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Rethinking risk in the new economy: Age and cohort effects on unemployment and re-employment

Stephen Lippmann

ABSTRACT

One of the major risks associated with flexible employment in the new economy is that of sudden and involuntary unemployment. The risk of involuntary unemployment, or displacement, has become widespread in the new economy, threatening workers across firms, occupations and industries. While most workers now face the risk of displacement, some appear better able to negotiate and navigate the flexible labor market that characterizes the 'new' economy. Using pooled cross-sectional data covering over 20 years, I examine how workers' abilities to recover from displacement have changed over the past two decades. Specifically, I examine how older workers – typically thought to experience greater risk of displacement and disadvantage in the flexible labor market – fare in the new economy. My results indicate that birth cohort is a better predictor than chronological age of post-displacement employment outcomes, including the duration of unemployment and the likelihood of switching occupations upon re-employment. Those workers who entered the labor market in the years before employment flexibility became widespread suffer the most from displacement. These findings are interpreted from an institutional perspective, which focuses attention on the dramatic changes that have occurred in employment institutions and the employment relationship in the past two decades, and the ways that individuals understand and respond to them. As the social contract between employers and employees has largely been dismantled, those workers who may carry vestiges

of the cognitive and cultural frameworks underlying that contract face greater risk of employment and career disruption in the new economy.

KEYWORDS aging ■ downsizing ■ employment ■ institutional theory ■ labor markets ■ organizational theory

The ability of American workers to adapt to changes in employment and the 'new' economy has been the subject of a growing body of literature in the past decade. Prescriptive accounts (Cappelli, 1999; Friedman, 2005; Osterman et al., 2001) encourage workers to continually learn new skills and embrace labor market flexibility, while descriptive accounts find that some workers are faring better than others (Spalter-Roth & Deitch, 1999). Underlying much of this research is an assumption that workers face new and growing risks of sudden unemployment as downsizing, offshoring and outsourcing have all become standard business practices. Although some argue that the risk of involuntary unemployment has not risen substantially in recent decades (Green, 2006), it does appear that the risks associated with displacement and involuntary unemployment, including long unemployment spells, wage losses and career disruptions, are being spread across a growing number of occupational and industrial groups in the labor market (Boisjoly et al., 1998). Because involuntary unemployment poses greater risks to those who are unprepared or unable to respond and adapt to it, or are in structural positions that may make it difficult to do so, it is important that attention is paid to the responses of workers to these events and the associated labor market outcomes that occur as a result of them. Using nationally representative pooled cross-sectional data, this article contributes to our understanding of this process by examining workers' responses to growing employment flexibility over the past two decades. Specifically, it examines age and cohort differences in re-employment patterns among a sample of displaced workers – those who have lost a job involuntarily. Understanding the risks that older workers face in the new economy is of great importance as employment continues to be increasingly insecure, the median age of the labor force, along with the rest of society, continues to rise and the social safety nets that enabled security in retirement become increasingly precarious.

'Flexible employment' is typically understood to entail a dismantling of the 'social contract' that governed employer–employee relations in the decades after the Second World War (Rubin, 1996). Implicit in this contract

was an understanding that, in exchange for loyalty and commitment to a given firm, employees would be rewarded with long-term employment and opportunities for career growth and mobility (Kalleberg, 2000; Osterman, 1999). In the new economic environment, employees are expected to develop careers over multiple employers, and firms' commitments to employees are not guaranteed over the long term. Growing employment flexibility presents a complicated mix of challenges and opportunities to workers. For some, flexibility increases opportunities for upward mobility and greatly reduces the tedium and monotony of work on a single job in a single firm (Barley & Kunda, 2004). For others, though, growing flexibility means increased instability and uncertainty, wage losses, mid-life career changes or long spells of unemployment as firms have worked to shift the risks associated with economic fluctuations and labor market turbulence onto individuals (Dudley, 1994; Koeber, 2002; Smith & Rubin, 1997).

Despite the debate and somewhat disparate findings, research has consistently found that older workers suffer more from displacement than younger workers (Gardner, 1995; Koeber & Wright, 2001). Older workers, for a variety of reasons, appear to have greater difficulty finding employment after being displaced. Recently, however, research has speculated that it is not only age that places older workers at a disadvantage in the flexible labor market. In addition, the fact that older workers were born, raised and began their careers during a dramatically different economic era explains, in part, why they have difficulty negotiating the flexible economy (Rubin & Brody, 2005). Stated more formally, it may be that a cohort effect, and not only an age effect accounts for the age differentials in some employment outcomes found in existing research.

Unfortunately, this and other existing research that relies on cross-sectional data is not equipped to fully disentangle the effects of age and cohort in employment outcomes for older workers. Using pooled cross-sections of nationally representative data, I examine more fully the effects of age and cohort on older workers' experiences with involuntary unemployment and re-employment. Such data allow for the examination of whether older workers have consistently been at greater risk in the labor market, whether age is becoming increasingly salient in an economy characterized by greater fluidity and flexibility or whether the historical conditions surrounding individuals' labor market experiences – and not simply chronological age – influence their current labor market experiences. In addition to synthesizing the literature on age and displacement, I draw on theories of institutional change and cognitive 'sense-making' to explore alternative explanations for how birth cohort may work to disadvantage older workers who have experienced displacement due to downsizing over the past 20 years.

Age and displacement

While the risk of displacement is spreading across occupational and industrial groups, its effects on older individuals appear to be particularly detrimental. Workers aged 55 to 64 are more likely than any others to be displaced (Gardner, 1995). Further, research has consistently documented that older workers are less likely to become re-employed or to find quality jobs when they do become re-employed (Farber, 1993; Koeber & Wright, 2001; Smith & Rubin, 1997). In some contexts, older workers suffer greater earnings losses upon re-employment as a result of displacement. In their study of the California semi-conductor industry, Ong and Mar (1992) found that age was associated with lower post-displacement earnings. Koeber and Wright (2001), using nationally representative data, found that all workers aged 50 and above experienced significantly greater earnings losses than their counterparts below the age of 50, and older workers are more likely to be displaced from manufacturing industries where their earnings were higher.

Research on the negative displacement-related employment outcomes associated with age focus primarily on four explanatory factors: 1) skills mismatch/obsolescence; 2) resistance to flexibility; 3) age-specific wage premiums; and 4) age discrimination. While perceptions, bias and discrimination all reinforce the effects of the first three of these factors (Bendick et al., 1999; Noonan, 2005), they are treated in the literature as conceptually distinct forces that structure the opportunities available to older workers.

Skills mismatch

In an economic era characterized by rapid and dramatic changes in technology, the skills required to negotiate work and the labor market are constantly evolving (Autor et al., 2003). As technology changes relevant skills and the way that work is done, it also changes patterns of employment. According to Levy and Murnane (2004: 2), 'there is a growing divide within human labor itself – a divide between those who can and those who cannot do valued work in an economy filled with computers'. In such an economy, groups with limited access to computers and relevant training are at a distinct disadvantage in the labor market. The skills possessed by older workers may be out of step with those that are in high demand in the labor market. Economists (e.g. Card & Lemieux, 2001) have found that returns to education decline with age, indicating that skills acquired in previous generations have less value in the current labor market. Hirsch et al. (2000), using more direct measures of the skill composition of jobs, found that

occupations requiring high numeric aptitude and those with high computer usage are less likely to be filled by older workers. In addition, and perhaps more importantly, they are significantly less likely to be hired into these occupations. They conclude that 'older workers are unlikely to select or be selected for jobs providing on the job training or requiring computer-based skills' (Hirsch et al., 2000: 412). Taken together, these findings suggest that older workers are disadvantaged by a selection process negotiated by both employer and employee.

Further complicating the issue for older workers are perceptions about their ability to learn new skills (Maurer, 2001). Those who believe that skills become obsolete over time, as employers are wont to do, are significantly more likely to believe that individuals over the age of 50 lack the ability to learn and develop new skills (Wrenn & Maurer, 2004). Given the pervasiveness of these beliefs, it is not surprising that employers are less likely to hire older individuals for jobs requiring significant amounts of on-the-job training (Hirsch et al., 2000).

Resistance to flexibility

Other explanations focus not on the nature or perceptions of older workers' stock of human capital but on the dispositions and values of older workers (e.g. Yeatts et al., 1999). In the flexible economy, the ability to adapt to and rebound from displacement is particularly important (Cappelli, 1999; Osterman, 1999). Workers also face the growing reality and expectation that a career is to be cobbled together out of a variety of jobs and occupations across a number of firms (Kalleberg, 1996).

Older workers, however, remain more committed to organizations even when those organizations have recently downsized portions of their labor forces (Rubin & Brody, 2005). They are also less likely to expect to lose their job, even as the risk of displacement increased for all workers in the 1990s (Manski & Straub, 2000). Elman and O'Rand (2002) found that older workers were less likely to engage in educational activities that might help them to be proactive about dealing with employment risks in the new economy (see also Leana & Feldman, 1992). Elman and O'Rand label the activities that may help older workers negotiate the flexible economy *non-normative life course behaviors*, because they deviate from the standard sequential life course model of education–work–retirement. The social sanctions that arise from such deviance appear to discourage older workers from engaging in them and, as a result, from adapting effectively to changes in employment. These results indicate that older workers, for a variety of

reasons, are less likely to adopt attitudes and behaviors that will help them to negotiate the flexible labor market.

These patterns have important implications for older workers who become displaced. When workers become displaced, they face disruptions to their career development and family and personal lives. They are forced to engage in job searching activities that, for many, have not been put into practice for years, if not decades. Qualitative evidence (Koeber, 2002; Uchitelle, 2006) supports the notion that older workers have a more difficult time rebounding from displacement. While representative data are lacking, one recent study found a similar pattern. Using data from the Panel Study of Income Dynamics (PSID), Baumol et al. (2003) analyzed a sample of job changers and found that, while most workers were more likely to switch occupation and/or industry in the event of a job change, older workers were *less* likely to do so.¹ Older workers, the authors argue, may have accumulated more job-specific human capital, increasing the potential costs of a job switch into a new occupation or industry. In addition, the 'shock' of mid- to late-career unemployment may have social-psychological consequences that lead to reluctance to search actively in new areas or participate in retraining programs that could potentially be of assistance (Knapp & Harms, 2002; Leana & Feldman, 1992).

Age-specific wage premiums

Older workers, net of other factors, typically command higher wages than their younger counterparts because of accumulated seniority and job tenure. Theories that focus on the structural changes associated with employment flexibility have noted that, individual-level characteristics described above notwithstanding, older workers are often in structural positions that make them more vulnerable to displacement and downsizing (Hirsch et al., 2000). As evidence of this pattern, Koeber and Wright (2001) found that not only did older workers who were displaced earn more than their younger displaced counterparts, but their earnings losses upon re-employment were greater. These patterns were particularly pronounced in goods producing industries, where the wage structure results in higher wages for older workers who typically have more seniority.

Two implicit assumptions about the reasons why displacement affects older workers remain untested in the existing research. The first, summarized above, involves aging workers' decline in relevant training, skills and productivity. In any labor market, according to this set of explanations, workers are at an increasing disadvantage as they age due to the passage of

time since training or their movement up career and occupational ladders. Furthermore, the negative labor market outcomes associated with age and aging are exacerbated by well-documented prevalence of age discrimination in employment. Roscigno et al. (2007) elaborate on a series of discriminatory practices, both explicitly ageist and ideological 'neutral', that negatively affect that promotion, retention, and employment chances of workers over the age of 50, and especially for those approaching retirement. Therefore, much of the existing literature would predict a positive association between chronological age and detrimental employment outcomes, including the likelihood of displacement, longer unemployment spells after displacement, and difficulty adapting to displacement and employment flexibility.

A second set of explanations, to which I turn below, involves changes in the social and cultural assumptions in the employment relationship. The explanatory mechanisms that underlie these assumptions and the implications they have for both older workers who become displaced and the policies intended to assist these workers are quite different.

Institutional change, cohort and labor market experience

Although age is a powerful predictor of many employment-related outcomes and significantly shapes individuals' labor market opportunities (Riscigno et al., 2007), aging takes place in particular historical and institutional contexts. As such, the meaning of age and experience of aging are both time-dependent. Stated in the nomenclature of the life course perspective, this research examines the possibility that chronological age alone does not fully explain the difficulty older workers appear to have with employment flexibility and job displacement. Instead, part of the observed relationships between age and employment outcomes may be explained by a 'cohort' effect. Because most of the existing studies rely on cross-sectional data, they cannot tease out the effects of age and cohort on older workers' employment outcomes. The data included here, which cover two decades, allow me to examine these two related, but distinct, effects.

The term *cohort* describes an 'aggregate of individuals who experienced the same event within the same time interval', and remains a powerful concept for understanding social change (Ryder, 1965: 845). Cohort analyses help to clarify how the processes of aging unfolds within a particular set of historical circumstances and contexts, and how the interaction of individual aging and broader social and historical patterns works to create both meaning for individuals and continuity and change for society (Buchmann, 1989; Elder, 1975, 2002). The life course perspective, with its emphasis on

cohort effects, has proven useful for understanding a variety of work-related processes and outcomes. For example, Henretta and Lee (1996) found that cohorts of older men who reached retirement age during periods of generous social security benefits were more likely to leave the labor force, indicating that the labor force participation of older men is influenced by the specific policies in place when they reach retirement age.

The cohort concept becomes all the more important for understanding age and displacement when one considers the major and dramatic institutional changes that have occurred in workplaces and employment over the past two decades. The decades immediately following the Second World War until the early 1970s, were a time of unparalleled economic expansion and middle-class prosperity in the US. The steady growth of consumer markets and the relative isolation of the US economy from foreign competition ushered in the zenith of the 'Fordist' model of organization and employment. Under Fordism, large organizations profited from high production volumes and economies of scale. The workers who staffed these organizations were paid relatively high wages, as union membership and strength peaked in these years as well. These high wages fueled demand for the very consumer products that many of these large organizations produced, and the Fordist cycle of economic expansion continued (Harvey, 1990).

Underlying employer-employee relations during this time was an implicit understanding between the two parties that, in exchange for hard work and loyalty, employees could expect regular, steady and upwardly mobile employment with their employers. As a result, the 'standard' employment relationship was one in which work was done full-time and continued indefinitely (Kalleberg, 2000). By the mid-1970s and through the end of the 20th century, however, the standard employment relationship and the implicit social contract by which it was governed unraveled (Rubin, 1996). Faced with global competition and unwieldy organizational forms that were unable to adjust to rapidly changing environments, employers began to search for strategies to increase their flexibility and boost competitiveness. Among these strategies were new production processes that emphasized 'just-in-time' inventory management, flattened hierarchies intended to increase employee input and voice, and the functional-flexibility of labor in which employees were trained for a variety of jobs (Rinehart, 2001).

The most common response by employers, however, was a reconceptualization of the employment relationship and the social contract with employees. With the implementation of 'numerical flexibility', firms began to abandon the standard employment relationship by engaging in downsizing and mass layoffs and relying increasingly on contingent workers (Kalleberg, 2000; Rubin, 1996). Although confined primarily to blue-collar

workers at first, downsizing and employment insecurity has become a widespread feature of almost all types of employment. Firms may enact layoffs even when they are realizing a profit (Osterman, 1999). Workers certainly can no longer expect lifetime employment with one firm, and a new set of skills is needed to successfully negotiate the flexible labor market (Smith, 2001). While some have gone as far to declare employment 'dead' (Cappelli, 1999) or that all workers are, in essence, self-employed (Hakim, 1994), there is little doubt that employment is a dramatically different institution than it once was.

Although there is a general consensus that the institutional arrangements surrounding employment have changed, there is some disagreement on how these changes are affecting workers and how workers are responding to these changes. Recent work on the cognitive aspects of institutional change, however, may shed valuable theoretical insight into this process. Institutions provide structure and stability to social life, in large part, because they influence cognitive processes that shape the taken-for-granted and normative understandings held by collectivities (DiMaggio, 1997; Scott, 2001). Further, deeply held and institutionalized beliefs and understandings shape the ways that individuals react and respond to features of the social environment that require attention (George et al., 2006). Social groups separated by meaningful social boundaries (birth cohort and subsequent labor market experience, in this case) often interpret their experience and enact norms and behaviors that reflect their distinctive understandings – thus reinforcing boundaries and reproducing status distinctions (Eliasoph & Lichterman, 2003). Individuals born in a given time are socialized in a normative environment that reflects prevailing institutional structures and patterns. Much of the power of the cohort concept arises from its explicit recognition that people born at different times, and therefore in different institutional environments, perceive and react to their worlds differently.

In the case of worker displacement, those who were born, raised and began their careers in the Fordist era (from the mid-1940s until the early 1970s, roughly), when educational institutions reinforced the norms associated with that employment model (Bowles & Gintis, 1976) and jobs were stable and often permanent, are likely to have more difficulty responding to displacement as it goes against their expectations and deeply institutionalized understandings of the way employment 'ought to be'. Although Elder (1999) describes the children of the Great Depression as a resilient cohort overall – whose early life experiences gave them the tools to adapt to economic circumstances – deindustrialization and the emergence of employment flexibility both occurred well after Elder's influential analysis and presented profound challenges that may have been difficult for those born

during the Depression and shortly thereafter to overcome. Perhaps the resilience observed among the children of the Great Depression was, in part, facilitated by the nature of employment under Fordism, where hard work – a trait bred by the Depression – was commonly rewarded with upward mobility and relatively high wages. However, a willingness to work hard may pay fewer dividends in the flexible economy than does familiarity with new forms of employment and career patterns. Those raised in an era of flexibility, during which job and career changes were the norms (and anecdotes about these processes were widespread in schools and career counseling) and mass layoffs were a regular occurrence, are likely to be more familiar with the concept and more able to engage in adaptive behaviors leading to better labor market outcomes.

Such a lag between expectations and realities surrounding employment should explain much of the difficulty that some workers have in adapting to recent economic and labor market changes. Moen and Roehling (2005), adopting a life course perspective, argue that individuals' expectations about work and employment are formed during childhood and adolescent socialization. While they do not directly test how differing expectations effect cohort-based variations in important employment outcomes, a logical extension of their argument is that older workers whose parents were employed during the Fordist era and whose educational and early labor market experiences reinforced Fordist employment patterns are less likely to be familiar with or responsive to new employment realities. As a result of this lack of familiarity, these workers are more likely to experience negative labor market outcomes in the new, more flexible economy. Drawing on the life course perspective, it is expected that, net of the effects of chronological age:

H1: Those displaced workers whose labor market socialization began during the Fordist era are more likely to experience longer durations of unemployment.

H2: Those displaced workers whose labor market socialization began during the Fordist era are less likely to switch occupations upon re-employment.

Data

The data for the analysis come from the Displaced Worker, Job Tenure, and Occupational Mobility Supplements (DWS) to the Current Population

Survey (CPS) conducted biannually since the mid-1980s by the US Census Bureau.² The DWS focuses on the labor market experiences of those workers who have become displaced from work in the three years prior to the interview date as a result of: 1) a plant closing or moving; 2) shift abolition; or 3) insufficient work.³ These biannual cross-sections were pooled into a repeated cross-sectional dataset covering the years 1984–2004. In the years the DWS was conducted, 1984–2004, there were 1,078,195 CPS respondents aged 20 and above at the time of the interview. Of these respondents, 79,733 experienced displacement. Of these displaced workers, however, 31,533 respondents were missing data on the duration of unemployment – a primary dependent variable – and 48,180 are included in the analysis of unemployment duration. Two-step selection models using maximum likelihood were employed to test for possible selection bias in the final sample of displaced workers after the substantial number of cases with missing data was dropped. These maximum likelihood models are preferable to the standard Heckman-type selection models, which are sensitive to assumptions about the error term in the selection model and the specification of those models (Winship & Morgan, 1999). Two-step selection models provide an estimate of *rho*, which ‘represents a residual correlation between two outcomes that remains after all observable effects have been accounted for’ (DeMaris, 2004: 336). In other words, *rho* measures the amount of correlation between the: 1) non-reporting of data on the duration of unemployment; and 2) the duration of unemployment that is not accounted for by their mutual dependence on the explanatory variables included in the model. If *rho* differs significantly from zero, it indicates that the outcome of interest is biased due to selection problems. Estimates for *rho* in the present analysis (see note 4) indicate that it is not significantly different from zero, which demonstrates that selection is based on the *independent variables*, and does not cause a problem of bias.⁴ Finally, 57,223 workers became re-employed and were included in a final set of analyses on occupational switching.

Independent and control variables

Age and cohort

Age is measured as a continuous variable, and a second-order term is included to control for the non-linear effects of age (i.e. after a point, as they near retirement, older workers are more likely to drop out of the labor force and bias the analyses). Birth cohorts are collapsed into a series of categories covering several important historical intervals: those born during and before the Second World War and the Great Depression, up to and including 1945;

those born during the baby boom, from 1946 to 1964; and 'Generation Xers' born in and beyond 1965. Baby boomers were further disaggregated into 'early' and 'late' boomers to reflect the varied experiences of baby boomers born during the beginning and end of that era. This categorization scheme captures the important distinctions and differences in the institutional arrangements surrounding employment during and after Fordism. Although baby boomers share a significant set of common experiences and characteristics, those born in the 'early boom' were raised and socialized during the pinnacle of Fordism, during which economic expansion created many stable and well-paying jobs. Thus, as argued above, they are likely to have the most difficult time dealing with the risks associated with displacement.

The mid-1960s represent a watershed moment in the cultural history of the United States, and those individuals born in and after 1965 experienced a dramatically different set of employment and economic realities that did those from previous birth cohorts. A series of economic changes, including the onset of deindustrialization and an economic recession, occurred in the early 1970s, just as the first Generation Xers entered school and began their labor market socialization (Bluestone & Harrison, 1982). These dramatic and large-scale changes, in turn, led to more specific instances of employment restructuring in the 1970s, which Rinehart (2001) argued signaled the decline of the Fordism. Significant among the changes occurring in the early 1970s were the implementation of 'quality of work-life' (QWL) programs – which involved employee input, job sharing and job enlargement, and an overall reconsideration of the bureaucratic model – and significant benefits concessions, both of which undermined two of the fundamental structures underlying Fordist employment – stable hierarchies and high wages. Further, and more generally, the mid-1960s saw the end of the baby-boom and the beginning of a number of other significant cultural changes that brought with them a shift in not only employment structures and practices, but also new norms and ideologies that undermined the static, stable, and predictable structures associated with post-Second World War employment.

The four cohort categories included in the analysis capture the important variations in the cultural and labor market experiences of those included in this analysis. Those born during and especially before the Second World War comprise a distinct cohort, as Elder explains in his classic book *Children of the Great Depression* (1999). Their values, experiences and expectations, especially in regard to work and employment, were shaped to a very large degree by their experience with the Great Depression. The baby-boom generation clearly represents a distinct cohort, comprising individuals born into a time of unparalleled and widely shared affluence, economic expansion and

employment stability. However, the 20-year period during which the baby boom unfolded covered a dramatic set of social changes as well, and we would expect those born in the early part of the baby boom (1946–55) – who really came of age during the peak of Fordism – to behave differently than those born in the late part of the baby boom (1956–64) and on the cusp of Fordism’s collapse. Generation X, the members of which have no first-hand experience with Fordist employment relations and for whom economic instability and insecurity became a fairly regular part of life, should be relatively well adjusted to employment flexibility.

Demographic controls

Race and ethnicity was divided into three dummy variables: white (excluded category), black and other (which includes American Indians/Alaskan Natives, Asians, Hawaiians/Pacific Islanders, and those reporting two or more racial categories). Males serve as the excluded gender category.

Educational controls

Controls for education are included because of the enormous effect it has on virtually all employment outcomes. Educational attainment is divided into five categories, including those who: did not complete high school; finished high school (which serves as the reference category); attended some college but did not finish; completed a four-year college degree; attended and/or completed post-baccalaureate education.⁵

Occupation and industry

Because employment flexibility has been accompanied by dramatic shift in the structure of the US economy, controls for occupation and industry are included to control for the declining or expanding opportunities in different occupations and employment sectors. Some 505 detailed occupational classifications were collapsed into seven larger occupational categories: 1) professional occupations; 2) skilled blue-collar occupations; 3) semi- and low-skilled blue-collar occupations; 4) executive, management and administrative occupations; 5) technical occupations; 6) service occupations (which include extractive occupations because of their low representation in these data); and 7) white-collar occupations (which serves as the reference category). The detailed industries included in the surveys were collapsed into six broad industrial categories based on the scheme developed by Browning and Singlemann (1978) – 1) extractive industries; 2) transformative industries (which

serves as the reference category); 3) distributive industries; 4) producer services; 5) social services; and 6) personal services.⁶

Income

Income for displaced workers is measured by a log-transformation of weekly earnings on the job from which the respondent was displaced.

Macro-economic conditions

In order to control for economic cycles and fluctuations in the state of the economy in the period covered in the analysis, a dummy variable for economic contraction was included for those periods that contained economic contraction as measured by the National Bureau of Economic Research (NBER, 2007).

Reason for displacement

Gibbons and Katz (1991) found that wage declines as a result of displacement varied by the specific reason for displacement, with those displaced as a result of a plant closing suffering fewer losses than those suffering from the abolition of a shift or a slack labor market. In order to control for these possible effects on the duration of unemployment, a dummy variable measuring whether the displaced worker was displaced as a result of a plant closing or for some other reason is included.

Dependent variables

Two separate dependent variables are included in the analyses. The first dependent variable analyzed is a continuous measure of the number of weeks that a displaced worker was out of work. Some displaced workers were still displaced at the time of the survey, in which case the number of weeks without work until the time of the survey is included. This measurement strategy will yield conservative estimates of unemployment duration and should not bias the conclusions to be drawn from the analysis in any way. The second is a dichotomous variable measuring whether or not the respondent switched occupations upon re-employment. Some 505 detailed occupational categories were used from the Bureau of Labor Statistics Standard Occupational Classification System to construct this measure. Descriptive statistics for these variables are listed in Table 1.

Table 1 Descriptive statistics for variables used in analyses

	<i>Displaced workers</i>		<i>Re-employed workers</i>	
	<i>Male^a</i>	<i>Female^b</i>	<i>Male^c</i>	<i>Female^d</i>
<i>Race</i>				
White ^e	87.2	83.9	87.4	84.6
Black	8.5	11.9	8.3	11.6
Other	4.3	4.2	4.3	3.8
<i>Mean age (standard deviation)</i>	38.172 (12.27)	38.43 (12.53)	37.37 (11.44)	37.79 (11.76)
<i>Cohort</i>				
Depression/Second World War cohort	22	21.5	21.9	21.6
Early boomers ^e	24.6	24	27.1	26.4
Late boomers	31.1	31	33.4	32.8
Generation Xers	22.3	23.5	17.6	19.2
<i>Occupation</i>				
Executive, managerial, administrative	13.8	13.2	11	12.9
Professions	6.4	7.1	7.6	8.5
White collar ^e	24.5	30.9	14.2	35.5
Technical	3.5	5.7	4.3	6.4
Service	10.3	25.7	8.5	15.2
Skilled blue collar	16.7	3.3	25.2	4.1
Low and semi-skilled	24.8	14.1	29.2	17.4
<i>Industry</i>				
Extractive	4.6	1.8	5.6	2.2
Distributive	6.8	4	8.1	5.1
Transformative ^e	39.3	22.9	47.6	28.8
Producer services	22.5	29.2	27.4	37.5
Social services	24.2	37.2	8.2	20.2
Personal services	2.6	4.9	3.1	6.2
<i>Education</i>				
Less than high school	17.2	13.7	16.8	12.8
High school ^e	38.2	39.6	39.5	41
Some college	25.2	28.6	24.6	27.7
College	13.5	13	13.2	13.1
Graduate degree	5.9	5.1	5.9	5.4

^a *N* = 28,715.^b *N* = 19,465.^c *N* = 34,771.^d *N* = 22,452.^e Excluded category in models presented in Tables 2 and 3.

Methods

Disentangling age and cohort effects

The modeling of the processes implied in the argument presented earlier, that the negative effects of age in various labor market outcomes are attributable to both age *and* cohort effects, requires special considerations that cross-sectional data are not equipped to handle. According to Erdman (1978: 284), in order for age, period and cohort effects to be separated, data must include: 1) longitudinal differences within cohorts; 2) cross-sectional differences between cohorts at the same period in time; and 3) time-lag differences 'between the older cohort at the earlier measurement and the younger cohort at the later measurement who have become the same age as the older cohort was at the earlier measurement'. Although panel data following individual respondents over time is preferable to repeated cross-sections, the data analyzed here comprise repeated cross-sections spanning 21 years, and these conditions are satisfied and appropriate for analysis.

For one of the analyses, in which the likelihood of an event (occupation switch) is modeled, standard age-period-cohort logistic regression techniques are employed, with period omitted, as the inclusion of age and period indirectly captures period effects. In age-period-cohort models, each of these predictors is a direct function of the other two. Therefore, the inclusion of all three of them in a single model creates a problem of multi-collinearity (see Lynch, 2003). The analysis of duration of unemployment is analyzed using ordinary least squares (OLS) regression models. Controls for age and period are first included separately, and in the full, final models they are both included in order to examine the differential effects of each.

Results

Two sets of analyses are included to test the hypotheses outlined above. In addition, each set of analyses is run separately for men and women, as patterns of labor force participation, labor force attachment, and employment-related behaviors vary considerably between males and females among the oldest cohorts in the analysis largely because women were less likely to be included in the employment arrangements and social contract underlying Fordism. First, the results of the analysis of the duration of unemployment are presented in Table 2. African Americans, both male and female, had significantly longer unemployment spells after displacement than their white counterparts. African American males were unemployed for six more weeks than whites, while African American females experienced almost

five additional weeks of unemployment. Both males and females who did not graduate from high school have significantly longer unemployment spells than those who did by over four weeks, while those who went to school after high school were unemployed for shorter periods of time. The effects of education appear to be particularly strong among women, for whom any education beyond high school is related to significantly shorter unemployment spells of between three and four weeks.

The occupational effects largely reflect broader occupational dynamics in recent decades, as white-collar male workers have significantly longer unemployment spells than those in professional, technical, service, and skilled blue-collar occupations, while males employed in low/semi-skilled blue-collar workers experience, on average, unemployment for one and a half weeks longer than white-collar workers. For females, the patterns are similar, except for those employed in skilled blue-collar occupations. Among that group, unemployment spells were significantly longer than they were for females employed in white-collar occupations by a period of over five weeks. Given patterns of discrimination and other barriers that females face in these predominantly male occupations, though, this finding does not come as a surprise. The industrial effects reflect sectoral and industrial changes in the US economy, with both males and females displaced from distributive and service industries having significantly lower unemployment durations than their counterparts in manufacturing industries, while those displaced from the rapidly declining extractive industries having significantly longer unemployment spells than those displaced from manufacturing industries. In addition, macro-economic conditions shape the opportunities of displaced workers, as those workers searching for employment during times of economic contraction have significantly longer unemployment spells, while those displaced due to a plant closing have significantly shorter unemployment spells. This finding resonates with those of Gibbons and Katz (1991), who found that workers displaced due to plant closings had smaller wage losses than those displaced for other reasons. It may be that in the case of plant closings, benefits such as advanced warning, job relocation or company sponsored job-search assistance may reduce the amount of time displaced workers remain out of work.

Model 2 introduces controls for age. The effects of age are not significant, but the significance of the second-order term indicates that after a threshold point, age begins to effect the duration of displaced workers' unemployment spells. The first-order effects of age are not significant for males, but are positive and significant for women, indicating that an additional year of age added approximately one-third of a week to the duration of unemployment. Among the males in the sample, the oldest displaced workers

Table 2 OLS regression of unemployment duration on selected independent variables^{a,b}

Independent variable	Model 1		Model 2		Model 3		Model 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Constant	24.492 ^{***} (1.531)	41.473 ^{***} (1.733)	23.804 ^{***} (1.941)	32.987 ^{***} (2.407)	28.803 ^{***} (1.543)	39.285 ^{***} (1.761)	41.488 ^{***} (2.226)	48.559 ^{***} (2.799)
Demographic variables								
Black	6.080 ^{***} (0.570)	4.874 ^{***} (0.652)	6.278 ^{***} (0.564)	5.579 ^{***} (0.650)	6.380 ^{***} (0.560)	5.745 ^{***} (0.645)	6.482 ^{***} (0.560)	5.702 ^{***} (0.645)
Other	1.549 (0.811)	1.748 (1.104)	1.660* (0.802)	1.824 (1.098)	2.155 ^{**} (0.797)	2.249* (1.091)	2.343 ^{**} (0.797)	2.441* (1.091)
Education								
Less than high school	4.336 ^{***} (0.430)	4.960 ^{***} (0.642)	2.958 ^{***} (0.429)	3.970 ^{***} (0.643)	3.078 ^{***} (0.426)	3.955 ^{***} (0.637)	3.144 ^{***} (0.427)	4.009 ^{***} (0.639)
Some college	-1.988 ^{***} (0.390)	-3.885 ^{***} (0.505)	-1.850 ^{***} (0.386)	-3.448 ^{***} (0.503)	-1.534 ^{***} (0.384)	-2.925 ^{***} (0.501)	-1.438 ^{***} (0.384)	-2.860 ^{***} (0.501)
College degree	-1.048* (0.530)	-3.946 ^{***} (0.693)	-0.982 (0.524)	-3.377 ^{***} (0.691)	-0.795 (0.521)	-2.821 ^{***} (0.687)	-0.609 (0.522)	-2.699 ^{***} (0.687)
Graduate degree	-0.664 (0.736)	-3.185 ^{**} (0.994)	-1.268 (0.730)	-3.332 ^{***} (0.988)	-1.825* (0.726)	-3.675 ^{***} (0.983)	-1.683* (0.725)	-3.694 ^{***} (0.983)
Occupation								
Executive, managerial	0.500 (0.632)	-0.722 (0.686)	0.076 (0.625)	0.859 (0.681)	-0.216 (0.621)	-1.387* (0.678)	-0.204 (0.620)	-1.442* (0.678)

Table 2 continued

Independent variable	Model 1		Model 2		Model 3		Model 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Professional	-1.873** (0.734)	-2.436** (0.813)	-1.742* (0.725)	-2.436** (0.808)	-1.432* (0.720)	-2.349** (0.803)	-1.453* (0.720)	-2.256** (0.803)
Technical	-3.490*** (0.810)	-4.412*** (0.804)	-3.072*** (0.801)	-4.248*** (0.800)	-3.418*** (0.795)	-4.594*** (0.795)	-3.391*** (0.795)	-4.657*** (0.795)
Service	-4.126*** (0.695)	-3.273*** (0.685)	-3.692*** (0.687)	-3.00*** (0.682)	-3.056*** (0.684)	-2.979*** (0.677)	-3.011*** (0.683)	-2.957*** (0.677)
Skilled blue collar	-2.244*** (0.545)	5.250*** (1.048)	-1.616** (0.539)	5.419*** (1.042)	-1.678** (0.536)	4.980*** (1.036)	-1.598** (0.535)	4.893*** (1.036)
Low and semi-skilled blue collar	1.311* (0.535)	3.163*** (0.664)	2.072*** (0.530)	3.322*** (0.660)	2.102*** (0.527)	3.086*** (0.656)	2.125*** (0.526)	3.040*** (0.656)
Industry Extractive	2.413*** (0.658)	2.987* (1.343)	3.014*** (0.651)	3.004* (1.334)	2.384*** (0.647)	2.270 (1.326)	2.285*** (0.648)	2.079 (1.326)
Distributive	-1.226* (0.557)	-2.872** (0.983)	-1.363* (0.550)	-2.677** (0.977)	-1.207* (0.547)	-2.224* (0.972)	-1.118* (0.546)	-2.116* (0.971)
Producer services	-4.353*** (0.389)	-4.995*** (0.555)	-4.090*** (0.385)	-4.671*** (0.552)	-3.609*** (0.383)	-3.931*** (0.551)	-3.582*** (0.383)	-3.810*** (0.552)

Table 2 continued

Independent variable	Model 1		Model 2		Model 3		Model 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Social services	-1.961** (0.658)	-2.721*** (0.682)	-2.105** (0.651)	-3.058*** (0.678)	-1.389* (0.647)	-2.466*** (0.674)	-1.287* (0.647)	-2.237*** (0.676)
Personal services	-4.096*** (0.897)	-3.991*** (0.948)	-3.837*** (0.887)	-3.811*** (0.942)	-2.987*** (0.882)	-2.850** (0.938)	-2.885** (0.881)	-2.685** (0.939)
Employment/economic controls								
Income	-0.742** (0.241)	-2.911*** (0.299)	-2.076*** (0.225)	-3.441*** (0.303)	-1.325*** (0.238)	-2.460*** (0.296)	-0.705** (0.260)	-1.895*** (0.317)
Economic contraction	5.524*** (0.382)	5.945*** (0.517)	5.393*** (0.378)	5.960*** (0.5133)	3.888*** (0.380)	4.750*** (0.514)	3.609*** (0.386)	4.362*** (0.520)
Job loss due to plant closing	-0.762*	-1.316**	-1.162***	-1.633***	-1.182***	-1.588***	-1.120***	-1.538***
Age	-	-	0.136	0.347***	-	-	-0.705**	-0.498***
Age ²	-	-	(0.083)	(0.103)	-	-	(0.099)	(0.123)
	-	-	0.002*	-0.001	-	-	0.009***	0.004**
			(0.001)	(0.001)			(0.001)	(0.001)

Table 2 continued

Independent variable	Model 1		Model 2		Model 3		Model 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Cohort								
Depression/ Second World War	–	–	–	–	5.167*** (0.419)	5.067*** –0.573	4.635*** (0.546)	6.299*** (0.729)
Late boom	–	–	–	–	–3.956*** (0.375)	–2.750*** (0.513)	–5.273*** (0.446)	–4.430*** (0.616)
Gen X	–	–	–	–	–8.729*** (0.467)	–8.207*** (0.619)	–11.107*** (0.619)	–11.058*** (0.084)
R ²	.041	.067	.063	0.079	0.074	0.090	0.078	0.091

N = 48,180

a * p < .05; ** p < .01; *** p < .001.

b N = 48,180 (male = 28,715; female = 19,465).

(as measured by the second-order term) appear to suffer slightly but significantly longer unemployment spells, possibly due to their greater likelihood of retiring after experiencing displacement (Chan & Stevens, 2002). Model 3 replaced the age controls with controls for birth cohort in order to test the first hypothesis. Males and females born during and before the Second World War – before the start of the baby boom – have significantly longer unemployment spells by over five weeks than those born in the early part of the baby boom, while those born after the early boom all experience significantly shorter unemployment spells than those born in the early boom cohort. Men born in the ‘late’ boom, 1955–1964, were unemployed for four weeks fewer than men born in the preceding decade, while females were unemployed for almost three weeks fewer than those females born in the first decade of the baby boom. Men and women born after 1964, members of ‘Generation X’, found employment more than eight weeks sooner than those born in the first ten years of the baby boom. Thus, there appears to be a threshold between those born in and before the first half of the baby boom and those born in and after the second half of the baby boom with important implications for the prospects of re-employment. Those born in the late boom, who became teenagers and presumably entered the labor market in the early 1970s, just as the social contract was beginning to fray, may be better accustomed to and prepared for a displacement event, while those born in ‘Generation X’ fare even better after such an experience. Those whose socialization and labor market entry most closely coincided with the onset of post-Fordism – those born beginning in the late 1950s – are able to find employment more quickly than those whose experienced the Fordist model of secure and stable employment more fully. This finding lends support to hypothesis 1.

When age and cohort controls are included in model 4, the earlier birth cohort continues to have significantly longer spells of unemployment than those born in the later years of the baby boom and after the boom ended, and age becomes significant and negatively related to the duration of unemployment for men and women, until a point. This finding lends stronger support to hypothesis 1. When chronological age – a major explanatory factor in much of the existing literature – is controlled for, the effects of birth cohort increase in magnitude. It may be that age is serving as a proxy for social capital, which facilitates job searching, or for human capital that makes older workers more valuable on the labor market. These findings indicate that chronological age itself does not disadvantage older displaced workers in their search for employment. The significant effects of birth cohort, however, indicate that those workers born before 1956 are at a disadvantage as they search for work because, I argue, their work-related

expectations and behaviors were largely shaped during a period of economic expansion and the height of Fordism. Instead of an age effect on unemployment duration, we observe a cohort effect which carries with it a different set of causal mechanisms. In all of the models, income is significantly and negatively related to unemployment duration. Again, this may be a proxy for human capital or social network connections that both facilitate successful job searching. The inclusion of income, however, does not negate the effects of age or cohort, indicating that their effects are not purely caused by economic constraints imparted by higher earnings.

Table 3 presents the results of the analysis of those displaced workers who became re-employed. Specifically, it examines whether or not those workers switched their occupation upon re-employment. It has been argued elsewhere (Baumol et al., 2003) that occupational switching is an increasingly common process in a more turbulent economy, and that the ability or willingness to switch occupations may be of benefit in the flexible labor market. Odds ratios, which describe the odds of experiencing an event as compared to another group, are presented for the ease of interpretation. For the sample of males, the results of model 1 indicate that African Americans and those in other racial categories have 23 percent and 14.5 percent lower odds, respectively, of switching occupations. Those with less than a high school education have 24 percent lower odds of switching occupations than those with a high school degree, while those with some college or a college degree have 15 percent and 13.6 percent higher odds, respectively, of switching occupations, possibly due to their more generalizable or marketable skills. African American females have 16 percent lower odds of switching occupations, and those females in other racial categories have 21.3 percent lower odds of switching occupations.

Males in every major occupational category have significantly lower odds of switching occupations upon re-employment than white-collar workers, likely because white-collar workers typically possess more abstract skills that are transferable across detailed occupations within their major occupational groups than those from other occupational groups. Females in professional, technical and service occupations all have approximately 40 percent lower odds of switching occupations, also owing to the more specific nature of the activities in those occupations. However, women in executive and managerial occupations have 11 percent higher odds of switching occupations than those in white-collar occupations, possibly due to well documented barriers to entry that females face in those occupational groups (Cotter et al., 2001). Men displaced from extractive industries have 26.6 percent higher odds of switching occupations than those in manufacturing industries, as job opportunities in the extractive sector continue to decline

Table 3 Logistic regression of likelihood of occupation switch on selected independent variables^{a,b}

Independent variable	Model 1		Model 2		Model 3		Model 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Constant	—	—	—	—	—	—	—	—
<i>Demographic variables</i>								
Black	0.770 ^{***}	0.840 ^{***}	0.767 ^{***}	0.813 ^{***}	0.762 ^{***}	0.812 ^{***}	0.762 ^{***}	0.810 ^{***}
Other	0.855 [*]	0.787 ^{**}	0.852 [*]	0.779 ^{***}	0.837 ^{**}	0.767 ^{***}	0.938 ^{**}	0.768 ^{***}
<i>Education</i>								
Less than high school	0.763 ^{***}	0.651 ^{***}	0.803 ^{***}	0.680 ^{***}	0.798 ^{***}	0.676 ^{***}	0.801 ^{***}	0.680 ^{***}
Some college	1.148 ^{***}	1.173 ^{***}	1.148 ^{***}	1.150 ^{***}	1.132 ^{***}	1.132 ^{***}	1.135 ^{***}	1.134 ^{**}
College degree	1.136 ^{**}	1.191 ^{***}	1.139 ^{**}	1.155 ^{**}	1.124 ^{**}	1.141 [*]	1.124 ^{**}	1.141 [*]
Graduate degree	1.042	1.149	1.071	1.157	1.077	1.161 [*]	1.076	1.158
<i>Occupation</i>								
Executive, managerial	0.795 ^{***}	1.110 [*]	0.808 ^{***}	1.113 [*]	0.815 ^{**}	1.133 [*]	0.814 ^{***}	1.129 [*]
Professional	0.516 ^{***}	0.587 ^{***}	0.511 ^{***}	0.582 ^{***}	0.508 ^{***}	0.583 ^{***}	0.509 ^{***}	0.582 ^{***}
Technical	0.618 ^{***}	0.615 ^{***}	0.606 ^{***}	0.607 ^{***}	0.613 ^{***}	0.618 ^{***}	0.611 ^{***}	0.615 ^{***}
Service	0.563 ^{***}	0.623 ^{***}	0.552 ^{***}	0.613 ^{***}	0.540 ^{***}	0.612 ^{***}	0.542 ^{***}	0.612 ^{***}
Skilled blue collar	0.518 ^{***}	1.085	0.504 ^{***}	1.075	0.504 ^{***}	1.087	0.503 ^{***}	1.082
Low and semi-skilled blue collar	0.743 ^{***}	0.905	0.721 ^{***}	0.899 [*]	0.719 ^{***}	0.904	0.718 ^{***}	0.903 [*]
<i>Industry</i>								
Extractive	1.266 ^{***}	1.000	1.237 ^{***}	0.992	1.260 ^{***}	1.020	1.253 ^{***}	1.014
Distributive	0.768 ^{***}	1.056	0.771 ^{***}	1.043	0.766 ^{***}	1.027	0.767 ^{***}	1.030

Table 3 continued

Independent variable	Model 1		Model 2		Model 3		Model 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Producer services	0.984	0.994	0.973	0.980	0.956	0.958	0.959	0.962
Social services	1.081	0.837***	1.088	0.851**	1.066	0.831***	1.072	0.836***
Personal services	0.865*	0.894	0.855*	0.886	0.835*	0.859*	0.839*	0.864*
Age	—	—	0.984*	0.990	—	—	1.001	1.001
Age ²	—	—	1.000	1.000	—	—	1.000	1.000
Cohort								
Depression/ Second World War	—	—	—	—	0.792***	0.745***	0.851***	0.791***
Late boom	—	—	—	—	1.109***	1.026	1.074*	0.994
Gen X	—	—	—	—	1.330***	1.237***	1.264***	1.177*
(Ln) Income	0.738***	0.764***	0.790***	0.783***	0.755***	0.751***	0.765***	0.758***
Displaced due to plant closing	1.130***	1.053	1.152***	1.069*	1.152***	1.066*	1.153***	1.068*
Economic contraction	0.932*	0.853***	0.931*	0.865***	0.880***	0.829***	0.891***	0.838***
Likelihood ratio	831.608	580.407	988.518	669.327	1015.461	692.316	1021.599	695.33

a * $p < .05$; ** $p < .01$; *** $p < .001$.

b $N = 57,223$ (male = 34,771; female = 22,452).

rapidly, while those in distributive industries and personal service industries have lower odds of switching occupations, as these industries have experienced growth, thus more opportunities to remain in the same occupation, over the time under consideration. For females, only those in social service have lower odds of switching occupations, likely due to the opportunities available to the high concentration of females in these growing industries. Males and females with higher weekly incomes have lower odds of switching occupations. As in the previous analysis, it may be that income is serving as a proxy for occupational-specific human capital, which increases the likelihood that a displaced worker will find work in the same occupation from which she or he was displaced.

As workers age, they become slightly but significantly less likely to switch occupations, as demonstrated in model 2. For every year a displaced worker ages, the odds of switching occupations upon re-employment decline by 1.6 percent. Model 3 replaces the controls for age with controls for birth cohort, and indicates that those males born during and before the Second World War have over 20 percent lower odds of switching occupations upon re-employment than those born in the first half of the baby boom. Those displaced male workers born in the second half of the baby boom have 11 percent higher odds of switching occupations upon re-employment, while those born after the baby boom have 33 percent higher odds of switching occupations upon re-employment. For women, a similar pattern holds. Those displaced female workers born during or before the Second World War have over 25 percent lower odds of switching occupations, while those female members of 'Generation X' who experience job displacement have 23.7 percent higher odds of switching occupations upon re-employment. Among females, there are no significant differences in the odds of switching occupations between early and late baby boomers. In the final, full model, the birth cohort effect for all members of Generation X, while suppressed slightly (down to 17.7 percent for females and 26.4 percent for males), remains significant, while the differences between the male 'early' and 'late' boomers become weaker and less significant. In addition, the small age effects observed among males are wiped out. While an admittedly imperfect measure, these results indicate that those members of Generation X are more willing or able to switch their occupations after displacement. Careers that span firms and even specific occupations are a defining characteristic of work in the new economy (Barley & Kunda, 2004), and here we have evidence that members of more recent birth cohorts are more likely to switch occupations upon re-employment after a displacement event, which lends support to the argument that they have embraced this orientation to employment to a greater degree than those born, raised, and employed during the period in

which Fordism was dominant. Thus, in the final analysis, hypothesis 2 receives support.

Taken together, the findings presented earlier indicate that birth cohort – specifically, being born before 1965 – explains many of the negative outcomes of worker displacement and employment flexibility among older workers. While workers become increasingly likely to be displaced as they age, chronological age does not have any negative effects on the re-employment patterns or outcomes of those workers who become displaced. Instead, the era and institutional milieu in which one was born appears to explain much of the difficulty older workers have in becoming re-employed.

Discussion and conclusion

The flexible employment relationships that are a key characteristic of the ‘new’ economy present a complicated mix of risks and opportunities for workers. Much of what distinguishes one from the other is the degree to which individuals are prepared and able to respond to uncertainty that is spreading across occupations and industries. In the economic and employment turbulence of the new economy, older workers suffer more negative consequences of displacement than their younger counterparts. The results of these analyses indicate that they are more likely to become displaced, experience longer unemployment spells after displacement and are less likely to switch occupations upon re-employment. This article contributes to the literature on age and employment by clarifying the mechanisms that cause older workers to be at a disadvantage in the ‘new’ economy. While chronological age does increase the likelihood that one will experience displacement, it does not predict the negative outcomes experienced by older displaced workers attempting to negotiate the re-employment process in an increasingly flexible labor market.

Instead, the timing of one’s birth and the era and institutional milieu into which one was born are important predictors of post-displacement employment outcomes. The rapid and dramatic changes in work and the employment relationship have undoubtedly affected all workers. The rise of the service economy, new forms of work organization and the decline of steady and long-term employment have all restructured the labor market and employment experiences of individuals in profound ways. The ability to respond, react and adjust to these changes, however, does not appear as widespread as the changes themselves. For a variety of reasons, some workers have greater success than others at negotiating the terms and terrain of the new, flexible labor market. Those workers who were born, socialized, and

entered the labor market during the previous period of employment stability appear to have more difficulty in responding to and recovering from displacement than those whose socialization and labor market experience began in the more flexible era (Buchmann, 1989).

There are limits to the conclusions that can be drawn from the data analyzed in this research. Because the CPS can only provide repeated cross-sections of data, we can only draw conclusions about general trends in patterns of unemployment and re-employment and not about specific changes in trends and events across the life course. Future research utilizing panel data can address questions regarding individuals' transitions into and out of various employment states, and how these transitions vary across the life course. However, the CPS Displaced Worker Supplement does offer several advantages over many existing panel datasets. The cross-sections pooled here cover a period of 20 years, which is a long enough time period to begin to disentangle the effects of age, period and cohort on employment trajectories. In addition, the large sample sizes allow for confidence in the reliability of the trends observed in this research. In order to fully understand the ways in which the cognitive and institutional bases of employment vary across different periods and birth cohorts, large-scale studies, such as this one, will need to be combined with smaller-scale quantitative studies of panel data and qualitative studies that can capture more fully the ways in which individuals conceptualize and understand the meanings of employment, and how these guide employment related behavior. This research presented here is a first step in that effort.

Future research must also examine variations among racial and gender groups in employment outcomes in the Fordist and the new economy. While the benefits of stability and mobility after the Second World War were positive for many, racial minorities and women were largely excluded from the social positions associated with them. For these groups, employment flexibility and the new economy may not increase the risk of a 'fall from grace' (Newman, 1988), but may exacerbate, accentuate, and/or complicate labor market inequality in ways we do not yet fully understand. McCall (2001), for example, describes the configurational character of the 'new inequality' that has been shaped by the 'new economy', in which region and class mediate the nature and degree of race and gender inequality in the labor market. A deeper understanding of these dynamics would result if research investigated the effect of individual work histories and conceptualizations of employment, jobs and careers. Also, studies of employment discrimination may benefit from considering more nuanced and covert forms of discriminatory processes that encompass the institutional arrangements surrounding employment in addition to discrimination in particular jobs and by particular employers.

In addition, these studies should focus on how the perceptions of risk and the navigation of it are shaped by work structures including employment and retirement policy and pension availability.

This research lays a foundation for these future studies by drawing attention to the multidimensional nature of employment institutions. First, employment institutions comprise a variety of structures that govern the dynamics of work and employment (Kalleberg & Berg, 1987). Labor markets are not 'free' in the sense that job seekers are matched to jobs by a set of fluid processes. Instead, a series of embedded social structures determine access to positions, skills, information and dispositions that influence one's chances in the labor market. Second, a set of norms and implicit rules determine the expectations that workers have about the way work should be. The social contract described by Rubin (1996) and others is, in part, also a psychological contract in which employees and employers both act in good faith based on their expectations that the other party will act in good faith according to normatively sanctioned behaviors. Third, in line with more recent research on the nature of institutions and strongly supported by the results presented here, is the notion that employment institutions have a cognitive dimension that shapes the way workers behave in response to changes in the other two dimensions of employment institutions. Employment at a given time retains its particular character through the organizations, laws, and practices that comprise it. As a social institution, it also exists in people's heads and minds, and the ways that people understand and make sense of employment reinforces or undermines its salience as a guide for social action. Much of the power of social institutions arises not only from the social structures that constrain or enable particular courses of action, but also from the ways in which they shape individuals' perceptions and understandings about the way the social world does or should work (for a review, see DiMaggio, 1997). Just as Willis (1977) demonstrated how expectations and understandings of the structure of work and jobs among the British working class became internalized at a young age, it also appears likely that more general cognitive expectations and cultural conceptualizations of work and employment are shaped by cognitive processes and socialization.

In the case of employment, the 'social contract' that comprised the employment relationship for decades provided a set of implicit understandings for workers about the nature of a job and a career, and about employers' obligations to their employees. The 1970s saw the beginning of a rapid dismantling of this contract in employment, and by the 1990s employment had become 'flexible' and the economy 'new'. In such an environment, those workers who have been documented as especially

resilient – the children of the Great Depression – appear to suffer fairly dramatically from one of the defining practices of flexible employment: displacement. Interpreted from an institutional perspective, this finding speaks to the totality of employment both as an inter-related set of social structures and also a set of cultural-cognitive conceptualizations that interact with more solid structures and guide human action in them. While studies of employment institutions and the employment relationship abound, this research helps to incorporate the often neglected cognitive aspects of this important institution.

While displacement, downsizing and layoffs will undoubtedly continue to present problems for those workers who experience these events and cause uncertainty and anxiety among the rest of the labor force, the cohort effects on employment and re-employment outcomes presented here indicate that, over time, and as flexible employment policies became more fully institutionalized in social and cognitive structures, workers may begin to have an easier time responding to the risks associated with displacement. To be sure, some will continue to find it easier to become re-employed – because of human capital, social capital, race and gender – but as the age structure of the population and the institutional underpinnings of employment both change, displacement may become less of a trauma than it typically is today.

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Notes

- 1 The PSID data do not distinguish between involuntary job losers and voluntary job switchers. Therefore, the study conducted by Baumol et al. (2003: 235) 'is likely to report greater well-being in the group of transferees than would have been the case had the data pertained only to involuntary job shifting in the wake of a downsizing move by employers'. Because the data analyzed here focus exclusively on those unemployed involuntarily, they provide a more accurate picture of the causes and consequences of displacement.
- 2 The exact name of the supplement changed slightly over time, as some were simply known as the 'Displaced Worker Supplement'. For the analysis of the likelihood of becoming displaced, the entire CPS basic labor force datasets were analyzed.
- 3 Prior to 1994, the DWS used a five-year recall window instead of a three-year window. While the probability of displacement itself is higher over a five-year exposure period than a three-year period, the ensuing unemployment spells and

- occupations upon re-employment – the outcomes of interest here – should be unaffected by this difference (see Farber, 2003).
- 4 Values for *rbo*: point estimate = .000104; SE = 0.2220059; $p = 0.9996$.
 - 5 In 1991, the CPS changed education coding scheme, switching a question about the highest grade attended to a question about highest grade completed. However, the surveys prior to 1991 also include a follow-up question about whether the highest grade attended was also completed. For the sake of consistency across the observation period, I constructed the collapsed education variable using the highest grade completed.
 - 6 Industry and occupation codes changed over the period covered by the pooled dataset. Inconsistencies between the 1990 and 2000 coding schemes were eliminated through the use of crosswalks provided by the US Census [<http://www.census.gov/hhes/www/ioindex/indcswk2k.pdf>; <http://www.census.gov/hhes/www/ioindex/occ2000t.pdf>] and with guidance from Scopp (2003).

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