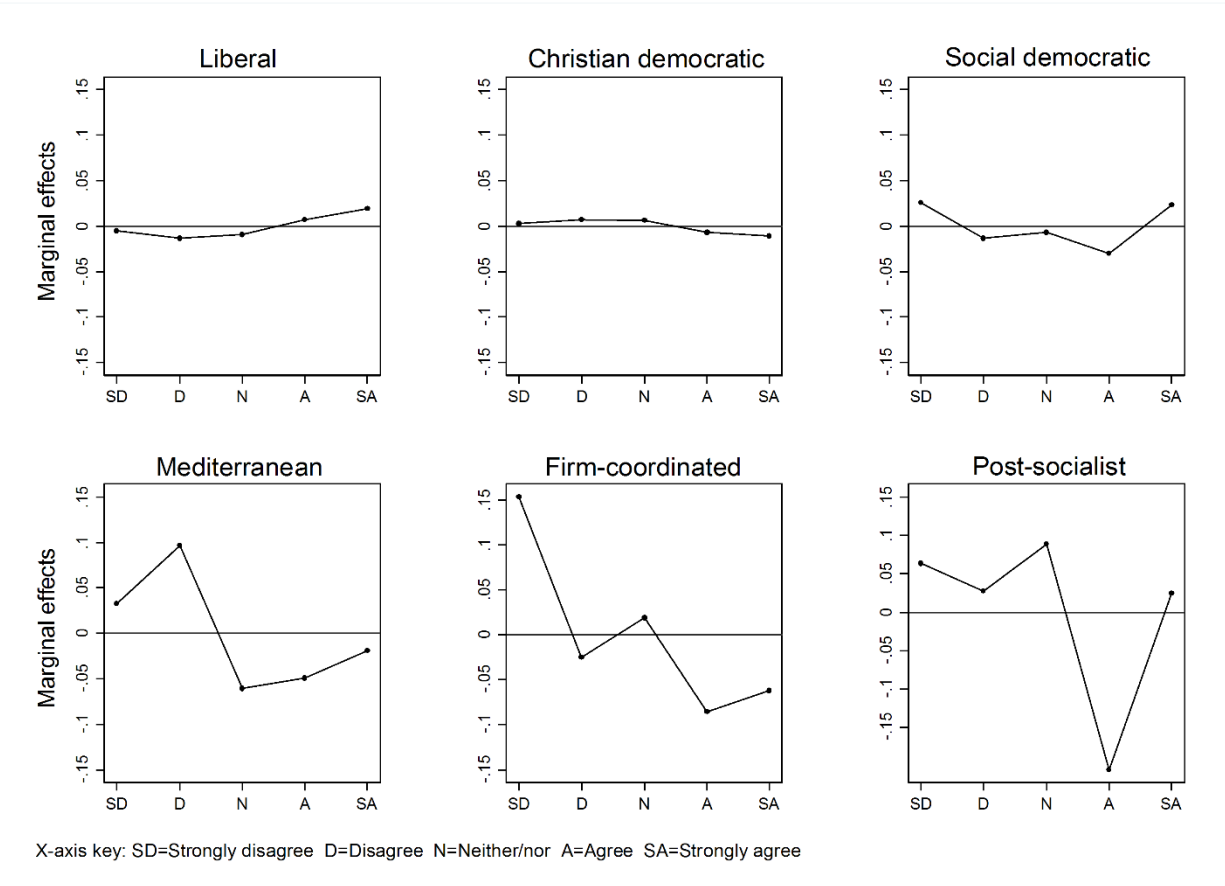
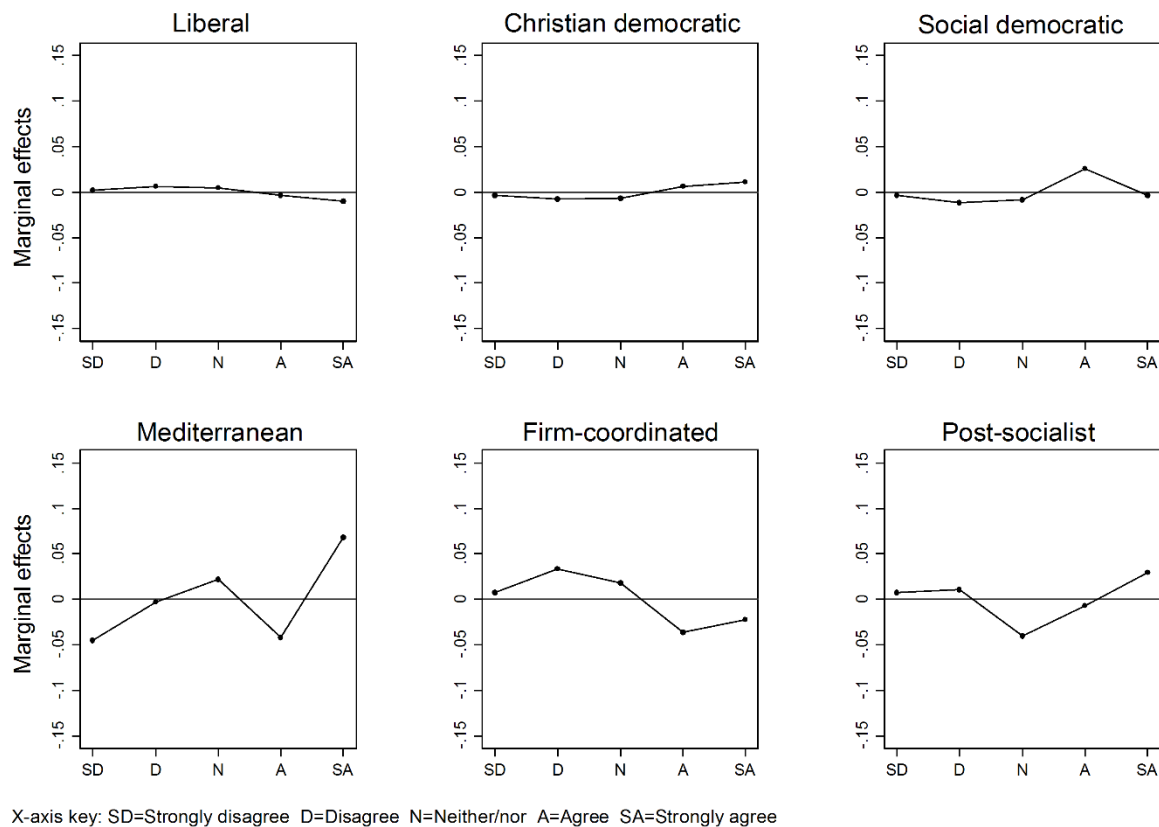


Figure 4.6. Average Marginal Effects of Sector



CHAPTER 5. CONCLUSION

The dissertation began with the premise that, in any capitalist economy, workers are exposed to unpredictable and uncontrollable threats from internal and external labor markets. As imperfect “probability calculators” (Huang, Lee, Ashford, Zhenxiong, and Xiaopeng 2010), the proportion of workers who perceive risk is far greater than the incidence of realized risk (Dickerson and Green 2012). In this project, I explore how workers’ risk perceptions are determined by the unpredictable threats implied in labor market conditions and the coping resources provided by the state. Although most perceptions of labor market risk will not culminate in an adverse event such as job loss or prolonged unemployment, subjective interpretations still matter importantly. Workers who believe they are disposable or unemployable and powerless to correct either of these situations are often besieged by anxiety. The detrimental psychological consequences of unpredictability and uncontrollability may make workers averse to precarity, steering their labor market preferences toward the least risky option. Understanding how the welfare state molds these risk perceptions is necessary to the development of political strategies that can bolster the well-being of the workforce.

This project situates risk perceptions at the intersection of states and markets, in acknowledgement of their mutual influence. “Welfare states are not just a Polanyian protective reaction against modern capitalism. They are a fundamental part of modern capitalism.” (Pierson 2000:793). The welfare state inserts a third actor into the labor market, a regulatory body that sets boundaries on the employment relationship and provides stability for the labor force.

Workers' perceptions of labor market risk should therefore not be considered as something independent of the policy context, but partly as a product of those policies. To this end, I examined the role of institutional change, labor market policies, and labor market rigidity on the cognitive and affective experience of risk. Each of these topics was evaluated in three research papers.

Change and Job Insecurity

Chapter 2 compares the relative import of policy change and labor market change on job insecurity. The main finding is that job insecurity responds most strongly to labor market fluctuations. In particular, GDP growth, declining unemployment, and a decrease in the long-term unemployment rate all alleviate job insecurity. The key macrostructural developments emblematic of the ages of precarity and austerity—declining unionization, weakened employment protection legislation, a rise in nonstandard employment—fail to manifest in heightened job insecurity. A similar study, by Lübke and Erlinghagen (2014), corroborates this conclusion.

While institutional shifts in power resources and precarity have significantly altered the economic landscape, these changes may be too diffuse and gradual to register as potential threats to one's job. They form the context within which easily identifiable, immediate labor market shifts occur. When workers assess whether their jobs are at risk, short-term changes in the unemployment rate or economic expansion provide a gauge of immediate threat. The temperature of the labor market is more readily felt than changes in the economic climate.

Affective Insecurity

In the corpus of insecurity research, employment insecurity and affective insecurity are understudied compared to job insecurity, an imbalance partly attributable to available survey data. In the ISSP, a survey item about affective insecurity did not appear until 2005. The ISSP Work Orientations Module does include a question about employment insecurity in all three waves (1989, 1997, and 2005), but the question wording varies in each survey. Chapter 3 finds that worry about job loss is a function of both internal and external labor market prospects. This implies that, absent an immediate threat to the job, a worker may still feel worried about job loss, a fear driven by the belief that they are unemployable.

The most surprising finding of Chapter 3 is the lack of an indirect effect of policy on affective insecurity through cognitive insecurity. In psychological theories, cognition precedes affect. One of the most common theoretical perspectives in the organizational literature, appraisal theory, describes a process wherein objective situational demands and coping resources feed into a cognitive interpretation of a situation as threatening or challenging. Anxiety arises from the anticipation of harm and the inability to counteract it (Lazarus 1991). In contradiction of this perspective, Chapter 3 did not establish a mediating pathway. This means that policy acts directly on affect, not through cognition. Specifically, policies that help workers cope with job loss alleviate affective insecurity. Employment protection legislation, a measure that reduces the unpredictability of job loss, has no effect.

Precarity Aversion

Chapter 4 is a stark demonstration of the perverse effects of strict EPL. In rigid markets stratified by contract status, where temporary work is often a trap, workers in protected labor market positions are highly averse to precarious work, to the point that these workers would

prefer to be unemployed than take a temporary job. Conversely, in flexible labor markets, education provides access to better-quality temporary work. Using a series of generalized ordered logit models, I find regime differences in the relationship between precarity aversion and human capital. Education predicts willingness to take temporary work in regimes with flexible labor markets but has no effect on temporary work avoidance in regimes with labor markets segmented by contract status because human capital bears little on the quality of temporary work available to workers. When mobility from temporary to permanent jobs is determined more by policies than individual skills, human capital opens no doors for temporary workers.

These findings accord with theories that dichotomize temporary work as a bridge or trap. To the extent that temporary work results in repeat spells of temporary contracts and unemployment rather than permanent work, workers will avoid temporary jobs. Temporary work may also prove aversive because it conveys a negative signal to employers. In some countries, temporary work carries a stigma at least as great as unemployment. Thus, temporary work may, in some cases, be *more* aversive than unemployment.

Methodological and Theoretical Contributions

This dissertation provides several insights into the comparative study of risk perceptions. First, it addresses two common methodological problems prevalent in comparative insecurity research. The first issue, prevalent in all areas of empirical sociology, is the application of linear regression to an ordered dependent variable. The pitfalls of this strategy are well known: the numbering system is arbitrary, the estimation can return negative probabilities, and the effect of x on y is not uniform (Long 1997; McKelvey and Zavoina 1975). One solution sometimes adopted is to collapse an ordinal scales into a binomial variable (Chung and van Oorschot 2011;

Erlinghagen 2008; Lübke and Erlinghagen 2014), but this causes an unnecessary loss of information.

Second, the “small n” problem of comparative research is handled several different ways in this dissertation. Chapter 3 uses Bayesian analysis to test a multilevel mediation model with an ordered dependent variable. Bayesian estimation shows promise for comparative research with a small number of countries because this modeling strategy does not penalize small sample sizes as maximum likelihood estimates do. With only 20 or so countries available for analysis, the likelihood of generating an unstable model increases with every country-level variable added. Chapter 2 also addresses the issue of small country-level sample sizes by estimating separate models for each country-level variable. This approach does not overburden the model and also circumvents issues of collinearity among country-level variables. Labor market policies tend to correlate highly, particularly active and passive labor market policies, so modeling each policy individually is a prudent approach.

The tendency of policies to co-vary suggests that regime theory, a typology that classifies countries according to their policies on decommodification, stratification, labor market coordination, and private-public mix, is a fruitful third analytical approach, already applied to good effect in comparative studies of job insecurity (Esser and Olsen 2012; Green 2009; Olsen, Kalleberg, and Nesheim 2010). Chapter 4 extends its usefulness to the study of precarity avoidance and job choice. The hybrid typology of welfare production regimes—an approach that melds production regimes (which defines regimes by the predominance of general or specific skills and the institutions that support acquisition of those skills) and welfare regimes (which classifies countries according to redistributive policies)—yields a parsimonious way to conduct comparative studies on risk perceptions.

This dissertation also cautions against using combined indicators of job, employment, and affective insecurity. Whereas job insecurity is catalyzed by a perceived threat from the employer, employment insecurity is fueled by a perceived lack of coping resources such as human capital or alternative sources of income. Job insecurity refers to the threat of job loss and employment insecurity to the inability to cope with job loss. Affective insecurity arises when the perception of threat outweighs the perceived coping resources. Both conceptually and empirically, these concepts are distinct. Until the policies relevant to each type of insecurity are clearly established, the best practice is to model them as unique concepts.

This dissertation has explored three different topics on the institutional and structural factors influential over workers' risk perceptions, with the overarching goal to situate risk perceptions at the state-market nexus. To achieve this, I analyzed various sources of labor market threat and state-sponsored coping resources, casting the balance of threat and coping as a core determinant of risk perceptions. Labor market policies that facilitate re-employment, stabilize income during unemployment, and protect jobs all impact some aspect of workers' perceptions of labor market risks. These three articles summarize how well the welfare state is actually fulfilling its role as a risk manager, from the perspective of the workers themselves.

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