FROM THE ‘TREATY OF DETROIT’ TO THE 401(k): THE DEVELOPMENT AND EVOLUTION OF PRIVATIZED RETIREMENT IN THE UNITED STATES

by

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To Mom, Dad, Audra and Anissa
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LIST OF ACRONYMS

AFL American Federation of Labor
CEO Chief Executive Officer
CIO Congress of Industrial Organizations
CPS Current Population Survey
CRR Center for Retirement Research
CSR Corporate Social Responsibility
DB Defined Benefit
DC Defined Contribution
EIN Employer Identification Number
ESOP Employee Stock Ownership Plan
GM General Motors
LGBT Lesbian, Gay, Bisexual and Transgender
LTD Long-term Debt
NAICS North American Industry Classification System
NWLBNational War Labor Board
OLS Ordinary Least Squares
PBGC Pension Benefit Guaranty Corporation
ROA Return on Assets
SED Socially Expected Duration
SIC  Standard Industrial Classification
S&P  Standard & Poor’s
UAW  United Auto Workers
UE  United Electrical Workers
US  United States
WWII  World War II
ABSTRACT

Among industrialized nations, the United States has a unique system for providing social welfare, as corporations supplement the basic and comparatively small Medicare and Social Security benefits (Esping-Andersen, 1990). One result of this system is that the employment relationship takes on increasing importance as one’s access to health care and retirement benefits is inextricably linked to her job. This dissertation offers a multi-method investigation of a key welfare provision, employer-sponsored retirement, from its emergence as an institutionalized practice to its present state of decline. Study 1, examines a key historical event in the diffusion of company-sponsored retirement plans – when the United Automobile Workers (UAW) union began bargaining for such benefits in 1949-50. Because negotiating over welfare provision was a strategic departure for the Union, I compare the rhetoric used to frame these demands with that used to bargain over price control of automobiles in 1945-46. The findings show that the UAW used relatively consistent framing efforts across the two negotiating rounds, suggesting that once leaders develop a discursive repertoire consistent with the organization’s ideology, leaders explain, rationalize and legitimize their organizational strategies using the same set of previously established frames. Study 2 examines firm-level factors that have led to the decline in defined benefit (DB) pensions and the growth of defined contribution (DC) retirement plans and argues that corporate choices around retirement are shaped by power differences at the firm level. Firm ownership by financial investors negatively affects DB
plan participation, while passive financial ownership promotes DC participation and active financial ownership hinders it. Manager and employee power promote DC participation and the findings suggest they also have a positive impact on DB participation. In sum, different organizational constituents have particular interests as it pertains to a firm’s retirement strategy – the extent to which these constituent groups have power, the better able they are to protect those interests. Together, these studies enlighten our understanding of the US’s unique form of welfare provision and show how decisions made at the organizational level can have significant societal impact.
CHAPTER 1:
INTRODUCTION

Among industrialized nations, the United States has an idiosyncratic system for providing social welfare. Resulting from a series of historical events, in the US individual corporations are critical dispensers of health insurance and retirement benefits. This system places firms in a unique role; the corporation becomes part of a broader explanation of health care outcomes via employer-sponsored health insurance and income maintenance via pension plans. Because of America's unique structure of welfare provision, the employment relationship takes on additional importance due to the fact that one’s access to and the quality of health and retirement benefits is, for most Americans, contingent on her employer. Privatized welfare and employment are inextricably linked and any analysis of social welfare or the nature of employment in the United States must pay significant attention to historical trends in the provision of employer-sponsored benefits.

The role of the firm as welfare provider has been challenged since the early 1980s. Increased economic pressure and the popularization of neo-liberal ideology has ushered in market-oriented reforms of employment practices (Davis, 2009, chap. 3). One important result of this change has been that many of the largest firms have increasingly shifted the cost and risk associated with providing welfare benefits onto workers (Hacker,
2008). Though this phenomenon has received considerable interest in the popular press (e.g. Gandel, 2009), to date, little work in organizational studies has taken seriously the role of the firm as a welfare provider and how that role has changed over time. My goal is to explore the American system of privatized welfare in greater detail, providing historical and statistical analysis to show how this system came to be and important ways in which it is presently changing.

**Organization of this Dissertation**

It is important to place firm-sponsored welfare in its historical context. In chapter 2, I provide a brief history of employer-sponsored welfare plans in the US – a human resource system often referred to as *welfare capitalism*. My focus is the period from the turn of the 20\textsuperscript{th} century through World War II. The purpose of this essay is to highlight the role played by organized labor, the federal government and firms in the formulation and diffusion of company-sponsored welfare.

Historians trace the emergence of the US’s welfare system to a few critical events. In chapter 3, I explore one of those events, the "Treaty of Detroit," which refers to the contract agreement between the United Auto Workers (UAW) and General Motors Corporation in 1950 (see Bell, 1950). Historically, organized labor was averse to firm-sponsored welfare, but the Treaty culminated in a shift in ideology as labor focused more directly on creating economic security for its members. This agreement expedited a trend where most large corporations financed retirement benefits for their workers. I contend that these negotiations and the resulting agreement served as a “constitutive moment”
(Berk, 1994), cementing the system of corporatized welfare that still exists in this country.

Previous studies have offered some hypotheses on why the UAW changed its bargaining strategy but what has been left unexamined is the role Union leaders played in altering the strategy of the organization. The agreement provides an excellent case to examine the rhetorical strategies that organizations use to enact change while also providing unique insights into an important historical event. I utilize the UAW archives located at Wayne State University, which houses meeting notes, press releases, pamphlets and flyers, correspondence with the membership, transcripts of the negotiations, and numerous other data and supplement these with press and advertisements in the local Detroit area newspapers and other major national newspapers. Drawing on social-movement theory, I explore the role played by the leadership in both the UAW and the “Big Three” automobile manufacturers (Chrysler Corporation, Ford Motor Company and General Motors Corporation) in framing their demands across two bargaining rounds – 1945-46 and 1949-50. The purpose is to examine whether and how the language used by organizational leaders to articulate their strategy to their constituents changes in light of a change in organizational strategy. I argue that constructing an appropriate rhetorical justification is a key mechanism by which organizations enact change, and the results suggest that organizational leaders, rather than craft new frames to articulate strategy changes, draw upon a common repertoire of previously accepted frames to legitimize their (changing) demands.
In chapter 4, I examine factors leading firms to transition their defined benefit (DB) retirement plans to 401(k) and other types of defined contribution (DC) plans. From the post-World War II period until the early 1980s, the largest American firms typically offered DB pension plans, which are essentially promises made by employers to pay employees a post-retirement annuity benefit in exchange for foregone wages (Kruse, 1995). Because DB plans typically rise in value as employees age and their length of service in the firm increases, these plans are used by companies to ensure long-term employment (Kotlikoff & Wise, 1985). By replacing a retirement system that rewards longevity to one that shifts the onus of planning and market risks to the worker, firms have seemingly repudiated the notion of long-term employment.

Prior research on retirement has largely ignored firm-level factors in explaining the shift from DB to DC plans, and has instead emphasized the impact of broader economic forces, such as the relative costs of plans and the US’s transition to a service-oriented economy (Friedberg & Webb, 2005). What these studies have failed to explain is the wide disparity in retirement offerings among firms, especially among those within the same industry. I argue that a firm’s choice in retirement strategy is due, in part, to the power structure of the organization. That is, different coalitions within the organization have different interests as they pertain to a firm’s preference in long-term employment, and subsequently its preference for DB or DC pensions. The relative power of each coalition helps determine the type of relationship firms establish with their employed. In this study, I focus on three coalitions – owners, particularly financial investors, managers and employees.
In order to examine the impact of coalitional power structures on firm retirement strategy, I have compiled a dataset on the retirement plans used by over 1,300 of the largest US firms for the years 1982 to 2006, making this the largest firm-level study of retirement plans to date. My analyses of the data show that ownership by financial investors has a negative effect on DB participation and a mixed effect on participation in DC plans. Managerial power has little impact on DB participation but is related to greater employee participation in DC plans. And employee power has a positive effect on both DB and DC participation. These findings suggest that changes in the structure of employer-sponsored retirement benefits, and the employment relationship more generally, can be explained, in part, by alterations in the power structure of American firms during the period of study. Specifically, less enduring employment relationships have emerged as financial investors have grown in prominence and managerial and employee power has decreased, due to the re-concentration of ownership and declines in unionization.

Contributions

My thesis offers several important theoretical and empirical contributions. Organizational institutionalists have called for research that chronicles the lifecycle of institutions (e.g. Greenwood, Oliver, Sahlin, & Suddaby, 2008). By investigating the entire arc of employer-sponsored retirement – that is, from its emergence as an institutionalized practice in the post-World War II period to its present state of decline, I answer questions of whether and why organizations maintain or abandon long-held strategies and practices. I place a particular emphasis on the role intra-organizational
power dynamics play in affecting these organizational decision-making processes.

Viewing the firm as a set of coalitions, each with their own interests that are often in conflict, I propose that widespread institutional and organizational change can be more fully explained by analyzing the changing power dynamics within organizations. In this way, my thesis connects classic social theory’s interest in intra-firm dynamics (Cyert & March, 1963), to studies of organizational and institutional change.

I also bring attention to the (often unanticipated) consequences of organizational action. As firms have restructured benefits over the last 30 years, individuals have increasingly been forced to bear the risks that employers once shouldered. Organized labor’s push for welfare benefits helped diffuse the spread of company-sponsored welfare while also limiting unions in their ability to spearhead broader social change. The shift from DB plans to 401(k) and other types of DC plans has also had dire consequence for many American workers. Given the recent and dramatic economic downturn, Social Security becoming less tenable, and health care costs rising, many retirees in this country will no doubt face a set of circumstances heretofore unexpected in modern times for the middle-class – that is, the inability to afford retirement. This change will have significant economic and societal effects, and understanding the contours of privatized welfare, as addressed in my dissertation, is of paramount concern to society.
CHAPTER 2:
A BRIEF HISTORY OF PRIVATIZED WELFARE IN THE UNITED STATES

Introduction

During the late 1800s, the growing prevalence of large, vertically integrated firms began to take on an increasingly significant role in American society; markets became progressively more national, and geographic competition gave way to national monopolies and oligopolies (Chandler, 1977). A great deal of power and influence was centered in the hands of a few, powerful corporate elites. Due to a confluence of factors, such as the rise of large corporations alongside a relatively non-interventionist federal government and an American ethos centered on individualism and voluntarism, a form of workplace governance developed whereby firms were able to maintain a high degree of autonomy – especially regarding the treatment of labor. The tendency to exploit this power led to considerable labor unrest; strikes and protests were common, many of which ended in violence (Zinn, 2003).

As the 19th century ended there was increased concern by many regarding the degree of power and influence large firms had on society, and the social-Darwinist system of workplace governance was attacked. A widespread series of related social movements, referred to here under the umbrella term, “the Progressive movement”, arose and marked a change in mindset for many Americans. During this period, many
individuals came to believe that intervention to improve the social and economic
conditions of working-class citizens was necessary to ensure social justice. These
reformers were a diverse group and represented a wide range of economic, political,
social and moral reforms, such as regulating child labor, “Americanizing” immigrants,
stopping anti-competitive business practices, prohibition and women’s suffrage. Though
the agenda of these reformers varied, one commonality between them was their view that
the economy should serve the public’s interest (Glad, 1966, pp. 76-77).

The effects of this ideological change profoundly affected business. During the
Progressive period, the perceived perils of an increasingly urbanized America became a
national issue (Abbott, 2005). In response, corporate leaders sought mechanisms by
which to minimize labor unrest while simultaneously quieting society’s general
skepticism of large enterprises. The most significant of these was the workplace
governance system commonly referred to as welfare capitalism, defined as “any service
provided for the comfort or improvement of employees which was neither a necessity of
the industry nor required by law” (Brandes, 1976, pp. 5-6).

Though concentrated mostly among the larger firms of the time and often uneven
and paternalistic in application, the legacy of welfare capitalism manifests itself to this
day. Fringe benefits like retirement plans, profit sharing, health benefits and vacations,
which have become a centerpiece of the modern employment relationship, can be traced
directly back to strategies employed by firms during the late 19th and early 20th century.
Thus, in order to better situate the study of corporate-sponsored retirement plans, in this
chapter I provide a brief historical review of company-sponsored benefit plans and
highlight the role of welfare capitalism in helping to establish a system whereby firms, rather than the state are the primary dispensers of welfare in the United States. In the sections that follow, I focus on the three primary rationales given for why this system of workplace governance emerged: 1) forestalling unionization and union pressure for benefits, 2) avoiding governmental regulation and promotion of private benefits by the state, and 3) enhancing the legitimacy and profitability of business.¹

Literature Review

Forestalling unionization and union pressure for welfare benefits

The most common explanation given for the advent and spread of welfare capitalism is that it served as a means by which company owners could mitigate labor unrest and forestall unionization. During the latter portion of the 19th century and the early 20th century, working conditions in manufacturing establishments were often brutal. In response, workers across a variety of industries joined unions in increasing numbers – from 1898 to 1903, organized labor more than quintupled in size (Dubofsky, 1994, p. xvi). The reaction by business to labor unrest and union organizing efforts, however, was often combative. Over time, in large part due to public outrage over these violent confrontations, the more aggressive union suppression tactics grew untenable. In their place, many business leaders chose to provide a safe and hospitable workplace to increase employee satisfaction and loyalty, hoping to reduce labor unrest and the threat of unionization. Hiring strikebreakers and bloody battles in the streets were supplanted by a

¹ Scholars also purport other rationales for the adoption of welfare capitalist practices, such as to reaffirm gender roles in the workplace (e.g. Tone, 1997), to ensure worker control in the workplace (e.g. Edwards, 1979) and to acculturate immigrants and as a means of social control over worker behavior beyond the workplace (e.g. Brandes, 1976; S. Meyer, 1981).
gentler hand to be sure, but many union members and workers saw these actions less as a means of “doing what is right” than as a manipulative stance against the increasing threat of labor organizations.

During much of the first half of the 20th century, organized labor was skeptical of private-sector philanthropy. For example, the American Federation of Labor (AFL) worried that,

[W]orkers would become so impressed by reforms that they would forget that their oppositional class position necessitated independent action and organization. … Welfare work, the AFL insisted, must not displace the workers’ quest for self-advancement or the organization that gave that quest focus and meaning, the trade union (Tone, 1997, p. 183).

Union proponents saw the union, not the firm, as the only means by which workers, as a class, could advance their cause. Labor leaders believed that through uniting, workers could extract the pay and benefits deserved from their inputs of labor. As such, unions saw any measure taken by companies to prevent worker organization as subversive.

Between 1933 and 1937, during a period of high unemployment and wage reductions, American unions were able to recruit about five million new members (Lichtenstein, 2002, p. 52). Many workers saw the union as one of the few, if not the only, institutions capable of ensuring that job security and wage levels were maintained, and great strides were made by labor unions in organizing economically central industries such as steel and automobile manufacturing. The growing union threat motivated many firms to maintain or expand their benefits despite the unstable state of the US economy. Even as companies became unionized, many voluntarily maintained and increased welfare benefits in order to maintain cooperative relationships between the union and management (Fones-Wolf, 1986, p. 269).
Though unions had been skeptical of welfare benefits during the Progressive era, by the 1940s, many began to expropriate these programs for their own purpose. Labor organizations began to organize recreational activities, such as baseball, bowling, picnics, dances, and bingo nights; activities that once were undertaken by firms to tie employee loyalty to the firm. Unions used these activities to a similar end – to help make the union “the focal point of its members’ social and cultural lives, thereby helping to solidify the workforce” (Fones-Wolf, 1986, p. 236). The unions, therefore, took one of the main weapons used against them; welfare benefits, and utilized them to accomplish their own goals.

As America entered World War II, labor relations changed dramatically. In 1941 unions represented approximately nine million workers, by 1945 that number stood at fifteen million. The bulk of the members were in mass production industries: steel, automobile manufacturing, electrical products, meat packing and rubber production, as well as many of the transportation and infrastructure industries: railroads, trucking, shipping, municipal transit, commercial construction and electrical power generation (Lichtenstein, 2002, p. 54). Because organized labor had made major inroads in many crucial wartime industries, the state was forced to develop measures to ensure that the production of critical goods was not disrupted. During the War, Roosevelt created the National War Labor Board (NWLB), which served as a mediator in labor issues. The NWLB also instituted guidelines requiring firms to operate under a given set of business practices. Most of those procedures copied the existing union model. Thus, many nonunion firms emulated unions’ personnel procedures during the War years – a process that was aided by the NWLB.
As personnel practices and grievance procedures became more commonplace and bureaucratized during World War II (Baron, Dobbin, & Jennings, 1986), unions continued to use collective bargaining to win wage and welfare benefit concessions. In the process labor helped popularize and diffuse these practices by impelling nonunion companies to match or exceed these measures to protect against unionization. As a result, the wage and benefit bargains negotiated by the large and powerful unions helped “set the norm for the less favorably situated worker,” which served as a form of social welfare as employment and wage policies instituted in union firms were quickly mimicked (Lichtenstein, 2002, p. 127).

_Forestalling regulation and governmental promotion of privatized welfare_

The state also played a large role in the adoption of welfare capitalist reforms. Andrea Tone emphasizes that welfare capitalism was a political movement in addition to a means of improving labor productivity and forestalling unionization (1997). Progressive era social movements brought increased attention to the social ills of urbanization and factory work, and the growing role of the federal government in the early part of the 20th century led to the fear that the government would become increasingly involved in the affairs of business – a situation that many companies attempted to circumvent. Welfare capitalism was a key mechanism used to divert the government’s efforts at welfare statism. The US was the only large industrial nation in which the rise of large firms was not preceded by the advent of a powerful state (Lichtenstein, 2002, p. 106). From the end of the Civil War to the beginning of the 20th century, private enterprise operated somewhat unfettered by the control of the
government. However, in the late 1890s, that began to change. The government played a role in forcibly suppressing labor unrest in the late 1800’s but it was not until the Progressive era in which the federal government sought to prevent labor strife from occurring (Tone, 1997, p. 7).

During the Progressive era, the federal government established commissions in order to help uncover the reasons behind worker frustrations. Moreover, the federal and state governments began to pass laws mandating worker compensation, setting limits on maximum work hours, and increased restrictions on the use of female laborers. Though legislators had some success in bringing about changes, the voluntary changes made by these welfare capitalists outdid the reforms by legislation (Tone, 1997, p. 33). Employers consciously instituted welfare benefit programs voluntarily as a means to ensure that more stringent legislative acts were not instituted (see also Zinn, 2003).

By the 1920s, many of the more paternalistic benefits popularized during the first two decades of the century were replaced by more substantive financial benefits, including pensions and life insurance (Jacoby, 1997, p. 24). The terms of these benefits were often codified in employee handbooks. Judicial rulings that such remunerations were contractual promises of compensation gave employees a newfound power; a contract binding the terms of employment and a more solid guarantee of the types of remuneration that they could expect to earn (Tone, 1997, p. 226). Though the US never

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2 For example, the Department of Commerce and Labor was established to report upon and investigate firms engaging in interstate commerce. Beginning in 1910, 42 states passed workers’ compensation laws. In 1915, Congress passed the La Follette Seamen’s Act in order to improve work conditions on merchant vessels. In 1916, it passed the Adamson Act which established an eight hour workday for interstate railway employees. That same year, Congress passed the Keating-Owens Act (later declared unconstitutional), outlawing child labor.
developed a large welfare state, private welfare was increasingly influenced by the state. This is not to say that all firms offered such benefits. Large corporations serving national markets were most likely to offer these benefits. Due to their economic prominence and ability to generate large profits, these firms’ business practices were likely more closely monitored by the government. The potential downside to federal intervention was considerable, providing the impetus for companies to develop more “enlightened” business practices.

Having become accustomed to minimal government intervention, the corporate elite of the day were skeptical of the expansion of federal programs that encroached upon the domain of private enterprise. Two major pieces of legislation, the Social Security Act of 1935 and the Wagner Act of 1935 ushered in a new era of government regulation of the economy. The Social Security Act provided retirement benefits to the elderly – a benefit normally provided by firms or not provided at all. Many business leaders feared that once Social Security was implemented private pensions would lose their strength as a binding agent, tying employee loyalty to the firm (Jacoby, Ch. 6). Despite these fears and an economic depression, between 1936 and 1939 more private pension plans were established than abolished. Congress further encouraged privatized welfare plans in 1939 by exempting such expenditures from payroll taxes. This exemption, in effect, “made welfare capitalism a state-supported policy” (Tone, 1997, p. 248).

During World War II the state did not intervene so much as it controlled much of private enterprise. The NWLB was responsible for many of the corporate-directed state interventions during the World War II era. The Board was also accountable for
arbitrating labor grievances between unions and management and the rulings handed down by the Board quickly diffused throughout other industries. In addition, the NWLB facilitated the institution of job evaluation systems, formalized job roles and dictated seniority provisions outlining the terms for worker advancement. These rulings were uniformly applied across industries and served to help regulate wage differentials across the different regions of the United States (Baron, et al., 1986). Though the NWLB froze wages and restricted employee mobility in order to maintain employment stability, the Board ruled that fringe benefits were exempt from wartime wage controls (Jacoby, 1997, p. 216; Tone, 1997, p. 249). Other actions by the state also promoted the spread of welfare capitalism, such as the Revenue Act of 1942, which exempted firms from paying a heavy war profits tax if they put excess earnings into certified pension plans. Between 1942 and 1944 the government certified 4,208 pension plans – triple the number approved in the thirteen years prior (Jacoby, 1997, p. 215).

Though the end of the War decreased the influence the state had over the administration of wages and benefits, the state’s influence on welfare capitalism remained far-reaching. In Inland Steel Co. vs. The National Labor Review Board and W.W. Cross & Co. vs. The National Labor Review Board, the Supreme Court declared retirement and healthcare plans were a mandatory subject of collective bargaining. The ruling enabled organized labor to continue its drive for fringe benefits – by 1957, 75 percent of major labor agreements provided for increases in such benefits, including pensions, vacation pay and health and life insurance (Tone, 1997, p. 249).

*The business case: profitability and organizational legitimacy*
In addition to forestalling unionization and mitigating governmental regulation, many firms created these plans to increase worker productivity and improve company loyalty. Companies experiencing frequent labor shortages and high turnover frequently turned to welfare benefits to retain workers (Tone, 1997, p. 78). Julius Rosenwald of Sears Roebuck stated, “Don’t imagine that anything we do for our people … is done from philanthropic motives – not in the least. Whatever we do for our employees we do because we think it pays, because it is good business” (as quoted in Jacoby, 1997, p. 26). That these large nonunion firms could create relatively inexpensive programs that decreased turnover, improved productivity and increased profits was a major impetus for the diffusion of such practices.

Welfare practices also served as a signal to customers that products were of the highest quality. As Charles Edgar, the president of Boston Edison stated to his employees, “Every day you meet … customers or possible customers. As they find you, smiling or grim, so they will judge us as a body. To them you are the company – good or bad” (as quoted in Tone, 1997, p. 58). A firm’s labor practices served as a signaling mechanism to customers; products made by workers employed by beneficent owners must be better than products made in other firms where the workers were treated much worse. In effect, welfare capitalism helped firms differentiate themselves from their competitors. Hence, many nonunion companies in industries such as banking, insurance and retail utilized welfare benefits though the risk of unionization was low and the working conditions would not have likely drawn the ire of the federal government. The fact that these practices spread in these types of industries provides further evidence that firms saw welfare capitalism as a mechanism to improve firm profitability.
During the Progressive era, firms also marketed their benevolent acts in order to achieve institutional legitimacy. In Roland Marchand's, *Creating the Corporate Soul: The Rise of Public Relations and Corporate Imagery in American Big Business* (1998), the author highlights numerous instances in which large companies strategically used marketing ploys in order to gain legitimacy from a public that was skeptical of corporations and their increasing power. The impact of this advertising was that it persuaded the public that their interests were being served by these large corporations (Heald, 1957). For example, firms like Metropolitan Life Insurance Company instructed their agents to use public service announcements of the firm's benevolence in order to generate new business (Marchand, 1998, p. 10). In order to gain the favor of the citizenry, firms engaged in welfare practices and advertised them in order to show how large corporations served the greater good of society. Large corporations became a taken-for-granted participant in commerce within a few decades after being reviled – advertising their benevolence to workers and the community was a powerful tool in aiding that endeavor.

The Great Depression had considerable impact on almost every sector of the American economy, though some firms were much more significantly impacted than others. In sectors of the economy most affected, welfare capitalistic practices became much less prevalent. Many of the most ardent practitioners of welfare capitalism through the 1920s, however, such as AT&T, DuPont, IBM and Proctor & Gamble, were least affected financially by the Depression, making it easier for them to avoid layoffs and cuts to welfare programs (Jacoby, 1997, p. 33). Though the Depression provided the economic motivation to discontinue such programs, many of these firms did not do so
(Dobbin, 1992). Greater labor productivity is one possible cause. Another, is that employees came to expect these benefits and the legacy of firms offering such perquisites to employees constrained these businesses from cutting their welfare practices (see Zahavi, 1988 for a historical account).

Though many large nonunion firms sought to prevent the welfare state from spreading, some influential nonunion firms sought to structure Social Security in a manner that benefited private enterprise. Marion Folsom, Treasurer of Kodak, was a key figure in the establishment of the early Social Security system and served in various governmental posts during the period. He did not believe that the government should be responsible for providing old-age and unemployment insurance in place of private enterprise, thus he sought to influence legislation so that federal pensions and unemployment insurance would work with existing welfare capitalist practices as opposed to substituting for them. Folsom predicted that a business-friendly Social Security system could actually increase the number of private pension plans offered, which is precisely what happened (Jacoby, 1997, p. 215). Nonunion employers like Kodak thus created pension plans that supplemented Social Security, which at that time, as now, did not provide a level of income upon which a family could subsist. By influencing legislation, these business leaders ensured that government intervention did not curtail the firms’ ability to use welfare capitalism for its own end.

Conclusion

Firms possess many possible rationales for instituting welfare capitalist practices: avert unionization, limit state intervention, boost legitimacy, signal to customers the
quality of production, increase labor productivity, decrease turnover, improve employee welfare, and/or fulfill a moral obligation. The real power of welfare practices is that they have the potential to accomplish each of these ends. Welfare capitalism’s emergence coincided with the rise of the large firm, early efforts at labor organization and greater state intervention. This is hardly coincidence. In fact, the study of welfare capitalism provides a unique glimpse into how the state, workers and firms interacted throughout the last century. Analyzing the changes in the structure of welfare capitalism provides a nuanced view of the relative shifts in power of these entities over time. In the studies that follow, I explore the diffusion and alteration of one of the most prominent and socially important welfare practices – company-sponsored retirement plans.
CHAPTER 3:

“TOO OLD TO WORK AND TOO YOUNG TO DIE”: THE FRAMING OF STRATEGIC CHANGE AND THE TREATY OF DETROIT

Introduction

Understanding the dynamics of strategic change poses a set of important questions to organizational researchers. Fiss and Zajac, borrowing from Rajagopalan and Spreitzer (1997) and Van de Ven and Poole (1995), define strategic change as an "alteration in an organization's alignment with its external environment" (2006, p. 1173). In addition to modifying practices, procedures and structures, researchers emphasize that strategic change also involves altering the organization's mission and goals (Gioia, Thomas, Clark, & Chittipeddi, 1994). Changing an organization's objectives requires that leaders articulate the change so that it elicits support from both internal and external constituents (Smircich, 1983). Therefore, an important aspect of strategic change is the role played by leaders in explaining and rationalizing the organization's actions (Pfeffer, 1981). These explanations, in turn, help determine whether the change effort leads to the desired organizational outcomes. In short, strategic change is necessarily accompanied by accounts to garner consensus for, and provide legitimacy to, the change effort. When strategic change represents a fundamental alteration or redefinition of the organization's stated purpose, these rationalizing accounts take on an even greater importance. Yet despite the criticality of symbolic management in articulating strategic change, to date,
little research has attempted to explain the way in which leaders present organizational strategies to their internal and external constituents (Fiss & Zajac, 2006). To address this shortcoming, I borrow insights from social movement theory to broaden our understanding of the ways in which leaders engage in acts to legitimize (changes to) organizational strategies.

Increasingly, organizational researchers have taken insights from the study of social movements (Davis, McAdam, Scott, & Zald, 2005; M. D. King & Haveman, 2008; Weber, Heinze, & DeSoucey, 2008), which has proved beneficial in articulating the mechanisms through which new fields are formed and organizational change occurs (Haveman, Rao, & Paruchuri, 2007; Rao, Monin, & Durand, 2003). In this study, I draw upon the framing literature in social movement theory, which emphasizes the role played by frames in "legitimating the activities and campaigns of a social movement organization" (Benford & Snow, 2000, p. 614). Framing, "involves the strategic creation and manipulation of shared understandings and interpretations of the world, its problems and viable courses of action" (Campbell, 2005, p. 49). Movement leaders develop frames to provide internal and external constituents a better understanding of the problem the movement seeks to address and its proposed solution (Valocchi, 1996). This suggests that leaders symbolically manage the issues of, and proposed solutions to, the problems the organization seeks to ameliorate in order to add legitimacy to the organization and its purpose.

In this study, I examine two negotiation rounds between the United Automobile Workers (UAW) and the "Big Three" automobile manufacturers (Chrysler Corporation,
Ford Motor Company and General Motors Corporation). The UAW offers several advantages as a case study of postwar labor relations and the symbolic role of leadership during strategic change. During its peak, the automobile industry directly or indirectly employed one in every six Americans. At this time, the Big Three each ranked among the ten largest employers as well (see Davis & Cobb, 2010). Due to these firms’ criticality to the US economy, their leaders possessed considerable political and economic influence. Similarly, the UAW was among the largest, and was the most economically powerful union during this period. Due to its influence in the auto industry, the UAW leadership also held considerable economic and political power – much more so than most union leaders (Boyle, 1998, pp. 3-4).

In the years following World War II (WWII), the UAW emerged as one of the most powerful organizations in the labor movement, a power derived ultimately from its ability to mobilize large numbers of members. The UAW, particularly under Walter Reuther’s leadership, was one of the unions most ideologically committed to using collective bargaining to the benefit of society. As such, the UAW is considered a type of social movement organization (SMO). An SMO is a formal organization that purposefully and collectively attempts to change organizational and/or societal institutions and structures (McCarthy & Zald, 1977; Zald & Ash, 1966). Many researchers consider labor unions generally (Lipset, Coleman, & Trow, 1956; Osterman, 2006; Voss & Sherman, 2000) and the UAW specifically (Lichtenstein, 1995) to be characteristic of SMOs as they are dedicated to improving conditions of work and remuneration for their members. In so doing, they challenge the dominance of firms in structuring the employment relationship. Furthermore, both in the 1940s and today, the
UAW self-identified as an SMO dedicated to promoting solutions to ameliorate a host of social problems (How Does the UAW Work?, 2011).

The UAW leadership is tasked with operating in the best interest of its membership. Therefore, its actions have to be commensurate with expectations from the rank-and-file. The Union's bargaining strategy therefore must simultaneously satisfy member demands and still be amenable to the firms from which it seeks concessions. A third constituency includes politicians and the general public with whom the union seeks support. Bargaining negotiations, therefore, have to balance demands and expectations from each of these parties. For the UAW leadership to identify a new bargaining goal necessitates establishing legitimacy for that goal among the three aforementioned groups.

The automobile manufacturers also provide explanations and rationalizations for their own goals and the repudiation/acceptance of the Union's demands to workers, the Union and the public. Counter-framing is an attempt by the target of a social movement to “rebut, undermine or neutralize a person's or group's myths, versions of reality, or interpretive framework” (Benford, 1987, p. 75). The counter-framing activities by the auto manufacturers played a key role in determining the success of the Union's mobilization efforts. In this study, I highlight the framing and counter-framing efforts of the UAW and the Big Three directed at workers, the public and firms/UAW across two negotiation rounds: 1945-1946 and 1949-1950.

In 1945-46, the UAW bargained for and went on strike against GM over demands for a large wage increase and that auto prices not be raised. The call for price control boldly challenged the well-established managerial prerogative of price setting. In so
doing, the Union’s demands expressed the interests of working class Americans –
increased purchasing power through high wages and low prices. These demands
exemplified the organization’s commitment to use the lever of collective bargaining to
alter the balance of power in the automobile industry and thereby benefit the public. As
Nelson Lichtenstein stated, "this was the last great strike in which unionized workers
could claim, with even marginal credibility, that their struggle embodied the immediate
hopes and popular aspirations of all Americans" (1995, pp. 234-235).

Organized labor had traditionally been skeptical of company-financed welfare
initiatives. In 1949-50, however, the UAW bargained primarily over retirement and
health care benefits for its members. In the agreements stemming from these
negotiations, the Union accepted the right of management to determine questions of
pricing and production in exchange for lucrative monetary gains for its members.
Though the UAW argued that its demands were in the best interest of all Americans, the
basis for this contention was tenuous at best (Brown, 1999, chap. 4; Lichtenstein, 1995,
chap. 12). Bargaining over monetary gains for its members represented a strategic and
ideological departure for the UAW and its leader, Walter Reuther.

By examining these two rounds of negotiations, this study makes several
important theoretical and empirical contributions. First, most framing studies are of
single cases, typically analyzing successful efforts of social movement actors. Negative
cases and analyses of the continuities and changes in framing strategies are rarely
examined (Benford, 1997). By examining the UAW over two rounds of negotiations –
and in terms of having its primary demands met by the firms, one ultimately a failure and
one a success for the UAW – with significantly different demands across rounds, this study can better account for whether and how framing efforts by movement leaders change over time. Additionally, most prior studies examine framing efforts to a single audience. How an organization frames its demands to internal and external constituents has rarely been examined (see Fiss & Zajac, 2006). I address this limitation by examining the framing efforts made to workers and the public and to the firms and compare those across these groups and over time.

Third, integrating the concept of ideology into the framing literature has proved problematic in past research. In much of the social movements research, frames (or master frames) are seen as synonymous with ideology (Oliver & Johnston, 2000). Frames, however, are derived from ideologies. That is, the content of the framing efforts used by movement leaders is determined in large part by the ideological commitments of the organization (Oliver & Johnston, 2000; Valocchi, 1996). In this study, I explore the dynamic interplay between ideologies, framing and strategic change. Specifically, I examine how an organization uses framing to balance its new strategic efforts with its existing ideological commitments.

Last, this study enlightens our understanding of a point in US history critical in establishing an employment relationship whereby firms became the primary dispensers of retirement and health care benefits – a system that is unique by international standards (Esping-Andersen, 1990). Events that lead to significant changes of order and moments of origin of new structures are of particular interest to sociologists and organizational theorists (Clemens, 2007) as these have important consequences in establishing new sets
of institutional arrangements which influence future events (Haydu, 1998). The UAW’s push for benefits during the 1949-1950 round of negotiations served as a constitutive moment (Berk, 1994), helping cement employer-sponsored welfare as the predominant form of social provision in the United States. Once labor unions began to bargain over fringe benefits such as retiree pensions, health care, unemployment and vacations there was a dramatic increase in the prevalence of these types of benefits in both the union and nonunion sectors (Jacoby, 1997; Macdonald, 1963). When organized labor changed its bargaining strategy to fight for company-financed retirement and health care benefits, no significant economic organization remained to push for an expanded welfare state. As such, the debate around how to provide for and finance welfare has been waged in the political arena – an arena where insurance companies, private corporations and professional organizations such as the American Medical Association have exerted, over time, tremendous influence in order to maintain the corporate-sponsored welfare system that persists today (Klein, 2003; Quadagno, 2005).

**Theory and Hypotheses**

For a movement to be successful, the framing efforts must resonate with its internal and external constituents. To achieve resonance, a frame must be salient (Benford & Snow, 2000). That is, in order to garner support, the organization must express its claims in a manner that is consistent with existing traditions, norms and understandings. Movement scholars argue that couching an argument in broader, more generally accepted beliefs and values (e.g. security or civil liberty) is more likely to resonate with a broader audience. Abolitionists were unsuccessful in generating support
for their rights to assembly and freedom of speech when framed as a concern about the
power of slaveholding southerners or a broader argument regarding race. Framing these
same demands as maintaining civil liberty, however, proved to be more successful
(Ellingson, 1995).

Resonance also necessitates that the claim be consistent with the ideology and
identity of the movement organization (Babb, 1996; Benford & Snow, 2000). A
movement's ideology, strategy, tactics and its use of rhetoric and discourse to explain its
actions must achieve a certain degree of congruence in order for the movement to
mobilize internal and external support. Protest groups who proclaim a strategy of
nonviolence but whose actions violate central tenets of nonviolence create inconsistencies
that make it difficult to elicit broader support for their cause (Johnson, 1997). In sum,
there is an important but often overlooked interplay between an organization's ideology,
its strategic choice and the rhetoric and discourse leaders use to generate backing from
internal and external constituents (Simons & Ingram, 1997).

An ideology is a "set of beliefs about the social world and how it operates,
containing statements about the rightness of certain social arrangements and what action
would be undertaken in the light of those statements" (J. Wilson, 1973, pp. 91-92). As
such, an ideology is the normative and moral foundation upon which collective action
occurs (Oliver & Johnston, 2000; Simons & Ingram, 1997). For a labor union, its
ideology helps determine the strategic direction the organization takes during its
negotiations. That is, it provides the basis upon which its demands are made.
An important distinction, however, must be made between ideology and frames. Though there is overlap in the two concepts, frames are derived from ideology. "Social movement leaders create their general frames from more specific and complex ideas that seek to explain and remedy a particular grievance, problem or injustice" (Valocchi, 1996, p. 126). Framing is a sensegiving process whereby understandings of the role and the purpose of the organization are shaped. Opposing movements can draw upon the same frame, such as is the case with pro-choice and pro-life advocates who both draw upon the "civil rights” master frame to argue for and against abortion rights respectively (Oliver & Johnston, 2000). Moreover, a single movement can draw upon different frames and strategically direct those at disparate audiences to generate support. Intra-organizational movements advocating the adoption of LGBT-friendly policies depended upon frames that resonated with public sentiments of fairness and equality as well as corporate sentiments of profitability and productivity (Creed, Scully, & Austin, 2002; Scully & Creed, 2005). Frames, therefore, are tools movement leaders use to generate support for their organization's claims. For a labor union, framing provides the rationale behind its demands in order to create buy-in from its members, the opposing firm and the public.

Ideology and framing can provide important extensions to the study of strategic change. Changes in strategy vary in the extent to which they contradict or comply with an organization's existing ideology. The more fundamental the change in strategy, the more likely it will call into question the constituents’ assumptions about the purpose of the organization (Fiss & Zajac, 2006). Early institutional perspectives highlight that organizations are willing to modify or abandon their stated purpose and founding
ideology in order that the organization (and the power structure it contains) persists
(Michels, 1962; Zald & Denton, 1963). Prior research also shows that one tool firms use
to deal with these opposing demands is to espouse new values in order to obtain
legitimacy, but decouple those from the actual practices and procedures of the
organization (Fiss & Zajac, 2004; Westphal & Zajac, 2001). However, the extent to
which an organization is willing to abandon its ideological commitments is likely to vary.
For an SMO, its ideology may be less pliable because such organizations are so strongly
defined by their normative commitments. By examining an SMO undergoing strategic
change inconsistent with its existing ideology, I am able to explore how such an
organization balances its ideological commitments with its strategy.

**Historical Background**

"Purchasing Power for Prosperity" and the General Motors negotiations, 1945-1946

During World War II, the government played a significant role in regulating the
US economy (Baron, et al., 1986), which had important implications for both large
American corporations and organized labor. The government placed industry under
several constraints, such as price controls and pre-determined market allocation.
Moreover, the government promoted policies to ensure labor peace, thereby limiting
business efforts to contest labor disputes and unionization drives. Despite these
regulations, the War had proved to be quite profitable for most American businesses, thus
governmental support of industry after the War was not required as it was in most of

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3 For detailed analyses of the 1945-46 negotiations and strike between the UAW and GM, see Barnard
McMillan (1975). For a pro-labor account of the strike, see Carlton (1946).
Western Europe. As the War concluded, business leaders lobbied hard to reestablish their managerial prerogatives in the areas of pricing, market allocation and labor relations (Lichtenstein, 1995, pp. 221, 228).

For unions such as the UAW, which had won recognition from the Big Three in the years just prior to the conflict, the War was a respite in their ongoing struggle with management (Bernstein, 1965). Because of the importance of domestic production for the War effort and labor shortages due to millions of working-age men called into active military duty, the government required the assistance and compliance of organized labor – particularly with the industrial unions of the Congress of Industrial Organizations (CIO). Most US unions voluntarily entered into a no-strike pledge during the War, and the government took on a greater role in regulating the labor market by such acts as investigating and mediating labor disputes and placing restrictions on wages and employee mobility. The War years, while constraining labor prerogatives to strike for higher wages and improve shop-floor conditions, provided a certain degree of legitimacy to these unions as organized labor became part of a tripartite system, along with the government and business, responsible for the planning and execution of wartime production. In effect, the Great Depression and WWII had "socialized the economy," and provided an opportunity for liberal leaders to promote a more regulated form of capitalism (Zieger, 1995, p. 219). As a result, many in organized labor saw the end of the War as an opportunity to expand this tripartite system, thereby creating a social-democratic state along the lines of much of Western Europe (Lichtenstein, 1995, p. 228).
The rank-and-file, meanwhile, grew increasingly dissatisfied with the no-strike pledge, which inhibited their ability to seek improvements in shop-floor conditions or to bargain for higher wages in an inflationary economic environment. Moreover, workers witnessed firms generate fabulous profits during the War, creating a sense that the sacrifice for the War effort was born largely by labor to the benefit of capital. This frustration became increasingly manifest through a rash of wildcat strikes and a growing dissatisfaction with union leadership (Lichtenstein, 1985).

Satisfying the demands of the rank-and-file had to be balanced by the concerns of the public, however. In the summer of 1945, there was a general concern over the rising cost of living. For labor leaders like Walter Reuther, at that time vice-president of the UAW in charge of negotiations with GM, any union proposal that was seen as inflationary was likely to be unpopular among the general public (McMillan, 1975). Furthermore, the government's wage-price policy stipulated that pay raises could be granted without governmental approval as long as they were not accompanied by higher prices; otherwise, the price increase would have to be approved by the Office of Price Administration (Bernstein, 1965). The UAW was in a situation where it had to meet the demands of its membership while adhering to government policy and the interests of the public.

Reuther thought the central issue in the political economy in post-War America was the relationship between wages and prices. The federal government was ineffective in constraining inflation – living costs had risen thirty percent since January 1941. Through collective bargaining, Reuther reasoned, a wage policy could be established
whereby wages would not be passed along to consumers in the form of higher prices. In so doing, the demand for wages and price control challenged managerial power "in the name of social and economic efficiency" (Lichtenstein, 1985, p. 362). The critical aspect of this bargaining strategy was to ensure that consumer interests were protected while worker demands were being satisfied. This effort was an attempt to shift the balance of power within the economy, placing labor and the government alongside firms in regulating American industry.

In a preamble to the formal demands made of GM, the UAW outlined its economic platform in the brief, "How to Raise Wages Without Increasing Prices," sent to the Director of Economic Stabilization on June 30, 1945. Penned by Don Montgomery, and signed by Reuther, the brief presented a Keynesian/Veblenian solution to America's post-War economic concerns – stimulating consumption through greater purchasing power, accomplished through higher wages and low prices. The brief argued that the financing of wage increases without raising pricing could be obtained through the "enormous size of war profits of American corporations, combined with ever-increasing labor productivity" (W. P. Reuther, 1945b). On August 18, the UAW, under the leadership of president R.J. Thompson and Reuther asked for a 30 percent increase in wages with no increase in prices from GM.4 By also demanding price control on automobiles, the UAW emphasized that wage gains could not be at the public’s expense.5

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4 The rationale for the wage demand was that during the War years, auto workers worked a 48-hour week – 40 hours of standard pay and 8 hours of overtime pay. The 30 percent increase was necessary to give workers the same purchasing power with a 40-hour workweek as they had under the 48-hour workweek.

5 The same 30 percent pay raise demands were issued to both Ford and Chrysler. In both instances, the UAW negotiation teams stated and argued that such a raise could be granted without a price increase. However, price control was not a subject of formal bargaining with either firm.
A formal reply came to the Union on October 3, at which time Charles E. Wilson, president of General Motors, in a letter to Reuther and released to the public, refuted claims of excess wartime profits and asserted that a 30 percent wage increase would lead to an increase in the price of cars. The firm also highlighted many errors made by the Union in forming its assumptions and argued that the firm was not nearly as profitable as the Union made it out to be (GM Negotiations, 1945a). This prompted the Union's request that the firm "open its books" to determine whether the wage increase could be granted without an increase in prices. Both to the public and in formal negotiations, Reuther stated that if the firm could show it was not able to pay the demanded pay raise, the Union would adjust its demands to grant workers the maximum raise allowable without the firm raising its prices (Loftus, 1945; W. P. Reuther, 1945a). The firm subsequently downplayed its "pleas of poverty," and to the UAW negotiators and the general public emphasized instead that the Union had no basis upon which to have a say in the pricing of products (CIO Rejects GM Proposal, 1945; G.M. Quits, 1945; UAW Accuses Auto Makers, 1946).

General Motors’ position throughout the strike was simply to wait the Union out. One reason for the firm's recalcitrance was the fact that GM’s leadership believed Reuther's demands were made simply out of self-interest – in order for him in 1946 to obtain the presidency of the UAW. The firm did not believe that Reuther’s demands were in any way ideologically central to him or the Union and assumed the rank-and-file would lose their taste for a long, protracted strike (McMillan, 1975, pp. 59-60). General Motors, the largest auto maker, was targeted by the Union in hopes that competitive pressures would impel the firm to capitulate to their demands. However, in 1945 GM
was awash in cash and had additional financial protection in the form of governmental tax rebates. Moreover, GM produced many parts needed by other automobile manufacturers; therefore, the strike on GM adversely affected its rivals as well.

The company’s initial counter-offer, issued on October 19, asked the UAW to join its petition to amend the Wage-Hours Act to increase working hours from 40 to 45 along with a wage increase of between five and eight percent. Not surprisingly, the Union rejected this proposition. On November 7, GM offered a ten percent wage increase, a demand the UAW rejected on the 19th of that month as being inadequate. Reuther countered the GM offer by stating the UAW was willing to submit the dispute to a three-member mediation board – the Union gave the firm 24 hours to reply to the offer. With no reply coming on November 21, 180,000 UAW workers went on strike against GM.

The strike captured the attention of the public as both sides continued their campaigns to curry public support for their positions in the negotiations. Because of GM’s position as a parts supplier to many other automobile manufacturers and the ongoing strike in the steel industry, the entire industry was at a near standstill. The ramifications for the public were obviously significant given the central importance of the automobile industry to the American economy. Though GM later increased its offer to 13.5 cents, in early December, US President Harry Truman announced the creation of a federal fact-finding board to analyze the dispute. Representatives of both GM and of the

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6 In 1945, a wartime tax on excess profits was still in effect. By the time the strike was called, GM had earned nearly as much as was allowed before losing its remaining excess profit to the tax. Moreover, the tax was paid in advance, meaning the firm would receive a rebate if a strike shut the firm down (Barnard, 2004, pp. 214-215; UAW vs. GM, 1945).
7 An additional 140,000 GM workers had been recently laid-off by GM and these workers too were considered strikers by many in the press as well as the Union.
UAW were invited to participate in the hearings. The board began its deliberations on December 20, and on the 28th, Truman sent a letter to the fact-finding board stating that "ability to pay" would be considered a legitimate factor in the dispute. Walter G. Merritt, attorney for GM, referred to Truman's proposal as "radical" and "revolutionary" and that yielding to the demand "... would mean the end of free enterprise" (G.M. Quits, 1945; Truman Asks Authority, 1945). GM promptly quit the fact-finding board hearings.

On January 10, 1946, Truman's fact-finding board returned with its recommendation that GM offer a 19.5 cent (17.5 percent) wage increase and stated that the increase would not require a raise in prices. Though the board had no formal authority to enforce its recommendation, the Union took the findings as a victory. As Reuther proclaimed,

"The Fact Finding Board's report in clearly stating that the wage increase will not require a price increase is a complete endorsement of the Union's position and represents a historic step in the fight to establish a full production, full employment, full consumption economy (W. P. Reuther, 1946)."

General Motors, however, rejected the board's finding. Reuther issued a letter to President Truman asking him to persuade GM to reverse its decision and accept the board's recommendation. In the letter, Reuther stated that if GM did not accept the board's recommendation within a week, the Union would revert to its 30 percent wage demand (Letter from Natl. UAW-CIO, 1946). General Motors ignored the deadline and the strike continued.

In January and February of 1946, the UAW’s position in the strike was hindered by a series of contract settlements. Both Chrysler and Ford reached settlements of 18.5 and 18-cents per hour increases, respectively, with no considerations of pricing. The
steel industry and its union, the United Steel Workers, accepted an 18.5 cent an hour increase. Around that time, the United Electrical Workers Union (UE), representing 30,000 employees at GM, settled with GM for 18.5 cents. Both Thomas and Reuther were upset with the UE leadership for not consulting the UAW about the impending settlement. Many believed that political divisions between the communist-led UE and Reuther, who was backed by the anti-communist caucus within the UAW, was the primary motivation for undermining the UAW’s negotiations with GM. Within a few days of the UE settlement, GM offered the UAW the same 18.5-cent raise. Reuther promptly rejected it, stating that the offer required the Union to give up on several local issues and provisions (Lichtenstein, 1995, pp. 242-243).

As the strike waged on, the financial impact on workers continued to mount. By mid-February GM workers had lost over $98M in gross wages (Strike Break Impends, 1946). Private citizens began a strike relief fund to aid GM workers, most of whom had long exhausted their personal savings. As the strike slipped into March, all discussion of automobile prices was dropped. Yet the long and costly strike compelled Reuther to attempt to win gains not achieved by the Union at other firms. After reverting back to the demand that GM match the fact-finding board’s recommendation of a 19.5 cent raise, Reuther asked that arbitrators settle the one-cent difference between the Union and the firm. The firm refused. On March 15, 1946, after 113 days, the UAW accepted GM’s 18.5 cent offer. Concessions made by the firm correcting wage inequities between plants allowed Reuther to claim that the UAW won a 19.5-cent agreement from the firm, however (McMillan, 1975).
Outcome and aftermath. The GM strike and its settlement had several important and long-lasting consequences. Financially, for the rank-and-file, the strike proved extremely costly. It took over two years before workers recouped the wage losses from the strike, and it was not until 1953 when they were as well off as they would have been had they accepted the 13.5 cent offer GM made in December (Bernstein, 1965, pp. 276-277). As predicted, the wage increases won by the UAW and other unions in 1945 and 1946 were passed along to consumers in the form of higher prices. Within weeks of the settlement, the price of basic commodities rose 25 percent and between March and November of 1946, inflation increased 14 percent, wiping out most of the wage increase (Lichtenstein, 1995, p. 246).

General Motors’ management and many rank-and-file believed Reuther's negotiation strategy was an effort by him to become UAW president (McMillan, 1975). Despite the financial cost to GM workers, Reuther's militancy earned him respect among the membership and within a few weeks of the strike's end, Reuther defeated Thomas for the presidency of the UAW. The GM strike raised his public profile and showed that Reuther was a powerful force within industrial relations and politics. The strike also earned a measure of respect and legitimacy for the Union from the automobile manufacturers. GM did not foresee the support the rank-and-file gave to the UAW’s leadership, and the strike proved that the Union could mobilize financial and public support for its workers. To many, it was the GM strike in which the automobile manufacturers came to accept the UAW (Barnard, 2004, p. 262; McMillan, 1975).

Political and economic constraints on labor, 1946 to 1949
In the months after the GM settlement, the political climate in the US changed significantly. At the mid-term elections in November of 1946, the Republican party regained control over both houses of Congress for the first time since the 1930-32 session. More than half of all liberal Democrats, including many supported by the CIO’s political action committee, were ousted, thereby cementing America's political shift to "the right" that business leaders believed began during the waning War years (Lichtenstein, 1995, p. 257; Sloan, 1944). As tensions with the Soviet Union manifested, the "red scare" made organized labor, long admonished for its socialist and communist sympathies, an easy target for the hostilities of many conservative political leaders. This created a political climate that was demonstrably hostile toward organized labor and liberal agendas to create a social-democratic state along the lines of those being erected in Western Europe.

Within two weeks of the start of its term, the 1946 Congress introduced over 100 bills designed to curtail the rights of organized labor (Stevens, 1990). Congress also blocked Truman's effort to pass a nationalized health insurance plan and an effort to increase Social Security benefits. In 1947, the Senate passed the Taft-Hartley Act, overriding Truman's veto, which placed significant and important restrictions on organized labor. Truman's reelection in 1948 brought with it few changes. Most efforts to expand upon the New Deal – including national health insurance, federal aid to education and a program of low-income housing construction – were blocked by Congress (Lichtenstein, 1995, pp. 305-307; 2002, p. 122).
In 1949, the economic outlook was only slightly more favorable for the UAW than the political climate. Though American industry racked up large profits in 1947 and 1948, mounting inflation and fears of recession made many apprehensive about the state of the economy. It was in this politically hostile and economically uncertain environment that unions such as the UAW entered into contract negotiations in 1949.

"Too Old to Work and Too Young to Die" and the Treaty of Detroit, 1949-1950

The year 1949 was not the first time the UAW expressed interest in pensions and "social security" benefits. The Union had been collecting data on firm-sponsored retirement plans as far back as 1944 (Company Pension Plans, 1944). During the 1945 contract negotiations with GM, a portion of the 30 percent wage increase demand was to be used to establish illness pay and death benefits as well as hospitalization insurance to workers (Reuther States Case, 1945). In April of 1946, as Chrysler threatened to fire its workers aged 65 and older, the UAW responded with a strike threat and a call for company pensions (Chrysler Strike Threatened, 1946). At the 1946 CIO convention, held a few weeks after the 1946 Congressional elections, Reuther spoke of winning retirement and health benefits through collective bargaining, as gaining such "security"

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9 The UAW defined social security as an “organized effort to assure people of protection from the common hazards of life against which they as individuals cannot defend themselves.” Social security plans include, “income maintenance during periods of involuntary unemployment; income maintenance during periods of lost time due to sickness and injury; hospitalization protection for worker and family; medical care for worker and family; retirement benefits; death benefits; social service program; guaranteed annual wage” (Bargaining for Soc. Sec., 1949).
through federal legislation seemed foreclosed due to the conservative domination of Congress (Dickinson, 1947, p. 1286). The next year, Ford offered a pension plan requiring employee contributions and the workers voted down the plan by a three to one margin (see Lichtenstein, 1985). That same year, the UAW asked GM to pay for a jointly controlled health plan, over which the firm refused to bargain (Derickson, 1994).

Though the UAW had publicly stated since 1946 that it intended to include pensions and health care as part of its bargaining demands, it was not until not until 1949 that the Union made a concerted effort to do so. Early that year, the UAW summarized its economic demands for the fourth round of post-War contract negotiations. Primary among those, were a pension plan; a "social security" program, consisting of health, hospitalization, medical, surgical and life insurance provisions; and a wage increase (Raskin, 1949; *UAW-CIO Admin. Letter*, 1949).

Among the Big Three, the UAW made the decision to begin its negotiations with Ford. Ford, being a single-family controlled corporation was thought by the Union to be the easiest target from which to establish new principles in collective bargaining (Lichtenstein, 1995, p. 283; V. G. Reuther, 1976, p. 309). Furthermore, Ford had the oldest workforce among the three, making the need for pensions more immediate. In 1947, when Henry Ford II took over the presidency of the company, the firm brought in a new management group that was more open to working with the UAW (Barnard, 2004, p. 263). Moreover, Ford II spoke publicly about the need for "human engineering," and was interested in burnishing Ford's public relations (W. P. Reuther, 1949b). The firm also began offering pension plans to salaried employees making over $3,000 in 1944 and had
agreed in 1947 to offer a pension plan to hourly workers that the Union rejected (Bannon, 1949).

With the contract set to expire on September 29, the UAW signed an agreement with Ford the night before that expanded health care benefits, established a company-financed retirement plan and provided a small wage increase. Ford workers were already receiving health and surgical benefits as well as some coverage for accidental death or dismemberment as part of employee-contributory plans. The 1949 contract added in-hospital medical benefits financed by Ford. In addition, the pension plan guaranteed each Ford employee aged 65 or over with 25 years or more of service a guaranteed pension of $100 a month, which was offset by social security benefits. That is, Ford made up the difference between $100 per month and the federal old-age monthly benefits, which in 1949 averaged $25.72. One of the key requirements made by the UAW was that the plan be "actuarially sound" – which ensured that contributions to the plan follow actuarial guidelines and that the plan be administered by a trust (Ford-UAW Contract, 1949; Macdonald, 1963).

Though negotiations with Chrysler had begun while the Ford contract was being negotiated, the Ford settlement established the pattern for the automobile industry. Chrysler, however, began a series of delay tactics to prevent the discussion of welfare benefits in formal negotiations. Chrysler’s negotiating team, headed by Robert W. Conder, claimed the firm was unprepared to discuss welfare plans because it did not think pensions and health benefits were legally negotiable in 1949.\(^{10}\) The company hired an

\(^{10}\) The 1948 agreement between the UAW and Chrysler stated that the 1949 contract could only be opened up for issues related to "the general level of wage rates". Because pensions and medical insurance were not
actuarial firm to conduct a study of the cost of such plans and continued to stall discussion with the UAW until the study had been completed. Throughout these early negotiations, the UAW pressed the firm to establish some basic parameters around which these plans would be created and the firm refused to capitulate (Chrysler Negotiations, 1949).

On January 17, 1950, with the actuarial study complete, Chrysler formally responded to the UAW, stating that the firm would not comply with the Union's demand that the pension plan be based on a cents per hour contribution and that the plan be jointly administered by a trust. Rather the firm would administer the plan and guarantee payments to workers at the time of retirement. Moreover, Chrysler stipulated that it would only guarantee benefits be paid to workers over the next five years, making the existence of the plan open for negotiation again in 1955. The Union calculated the cost of the welfare plans at 3 cents per hour, far below the 10-cents per hour demanded. The counter-offer, which had not followed the pattern set by the steel industry or at Ford, led the UAW to strike against Chrysler on January 25.

A challenge for the UAW was to make clear to its workers what the deficiencies were with the Chrysler offer. Through communications to the rank-and-file, Reuther and the Chrysler team attempted to make the abstract concepts of “actuarial soundness” and “administered by a trust” more concrete. "Only through such actuarially sound funding of both past and future service credits can pension benefits be guaranteed. This is how considered in the same class as wages, the Chrysler negotiation team's contention was that the Union had no legal ground in which to demand these benefits (Conder, 1949).

11 There were other issues with the plan, namely that it be based on seniority rather than years of service. There are important distinctions between the two, as a worker could lose seniority by transferring to another plant or another position within the firm (Chrysler Negotiations, 1950).
Chrysler executives have their pension benefits guaranteed” (W. P. Reuther & Matthews, 1950a).

“The Union asks for a pension and social security plan in which both the Company and the Union will jointly administer the fund. The Company wants full control. The Union is asking for a definite amount to be set aside with which to guarantee the payment of the benefits. The Company refuses to set any certain amount aside” (Speakers and Notes, 1950 emphasis in original).

Though Chrysler later made concessions, agreeing to establish a trust fund with a fixed amount of dollars from which benefits would be paid, the Union refused to accept a deal less generous than that won at Ford. On May 4, after 103 days of striking, the two sides reached an agreement. The firm agreed to the previously established 10-cent economic pattern and that the pension and social security funds be financed on a cents per hour basis and administered by a trust.

The rationale for Chrysler's reluctance to follow the pattern set at Ford was never fully explained. Unlike GM and Ford, the Chrysler management was much more antagonistic to the Union during this time, and the labor relations at Chrysler were the most contentious among the Big Three (Barnard, 2004, p. 263; Zetka, 1992). The UAW charged that Chrysler, which had widely dispersed ownership and interlocks with prominent banks through its corporate board and law firm, was being used as a tool by financial interests to combat the Union drive for welfare benefits (Weinberg, 1950). Though the validity of the theory put forth by the Union is questionable, Chrysler's decision to engage in a long and costly strike at a time when it had just achieved record
profits and threatened Ford's status as the second largest automobile manufacturer was nonetheless surprising and ultimately a strategic misstep by the firm.\textsuperscript{12}

Reuther and the UAW looked to establish even greater benefit levels at GM than those achieved by Ford and Chrysler. In 1950, GM was the largest and one of the most profitable firms in America, employing nearly 500,000 workers, holding over 40 percent of the domestic market share for automobiles and with net income of over $656 million the previous year. After two months of relatively uncontentious formal negotiation, the UAW and GM signed an agreement that extended the benefits won at Ford and Chrysler. It was seen as a landmark in the history of industrial relations and ushered in a new era of collective bargaining between industry and organized labor.

The deal called for an annual raise of 4 cents per hour as well as continued cost of living adjustments tied to inflation. GM also agreed to pay one-half of the cost of hospital and surgical insurance for employees and dependents. But the most significant aspect of the contract was its liberal pension plan. GM agreed to provide a noncontributory pension of $125 per month offset by social security for employees at normal retirement age with 25 years or more of service.\textsuperscript{13} The deal represented the greatest economic gain won by any of the big unions since the outbreak of World War II. In exchange, the Union signed a five year contract, the longest ever at that time for an industrial union, thereby offering a degree of stability and predictability for the firm (Lichtenstein, 1995, p. 280; Macdonald, 1963).

\textsuperscript{12} Chrysler was thought to have lost the production and sale of 450,000 cars and trucks valued at over $950,000,000 in revenues (Ruch, 1950).

\textsuperscript{13} For full details on all of the provisions won in the GM and Ford agreements, see (Ford-UAW Contract, 1949; Harbison, 1950).
**Outcome and aftermath.** At the time of its passage, the UAW-GM contract was hailed by both labor and business. The UAW called it "the most significant development in labor relations since the mass production industries were organized in 1936 and 1937." GM referred to it as "unprecedented in labor-management relations" and predicted it would have a "stabilizing influence not only on our business but on the economy of the whole country ..." (as quoted in Harbison, 1950, p. 399). Termed the "Treaty of Detroit" by Daniel Bell (1950), the contract had several profound and unintended consequences for the Big Three, the Union, its workers and society.

For the automobile manufacturers, the contracts provided them with stability and predictability regarding their labor costs in the years immediately after the agreement due to the fact that the UAW accepted managerial prerogatives to make pricing and production decisions in exchange for monetary gains for their membership. As Daniel Bell wrote after the UAW-GM agreement, "General Motors may have paid a billion for peace, but it got a bargain ... General Motors has regained control over one of the crucial management functions ... long range scheduling of production, model changes and tool and plant investment" (1950, p. 53). In so doing, the UAW’s social and political agenda was narrowed and collective bargaining was no longer a threat to radically change the free enterprise system (Babson, 1999, p. 113; Harbison, 1950).

Despite the short-term benefits, these contracts later financially constrained the Big Three by burdening them with "legacy costs" (i.e., retiree health and pension expenditures), that their younger, foreign rivals avoided. Regardless of whether one blames union greed (e.g. Sorkin, 2008) or management shortsightedness (e.g. Gladwell,
2006) as the ultimate cause, few dispute the role these generous firm-sponsored benefits played in the financial troubles among American auto manufacturers. General Motors' bankruptcy filing on June 1, 2009 emphatically demonstrated the unintended consequences of the Treaty for the industry.

The living standards of automobile workers rose significantly due to the wage and benefits gains made by the UAW. Measured in constant dollars, between 1947 and 1960 the average wage of automobile workers nearly doubled. Employee benefits rose even faster – in 1939 the cost of employee benefits relative to the average wage rate was approximately six percent; by 1960 it was 26 percent (Macdonald, 1963). By 1970, Ford and Chrysler had paid more than $660 million in pension benefits (Barnard, 2004, p. 277). The Treaty also had a significant impact on the internal structure of the UAW as well as industrial relations, as it ushered in a relatively stable and centralized bargaining structure in the automobile industry (F. Levy & Temin, 2007; Lichtenstein, 1985). Moreover, some historians contend that by winning welfare benefits, organized labor was able to re-establish its loss of legitimacy in the wake of Taft-Hartley and assured labor's role as a viable economic institution (see Brown, 1999, chap. 4).

But these gains did not occur without significant cost to the Union and its workforce. The strategy of bargaining over wages and improved benefits, while financially lucrative, did little to change conditions for workers on the shop floor (Glaberman, 1997). By focusing their attention on issues that could be monetized, the UAW leadership subordinated shop-floor conflict. The number of unauthorized strikes at Ford, Chrysler and GM in the 5 years after the Treaty rose dramatically (Lichtenstein,
Furthermore, the push for economic benefits at the expense of shop-floor issues limited the UAWs ability to forestall the deindustrialization of the rust belt, as the Big Three began to move production to the South and overseas (Barnard, 2004, p. 261).

By the 1960s, criticism came to organized labor from many social commentators, including many from the left, for its lack of a socially liberal ideology and for becoming a special-interest group (e.g. Bell, 1960, chap. 11; Swados, 1963). One explanation for this change in perception is that labor traded its broader social agenda and the quest for industrial democracy for an expanded system of employer-sponsored welfare (Brown, 1999, chap. 4; Derickson, 1994; Gordon, 1999; Zieger, 1986, p. 147). Bargaining over fringes signified the "middle-class character of the American workers and his union" (Davenport, 1951, p. 93), and a diminishing influence of left-wing ideologies on the American labor movement (Swados, 1963). In relinquishing its capacity to mobilize for social change, industry was able to dismiss Reuther's social vision as rhetoric (Babson, 1999, p. 113; Glaberman, 1997). As Lichtenstein argued, "The Treaty signaled the end of an era in which Reuther – as the boldest spirit in the leadership of the industrial-union movement – could hope for a serious transformation in the governing structures of American industry” (1995, p. 280).

The major features of the Treaty eventually spread throughout many industries and influenced human resource practices in most of the largest American firms. By 1954, over eleven million workers, and three-fourths of all union members were covered by a health or pension plan won through collective bargaining (Brown, 1999, pp. 141-143). The result of this process was sustained and dramatic improvement in wages and benefits
for many working-class citizens, and a corresponding decrease in income inequality (Davis & Cobb, 2010; F. Levy & Temin, 2007).

The union drive for private benefits, however, ultimately proved to diminish any hope of creating in the US a welfare state along similar lines as the countries of Western Europe (Klein, 2003). Though the UAW leadership continued to support public policy initiatives such as nationalized healthcare and expansions to Social Security, the Union was never able to spearhead a movement of working-class Americans to push for an expanded welfare state (Derickson, 1994; Lichtenstein, 1995, chap. 12; Zieger, 1995, chap. 11). The firm-centered welfare system erected in the US after the Treaty has, in many respects, been a failure. At its peak, in the mid-1970s, company pensions covered only 49 percent of the private-sector workforce and private health insurance only two-thirds of workers under 65 (Lichtenstein, 2002). Over the past three decades, there has been a dramatic transformation of these benefits in the US as employer-financed defined benefit pension plans have given way to employee-financed defined contribution plans, resulting in a dramatic loss in retirement security for most workers (see Chapter 4). Moreover, with rapidly rising health care costs, firms have increasingly shifted these onto their workforce (Hacker, 2008). In short, America's firm-centered welfare system has provided comparatively meager and highly unequal access to benefits necessary to combat the most serious of social problems.

**Data and Methods**

I analyze the framing efforts using a historical-narrative analysis of the UAW contract negotiations with GM in 1945-46 and with Ford, Chrysler and GM in 1949-50.
Such methodology is common in history and historical sociology (Haydu, 1998; Krippner, 2007) and provides the best opportunity to detail the relation between events and discourse during the period of study (Ellingson, 1995). Narrative analysis relies heavily on primary, historical sources. Archival data has the advantage of placing social actors within context and allows the researcher to garner a more complete understanding of her perception of the situation. I utilized the UAW archives located at Wayne State University as source material to conduct a historical case analysis of the years leading up to and through the two rounds of negotiations. Sources include meeting notes, press releases, pamphlets and flyers, correspondence with the membership, transcripts of the negotiations, transcripts of radio and television interviews and personal correspondence among the UAW leadership. Journalistic accounts and advertisements in the local Detroit area newspapers and other major national newspapers such as the New York Times, Wall Street Journal and Washington Post were also important primary data sources. Finally, a number of secondary works, including Babson (1999), Barnard (2004), Boyle (1998), Lichtenstein (1995) and McMillan (1975), were important sources of historical information. These and other accounts were instrumental in helping me ground the study within its historical context and informed my interpretations of the historical data.

There is no commonly accepted method for choosing which historical documents to examine and which to ignore. To aid me in this endeavor, I relied heavily on the secondary historical accounts to help identify some of the major actors in the negotiations. I also read transcripts of the 1945-46 GM and 1949-50 Chrysler contract
negotiations to identify the primary participants in the negotiations.\textsuperscript{14} I then searched the internal papers and documents of those individuals. I identified the journalistic accounts by searching on keywords related to the negotiations between the UAW and the Big Three using the ProQuest historical news databases. Though I was not able to include all journalistic sources in the search, key national newspapers such as the \textit{New York Times}, the \textit{Wall Street Journal} and the \textit{Washington Post}, which all had dedicated staff to writing about labor relations, covered these negotiations consistently.

What I looked for in all the source materials were explanations for why the Union/firm made its demands. That is, what was the rationalizing account for the particular claim? Once collected, I read the source material and categorized them along the different themes the organization used to frame its demands for each bargaining round. An SMO can use many different frames, and varyingly implement those depending upon its audience (Glaser, Fiss, & Kennedy, 2010). Thus, it is not surprising that both the Union and the firms possessed a varied repertoire of frames in order to elicit public support for their respective claims. Within a given text or speech it was also common for the organization to draw upon several different frames. In the sections that follow, I present data on the different frames used by the UAW and the Big Three across the two rounds of negotiations and highlight some of the commonalities and differences in the themes used in the framing efforts of both the Union and the firms over time.

\textbf{Analyses}

\textit{Framing: 1945-46}

\footnotesize{\textsuperscript{14} There were no transcripts kept of the Ford and General Motors negotiations.}
Workers and public. Reuther and the UAW leadership made a conscious effort to politicize the GM strike and emphasize the stake the public had in the negotiations. The rationale for this tactic was Reuther's realization that labor was seen as being apart from, or at odds with, consumers (Lichtenstein, 1985). Reuther implored GM to make the negotiations open to the public. Though the firm balked at this demand, citing the Union's desire to keep the 1942 negotiations private as its rationale, a transcript of negotiations were kept. Excerpts from these transcripts were released to prominent newspapers. Don Montgomery, at that time the head of the UAW’s Consumer Counsel and key architect of Reuther's economic platform, stated, "let's remember this is our chance to talk to the public, the propagandized non-labor public, not to GM ... We should emphasize we want the public to hear our negotiations because it means so much to them. ... [Tell them] This isn't our fight alone. It's your fight too” (Montgomery, 1949).

In its discourse, the Union's leadership repeatedly reminded the public that the Union was looking after the public interest and called upon GM to meet its responsibility to ensuring that the transition to a post-War economy benefitted all Americans. A standard part of the Reuther rhetoric during the strike was that the union "would make progress with the community and not at the expense of the community" (Boyle, 1998, chap. 1; Lichtenstein, 1985; W. P. Reuther, 1946). As the strike lingered into the spring of 1946, Reuther pressed this point. "General Motors stands convicted before the bar of public opinion for contemptuous disregard of the public interest in this dispute. It is the union which has consistently demonstrated a serious concern for the general welfare in this controversy …" (Wages and Prices, 1946). Though ultimately unsuccessful in terms of winning concessions from GM, framing the debate as one of the public interest
generated a great deal of support for Reuther and the UAW (e.g. Lerner, 1945). As Carlton proclaimed,

It [the GM strike] revealed the willingness and the capacity of labor to rise above the traditional tactics of bargaining for a bigger slice of the fruits of capitalist enterprise, and to lay the foundations for new economic arrangements aiming at a society of security, freedom and abundance (1946, p. 427).

As negotiations were underway and GM showed an unwillingness to discuss the UAW's demands at the bargaining table, the Union criticized the firm. "The corporation now has an obligation to its employes [sic] and to all American citizens. GM cannot fulfill this obligation with a mere rejection of the demand, unsupported by reasons. It must lay the facts on the table as the union has done" (W. P. Reuther, 1945f). See also (Ruch, 1945b; Union Accuses GM, 1945). The UAW regularly reported the tremendous profits of the firm during the War and its own calculations that the firm could earn record profits in 1946 while granting a wage increase and holding prices constant (Auto Chief's Pay Views, 1945; Wages and Prices, 1946). Doing so was effective in countering the firm's "pleas of poverty" that it could not afford the wage increase without raising prices. Using "ability to pay" and "open the books" in the press helped demonstrate the Union's encompassing statistical analysis of GM's financial position and the corporation's capacity to generate profits (Carlton, 1946). These efforts seemed to have some effect. As one writer stated, "… it is simply the fact that the union has bill-boarded its position for all to see that amplifies the suspicion, perhaps ill-founded, that the company is hiding its light under a bushel" (Ruch, 1945a).

In efforts to highlight that the Union, and not GM, was working in the public's best interest, Reuther and the UAW leadership had to explain their economic logic. For
Reuther, the War proved that production was not the problem; the maintenance of purchasing power and stimulating consumption was.

They [UAW workers] want more money in their pay envelopes so they can buy more of the things grown and made by farmers, other manufacturers and workers. They want the national purchasing power at such a level that people in other industries, in agriculture, in the professions and in the service trades can buy more of the cars they make (W. P. Reuther, 1945f).

To better explain their economic thinking to and elicit support from the public, the UAW leadership sent letter templates to its Locals encouraging them to pass them along to merchants in their respective communities.

How many of the Du Ponts do you have among your customers?
Who are your real customers, your real friends in a business way, the Du Ponts of Wilmington, Delaware or the [-insert number-] GM workers of [-insert names of towns-] and their families? ...

Perhaps some of you think that Du Ponts know best, that General Motors workers should take whatever wages the Du Pont-controlled GM management wants to pay. … Perhaps some of you agree with GM management that our demand for a 30 percent increase in wage rates to maintain take-home pay without increasing prices is unreasonable, … If so, we ask you to look at our side of the story.

We feel that we are fighting not only for decent wages which GM is well able to pay, but, even more important, to make postwar America a land of stable prosperity and full employment, year in and year out. …

Du Pont's formula is to pour prosperity in at the top, in the form of lower taxes for high incomes and higher prices, and let it trickle down to the folks at the bottom. That means us. And it means you, with whom we spend our wages. ...

Our fight to maintain our purchasing power, our ability to buy your goods and services, is your fight, Mr. Merchant (W. P. Reuther, 1945c).

The Union charged, however, that GM, the rest of industry and Wall Street preferred to maintain a program of "planned scarcity" to maximize profits.

Will industry, in its search for profits, find them by exacting a high price per unit of a limited output, maintaining an artificial scarcity, pocketing the returns on advancing technology, and shutting millions out from employment and a stake in the preservation of the [current economic] system? Or will industry, following the most respectable economic theory, pass on to labor its just share of the benefits of technical progress in the form of higher wages and seek its profits in capacity production for an expanded market? (W. P. Reuther, 1961a).
This quote also highlights Reuther's belief that productivity increases due to technological improvement would allow firms to generate large profits while raising wages and keeping prices low, countering GM’s claims that raising wages necessitate higher prices (Auto Chief's Pay Views, 1945).

The UAW leadership also referred to the role laissez-faire economic policy, still promoted by industry leaders, played in creating the Great Depression. By framing its demands as a bulwark against another depression, the UAW played upon the public's fear of an economic recession or depression at the War's conclusion (Purchasing Power for Prosperity, 1945; Wishart, 1946). "Men and women of the production line, who know full production and full employment as a fact, are telling the nation they don't intend to go back to the half-time, half-hearted, half-baked slap-doodle that glorified itself as American enterprise before the war" (Addes, 1945). Furthermore, the UAW appealed for a more enlightened form of capitalism – one where the interests of shareholders were not primary over those of the remainder of society. "Free enterprise, to survive, must learn that it has more and greater responsibilities than merely producing a cash return for its investors. It must make its contribution to the welfare of the community as a whole" (UAW Statement, 1945). Government intervention and spending during the Depression and the War effectively demonstrated to many Americans the value of Keynesian economic policy. In America's more regulated economy, the UAW characterized GM’s laissez-faire economic logic as "outdated" and "out of step with America."

Nelson Lichtenstein argues that during the 1945-46 strike, "The labor movement began to use the language of Keynesianism – 'purchasing power, aggregate demand &
wage-price stability' in place of the prewar lexicon of power, justice and industrial
democracy” (1995, p. 221). While economic logic became a key part of its discourse at
this time, the Union's appeals for justice and equality against the power of industry
remained an important framing strategy.

The UAW discourse was often used to make a sharp distinction between the
classes; comparing the plight of workers to the wealth and economic security of
management. "Mr. C.E. Wilson has told GM workers, whose average weekly take-home
pay during the war was $56, now cut to $44 per week, their wage demand is
unreasonable. Look who's talking! Mr. Wilson made an average of $8,846 per week and
his take-home pay has not been cut" (W. P. Reuther, 1945e). Letters from workers
detailing their financial struggles were also printed in the Union's and in other popular
newspapers (e.g. excerpt taken from Nov. 2, 1945 Detroit News *GM Negotiations*,
1945b; GM Workers' Own Stories, 1945). In the Union newspaper, satires of the firm
and its management were also used to dramatize the economic division between
management and workers. The Union writers also mocked Wilson's claims that the firm
could not afford a wage increase and derided Wilson's "pleas of poverty."

Join the march to the wailing wall in Wall Street - and shed a tear for poor old GM Prexy
Wilson. Prexy Wilson says that GM did not make 'excessive profits' during the war.
"The average yearly net profit in dollars earned during the war was less than the average
prewar net profits …” he sobs. “Dividends paid to stockholders also averaged less than
those paid before the war …” he moans low and mournful. So let us all trample to the
wailing wall and bawl out our hearts in sympathy for poor old Charley (Help the Poor!,
1945).

The repeated emphasis on the fantastic profits earned by the firm during the War years
only served to reinforce the UAW’s contention that there were significant inequities in
how wealth in America was being distributed. Reminding workers and the public that a
small “clique” of millionaires, namely the Du Pont family, controlled GM established a
clear distinction between the average American and those who manage and own the large corporations that dominated the US economy (Letter from Natl. UAW-CIO, 1946; Thomas Assails GM, 1945; UAW Letter, 1946).

To help affirm the power and greed of GM’s ownership and management, Reuther, throughout negotiations, sought to make the firm look obstinate and unresponsive. General Motors, according the UAW leadership, in its refusal to bargain with the UAW over prices and to accept Truman’s fact-finding board's recommendations was acting as if it were a "sovereign power" and not beholden to the laws of the land or the interests of the public. "Throughout the dispute, the Corporation took the position that it was a self-sufficient island in the economic sea, a little kingdom ruled by a band of men who refused to abdicate their powers over the economic destiny of their subjects" (V. G. Reuther, 1945). See also (Letter from Natl. UAW-CIO, 1946).

Casting GM as unsympathetic to the interests of the public allowed Reuther to contrast the firm's actions with those of the Union.

General Motors representatives have told us that prices and profits are – and I quote from the record – “none of your (our) damned business.” In other words, if we were to enter into a conspiracy against you, the American people, who are the consumers of General Motors products, we might get a wage increase that would be made for the excuse for charging for higher prices (W. P. Reuther, 1945e).

By focusing on issues of justice, equality and highlighting the power and greed of the company and its management, the UAW leadership was able characterize its negotiation demands as a battle between "GM and the rest of us" (Lichtenstein, 1995, p. 235).

Social movements exist in a broader societal context (Zald, 1996), thus the discursive repertoire used by a movement organization is influenced by external events.
One powerful example of this was the UAW’s use of World War II as a backdrop upon which its demands were articulated and explained. The UAW did so primarily in two ways: by appealing directly to the veteran servicemen and women returning from War and by comparing the War effort to the efforts of the UAW in its confrontation with GM.

After victories in Europe and Japan, millions of US service members began reentering the workplace, creating additional concerns over potential high unemployment. The major tenet of the Union's demands were a Keynesian prescription of increasing purchasing power, thereby stimulating consumer demand, which would lead to more jobs. The UAW leadership consciously promoted its demands to returning veterans out of an understanding that they would be important for generating public support (Montgomery, 1949). In issues of United Automobile Worker, letters from (soon to be) returning soldiers supporting the Union's demands were printed. "Their [soldier's] rights as wage earners are being safeguarded and enhanced by the fight of labor at present to maintain and improve the standards it has achieved. Higher wages for labor means higher wages for the returned soldier" (Servicemen Urge 'Yes' Vote, 1945). See also (GI's See Full Employment, 1945). A press release written by returning veterans from GM plants stated,

We, as veterans of World War II … when we lay down our arms after fighting to preserve decency in the world, we returned to our jobs with the belief our fighting days were over. But, instead, GM arrogance and callousness has forced us into the front lines of the fight to preserve a decent standard of living for all Americans (Statement from Veterans, 1945).

Reuther also argued that the Union was looking after the interests of veterans, stating "The UAW-CIO refuses to join in a conspiracy with the General Motors Corporation to
slam the door of job opportunity in the face of millions of returning servicemen and other Americans who are seeking and are entitled to work” (W. P. Reuther, 1945d).

A patriotic fervor swept through the US during WWII. By linking its claims to those of the War effort, the UAW attempted to arouse sentiments from its workers and the public to support its cause. The use of analogy and metaphor is a powerful rhetorical device because it helps justify and explain using concepts people understand and view as appropriate (Jonsen & Toulmin, 1988). Analogy can help legitimize a claim (Glaser, et al., 2010) as well as elicit an emotional response from its targets (Holyoak, Gentner, & Kokinov, 2001). By comparing the worker's struggle in terms of a "battle" and "war" and casting GM as the "enemy," the UAW hoped to draw upon the patriotic tenor of the day.

Reuther affirmed that the Union was battling for "peace on the home front" (UAW Statement, 1945). On several occasions, the UAW leadership referred to the Union and its workers as soldiers fighting against GM. "In line with UAW-CIO strategy the General Motors workers constituted themselves as the beachhead troops. They have held the salient so that the rest of us are able to make a peaceful landing" (Jenkins & McCusker, 1946). George Addes, secretary-treasurer of the UAW, referred to the workers at the Flint plant as "the biggest pill box in the fight against the General Motors empire" (Auto Strikers Cheer, 1946).

When GM refused to accept Truman's fact-finding board’s recommendation, the UAW leadership, in a letter to the President, referred to GM as an "economic and industrial dictatorship," that was "in open revolt against the American government" (Thomas et al., 1946). In response to GM’s claims that high wages were responsible for
high inflation, R.J. Thomas compared the GM propaganda to that of Hitler. "This is as phoney [sic] and colossal a lie as ever Hitler tried to palm off in the hey-day of the Third Reich. High prices and inflation were caused ... by the greed and gluttony and monopoly prices charged by the robber barons of industry" (Thomas, 1946). These and similar other metaphors and analogies helped reinforced the "us versus them" temperament of much of the Union's discourse.

Firms. In negotiations, Reuther consistently attempted to get the firm to discuss "arithmetic" – the calculations generated by the Union and the firm to determine whether the wage increase could be granted. Though at times Reuther spoke of concerns for the public interest and espoused Keynesian economic logic, particularly when the UAW read letters and reports into the record, the language primarily used in the negotiations was much less ideological. Because ideologically-based disputes present a unique set of challenges to resolve in a negotiation (Wade-Benzoni et al., 2002), focusing on "arithmetic" was the Union's effort to bypass some of those challenges. Reuther's intent was to engage the firm in establishing an objective process through which both sides could determine whether a wage increase could be granted without a price increase.

You may have your philosophy of how economics ought to be, and we have our particular philosophy, but the argument is over arithmetic. ... Instead of bringing out the arithmetic, you hide behind a lot of antiquated, obsolete concepts about the sovereignty of management, about the limited concept of collective bargaining ... (GM Negotiations, 1945a, p. 1302).

A key determinant of frame effectiveness is whether the target of the claim sees the claim as being legitimate. The Union was well aware that it could not convince GM to publicly accept Keynesian economic theory or the virtues of corporate social responsibility.
"Arithmetic," however, was a potential common ground upon which the two sides could negotiate.

Counter-framing. General Motors, prior to and throughout negotiations, conducted its own campaign for public support. Initially, GM tried to discredit the UAW’s claims that the firm earned excessive profits during wartime (e.g. Action Follows, 1945; C. E. Wilson, 1945). To pay the 30 percent wage demand with no price increase would mean that GM would "run out of cash" and "have to shut down" (Reuther Asserts, 1945). Quickly, however, the firm abandoned its "pleas of poverty" as the Union asked GM to open its books to prove that it was unable to pay the wage increase without raising prices. Instead, at the bargaining table the firm simply ignored the Union's attempt to discuss automobile prices or the firm's "ability to pay" and publicly stated that "prices and past and future profits are out of place in these wage negotiations" (CIO Rejects GM Proposal, 1945; G.M. Quits, 1945; GM Negotiations, 1945a; UAW Accuses Auto Makers, 1946). The firm refused to acknowledge the validity of the demands by negotiating them (McMillan, 1975), and in so doing did not allow the Union's claims to be legitimized.

To the public and in negotiations, GM stressed that the Union was encroaching upon managerial prerogatives (Bernstein, 1965). When the UAW asked that matter be taken to federal arbitration, management replied, "Stripped of its deception, the union proposed that General Motors relinquish its rights to manage its business. This was not an offer for arbitration but a demand for abdication. General Motors, of course, rejects such a demand" (UAW vs. GM, 1945). In response to the federal government's

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15 Interestingly, GM was able to deduct these advertisement expenditures from its corporate taxes.
intercession into the dispute, Wilson admonished the Truman administration for backing the Union, stating that if allowed to do so, the Union would usurp managerial control and "reduce the incentive of management to do things better" (Moore, 1946).

Much like the UAW, GM, in its press releases and through a series of full-page advertisements published in newspapers across the country, referenced the importance of looking after the best interest of society. Wilson agreed with the UAW that, "The interests of all Americans must be considered, and if strikes are called and our plants closed, the strikes will be against the interests of all of the people of our country as they will be against General Motors" (Action Follows, 1945). However, in his view the public interest can best be served by protecting free competition, something that organized labor threatened.

For Labor Unions to use the monopolistic power of their vast membership to extend the scope of wage negotiations to include more than wages, hours and working conditions is the first step toward handing the management of business over to the Union bosses. We therefore reject the idea of a “look at the books” not because we have anything to hide but because the idea itself hides a threat to GM, to all business, and to you, the public (A 'Look at the Books', 1946).

In an advertisement entitled, "Danger on the Production Front," published in newspapers around the country, the company reminded the public of the numerous parties had an important stake in the negotiations.

A sound and equitable solution must be found in the interests of not only our 400,000 employees [sic], but our 426,000 stockholders, our 15,214 automobile dealers, who have had no new cars for over three years, our 10,000 subcontractors and suppliers and their employees [sic], and the more than 10,000,000 potential customers who are anxiously waiting for new cars and our other products they need so badly (Danger on the Production Front, 1945).

Wilson also castigated the UAW by arguing that the inflation problem confronting the US was due in large part to "the desires of selfish unions to take advantage of the situation and force unreasonable wage increases" (Action Follows, 1945).
General Motors' management also went to great efforts to portray the UAW as a threat to the American capitalism.

General Motors' position on the issue of wages and the relation of wages to prices is in keeping with the principles of our American system of free competition. It does not subscribe to those old and reactionary political and economic concepts advocated by those who wish to destroy our free American economy. Under our American system, competition keeps prices low and thus distributes the benefits of increased industrial efficiency to the whole population (GM Negotiations, 1945a, pp. 491-492).

Playing upon the public's fears of the spread of socialism and communism, GM cast itself as the bulwark against their proliferation.

America is at the crossroads. It must preserve the freedom of each unit of American business to determine its own destinies. Or it must transfer to some governmental bureaucracy or agency, or to a union, the responsibility of management that has been the very keystone of American business. Shall this responsibility be surrendered? That is the decision the American people face. America must choose! General Motors has made its choice. It refuses to subscribe to what it believes will ultimately become, through the process of evolution, the death of the American system of competitive enterprise. It will not participate voluntarily in what stands out crystal clear at the end of the road – a regimented economy (Sloan & Wilson, 1945). See also (Wilson Flays Union, 1945).

As part of its campaign to curry public sentiment, GM also engaged in a series of costly, local efforts to highlight the risks to the public if the UAW was successful in its efforts to initiate price control. The firm's public relations departments held luncheons around the country, inviting local business, church, educational, political and women's club leaders to attend. At these events, a slideshow was presented highlighting GM’s fight for democracy and free enterprise and concerns the US could become a regimented economy. Attendees were urged to contact their congressional representatives to voice their opinions on the strike (Ross, 1946).
Table 1. Framing and counter-framing in the 1945-46 negotiations

<table>
<thead>
<tr>
<th>Target</th>
<th>Frame</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers and Public and social responsibility</td>
<td>Public interest and social responsibility</td>
<td>When organized labor asks employers for a 30 per cent increase in wage rates, we do it not only to maintain our own living standard, but also for the economic welfare of every American (Addes, 1945).</td>
</tr>
<tr>
<td>Economic logic</td>
<td>[L]abor is not asking for a bigger cut out of the same old pie. Labor is saying that the old pie was never big enough. We are asking for more pie for everybody (High Wages, 1945).</td>
<td></td>
</tr>
<tr>
<td>Justice</td>
<td>Wanted - Help with financial problem. During the war, as Detroit auto worker, my take-home pay was $56 a week. Now, it's out to $40. Had hoped to buy home and enough war bonds for a secure future for my wife and baby. On present day, I can't even keep up with cost of food, clothes and medical care. My organization (UAW-CIO) fights cuts in take home pay. It's a fight for our children, Detroiter's of tomorrow. Will you support our program? (excerpt taken from Nov. 2, 1945 Detroit News GM Negotiations, 1945b).</td>
<td></td>
</tr>
<tr>
<td>GMs power and greed</td>
<td>In their greed for profits and power and in their contempt for the national welfare, the people who control General Motors abhor any kind of economic thinking which threatens to reduce to respectable size the outrageous profits they had anticipating by plundering the huge consumer demand built up during the war years (Statement by the GM Neg. Committee, 1949).</td>
<td></td>
</tr>
<tr>
<td>War</td>
<td>Did the American people fight this war to go back to unemployment and insecurity, or did they fight to win their way forward to a better and more abundant life? (W. P. Reuther, 1945e)</td>
<td></td>
</tr>
<tr>
<td>General Motors</td>
<td>“Arithmetic”</td>
<td>… [W]e don't deny your right to say that they [the union's demands] are unreasonable, but we do say … you ought to be prepared to advance the economic facts to prove your contention (GM Negotiations, 1945b, p. 1299).</td>
</tr>
</tbody>
</table>
Target | Frame | Example
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Counter-framing
UAW | “Plea of poverty” | General Motors wages are now at an all-time high and are importantly higher than the average wages paid throughout the country for similar work … General Motors did not make big profits during the war. … (Danger on the Production Front, 1945).
Public | Managerial prerogatives | If you accept the theory that profits are justification for excess wages, then you can expect labor to think it should share in the management (Moore, 1946).
Economic logic |  | Is American business to be based on free competition, or is it to become socialized with all activities controlled and regimented? (A 'Look at the Books', 1946).
Union greed |  | The feather-bedding principle of more pay for less work is unsound (Wages and Production, 1946).

Framing: 1949-50

Workers and public. One issue confronting the UAW was to combat some of the stigmas of company-sponsored welfare benefits. During the first three decades of the 20th century, as welfare practices spread across many of the largest American employers, offering fringe benefits to workers was often derided by labor organizations and workers as paternalistic (Jacoby, 1997; Tone, 1997). Therefore, the UAW had to convince its workers and the public that bargaining over welfare benefits was both legitimate and necessary.

To the employer such [workers' security program] payments are a cost of doing business – a labor cost. To workers such payments are a form of compensation – not gifts. By performance of his job, a worker earns a retirement and health protection. … [W]orkers are not accepting paternalism or charity affecting their dignity as self-respecting Americans (Becker, 1950).

The UAW also affirmed that a worker's inability to finance her own retirement was not due to any individual deficiency, but was rather endemic to an industrialized society (Becker, 1949; Matthews, 1949a). To support its claim, the Union presented governmental data that showed that the average autoworker in Detroit, after factoring in
the cost of living, could not adequately save for retirement out of earnings (e.g. *The Problem of Old People*, 1949).

With the passage of the Social Security Act in 1935, the federal government became the primary dispenser of retirement benefits to most American workers. To argue that industry should now share in this burden necessitated that the UAW make individual companies the new target for its claims. A key process in framing involves the act of identifying the party responsible for remedying the issue. Not only does the new target have to accept the framing of the claim as legitimate, those inside and important constituents outside the movement must perceive the act of changing targets as legitimate as well (Spector & Kitsuse, 1987, chap. 5). Therefore, the UAW had to explain why federal benefits were inadequate and rationalize why private firms were the party responsible for making up Social Security's shortcomings.

To both its workers and the public, the UAW made numerous efforts to highlight the insufficiencies of federal benefits. At that time, Social Security also had somewhat limited eligibility requirements and did not cover against worker incapacity – deficiencies the Union felt could be rectified by private plans (*UAW-CIO Workers*, 1950). The UAW argued that the shortcomings of federal benefits were the responsibility of industry to ameliorate; a fact that affirmed by the Supreme Court's ruling in the Inland Steel and W.W. Cross & Co. cases that employers were legally obligated to bargain over fringe benefits (Becker, 1950).

Reuther's oft repeated slogan "too old to work and too young to die" demonstrated the plight of the aging worker and emphasized the importance for industry to meet its
obligations to its loyal workforce (Barnard, 2004, p. 274; Ruch, 1949a). And the Union argued that by looking after the interests of its workers, the company would be acting in the benefit of all of society. "A healthy society and a socially mature society has not been realized until we have taken the steps which are needed to remove the fear of the economic consequences of these unpredictable hazards [of age and illness]" (Becker, 1949). The UAW even alluded to the importance of providing worker security as a means to ensure the nation's economic and political security. In testimony before the Senate Finance Committee, Reuther asserted that if industry were to meet its responsibilities to the general public and provide a more enlightened form of free enterprise, it could "strengthen us [the US] greatly in our struggle against the forces of totalitarianism in the cold war" (W. P. Reuther, 1950). The Union emphasized this point as well in its propaganda drive during the Chrysler strike (How Much Blind Selfishness?, 1950).

The UAW leadership gave its call to look after its aging workforce a corporatist twist by comparing the financing of pension plans to the depreciation of machinery.

Industry recognizes responsibility for safeguarding physical resources – plant and machines – it employs. Even more important is industry's social responsibility for the human resources it employs. A sound and healthy society is necessary for sound and healthy industry, and adequate social security is necessary to achieve a sound and healthy society. Workers' social security protection must be considered a cost of doing business as much as charges for repairs and reserves for depreciation. Indeed, it is a more legitimate and important charge since social security protects human values while depreciation relates to property values. … Industry must recognize its responsibility to the people it employs as well as to property it employs (Bargaining for Soc. Sec., 1949). See also (Becker, 1949; Intl. Exec. Board, 1949).

Comparing workers to machinery established an analogy to legitimize the act of putting aside money for workers' care as their productive usefulness to the firm declines.
In its calls for the Big Three to meet its responsibilities to the public, the Union also emphasized its own social responsibility. Because company-sponsored benefits would only benefit employees of the firm, the UAW made efforts to cast its demands as in the public interest. The Union was an ardent supporter of expanding Social Security and efforts to establishing a nationalized healthcare plan in the US (Aid for the Aged, 1960; Boyle, 1998; Proposal, 1955). Reuther argued that the drive for benefits through collective bargaining and its continued support for nationalized legislation was a "fight on two fronts" for retirement and health security. By forcing employers to pay for such benefits directly, management would come to favor expansions in Social Security and nationalized healthcare (Becker, 1949; Lichtenstein, 1995, p. 282; UAW-CIO Admin. Letter, 1949). In short, the Union attempted to frame its insular demand for company benefits as a mechanism through which all workers would be granted increased security.

Similarly, as negotiations with Ford ended, the Union maintained that its strategy of tying private benefits to Social Security would help generate managerial support for expanding governmental provisions. Though there is some evidence supporting Reuther's claim, as multiple business leaders supported the expansion of Social Security benefits in 1949 (Barnard, 2004, p. 262; Chrysler Negotiations, 1950), there are several issues with this hypothesis. First, evidence shows that when first entering contract negotiations with Ford, the Union sought a pension that was not offset by Social Security (Brown, 1999; Raskin, 1949; Ruch, 1949b; UAW Plans Demand, 1949), lending support to the idea that tying pension benefits to Social Security was not some pre-determined strategy by Reuther designed to encourage industry’s support for an expanded government-sponsored retirement system. Tying pensions to Social Security was not a
strategy employed by all CIO unions, as several established pension contracts with no offsets (Ford-UAW Contract, 1949). By 1955, the UAW removed the offsets from the company pensions (Fringe Labor Costs, 1955).

Second, as the 1945-46 strike with GM attests, Reuther understood well the economics of the automobile industry. The Big Three firms did not merely absorb labor costs. They passed those along to the public in the form of higher prices – a fact made clear to the Union by management at the onset of the fourth round of post-War negotiations (Ruch, 1949a). For Reuther to assume that Chrysler, Ford and GM would not pass along the costs of welfare plans in the form of higher prices was unlikely.

Much as was the case in the 1945-46 negotiations with GM, during the 1949-50 bargaining rounds, Reuther emphasized the distinctions between workers and management in their relative ability to achieve economic security in old age and obtain adequate health care. When the Union began articulating its demands for pensions and health care, the automobile manufacturers replied that such plans were too costly and amounted to socialism. In reply, Reuther referred to what would later be the most prevaletly used frame throughout the 1949-50 negotiations: the "economic double-standard" of executive pensions.

The trouble is that industry operates on the basis of these double economic and moral standards. They say to the worker when he is too old to work and too young to die, “You cannot have security in your old age”: that is reserved for the blue bloods, only the ones who were smart enough to pick the right grandfather before they were born. They can have security, but if you live on the wrong side of the railroad tracks you are not entitled to it.

And we say they are economically and morally and stupidly wrong.

Let me give some figures. C.E. Wilson in 1948 got $516,000 in salary on basis. He made, on the basis of a 40-hour week and 50 weeks a year, $258 an hour. Yet the Board of Directors of General Motors when they met in Wilmington said, “Poor old C.E., he is
having a rough time of it, he can't get along on $516,000 a year; General Motors will give him $25,000 a year when he is too old to work but too young to die."

If you make $258 an hour, they give it to you; if you make $1.65 an hour they say, "You don't need it, you are not entitled to it, and we are not going to give it to you" (W. P. Reuther, 1961b). See also (W. P. Reuther, 1947, 1948).

In that same speech, Reuther also recounted a story of a young worker who was paralyzed from an on-the-job accident. The worker was making progress in his recovery but was forced out of the hospital because he had neither medical insurance nor the financial means to receive adequate care. Reuther juxtaposed this with an account of the medical treatment received by C.E. Wilson's injured, prized bull.

In the case of C.E. Wilson's bull, the General Electric Company sent a special 140,000-volt X-ray machine into Detroit on a special chartered airplane. It was picked up by a General Motors truck and taken out to C.E. Wilson's farm. The bull didn't even have to leave home to get medical care. Then when they got the 140,000-volt machine there they couldn't operate it because they didn't have enough power, so the Detroit Edison Company ran a special power line out to C.E. Wilson's farm. ... Why did C.E. Wilson's bull get the best of medical care while millions of these kids all over America are not getting that kind of care? It is because C.E. Wilson's bull cost $16,000, and you get boys and workers for free. It is the age-old struggle between human rights and property rights, between people and profits, and this is just a dramatic illustration of how completely wrong some of our moral values are in America. ...

The industrial scrap-heap is piled high with human beings – too old to work, but too young to die – who are living reminders of the injustices which workers have endured under an industrial system in which machines and animals get the tenderest care while workers are lucky to get a pat on the back or a gold button when their maximum usefulness to the profit-makers has ended (W. P. Reuther, 1961b).

Emphasizing the "double-standards" of executive pensions and healthcare and the catchphrase "too old to work and too young to die" dramatized the inequities faced by workers in their attempts to obtain for themselves economic security.

This point was also used to paint the Chrysler strike as part of a larger, class-based struggle for recognition and security.

The price of human progress, like the price of freedom, has never been cheap. In the early days of our Union, we had to fight for recognition, for job security through seniority, for overtime pay, for vacation pay, for the right to raise our voices against the speed-up that made men old at 40. Then, as now, they [Chrysler] granted nothing as a
matter of “right and justice.” All of the profits and propaganda of the Chrysler Corporation cannot stop the forward march of American labor in its search for a larger measure of human dignity, human happiness and human security (W. P. Reuther & Matthews, 1950b).

In its calls for justice for the rank-and-file, the Union also cast the firms, particularly Chrysler, in a negative light. One particularly telling example occurred during the strike as workers were set to lose their health care coverage. Chrysler had an employee-financed health care plan, with premiums taken from worker wages. It was customary in case of a strike for firms to arrange with the insurance companies that coverage not be suspended and that extra wages be deducted from worker pay once the strike was completed to cover the costs. Chrysler refused, though such an arrangement would have cost the firm nothing. Because Chrysler's pension proposal called for the Union to accept the firm's guarantees that it would pay pension benefits, Reuther and the UAW leadership used the health insurance situation against Chrysler and to call into question the firm's generosity.

[T]he Chrysler Corporation sees here an attempt to force the Chrysler workers to their knees by willfully [sic] and deliberately placing in jeopardy [sic] the health of their wives [sic] and children. The Chrysler Corporation does not hesitate to use such a weapon in an attempt to force the Chrysler workers to accept its unfair, inadequate and unsound proposals. The Union insists on a funded pension plan, which is the only way that pension payments can be guaranteed, while the Corporation offers a plan based on Company “generosity.” Measuring by this example of Company generosity can anyone question the wisdom of the Chrysler workers in insisting that a pension plan be guaranteed by a trust fund? (Strike Bulletin #22, 1950). See also (Chrysler Workers!, 1950; W. P. Reuther, Mazey, & Matthews, 1950).

Firms. Through a series of letters and memos to the Big Three, the UAW explained why welfare benefits were the cornerstone of its demands. The Union attempted to lay out a business case to each firm for why it should offer retirement benefits.

The Company cannot keep workers at their machines and on the assembly line when they are too old to work or too ill to work because this is as injurious to the Company as to the workers. ... There is no virtue in struggle for existence for the sake of struggle. We
know that anxiety and fear may destroy initiative and motivation (Bannon, 1949; Matthews, 1949a).

Throughout negotiations, the UAW highlighted the advantages to firms for offering these welfare benefits – improved motivation and loyalty, higher worker productivity and providing younger workers with more opportunity as retirement flows can be more easily managed (The Problem of Old People, 1949; Voluntary vs. Compulsory, 1950). With average worker ages increasing and seniority provisions protecting the rights of the more experienced, usually older workers, the Union was quick to remind, "The question is not whether it [the retirement problem] will be met, but how" (Matthews, 1949a).

In correspondence with the Big Three, the Union also provided the firms with details on the usage of welfare benefits by other firms and industries. Using Department of the Chamber of Commerce reports, the UAW highlighted that the automobile industry was a laggard in the adoption and utilization of employee benefits. In the economic briefs sent to both Ford and Chrysler, the Union also provided a detailed history of company-sponsored retirement and health care plans (Bannon, 1949; Matthews, 1949a). The purpose behind providing these accounts was to legitimize the practice of offering company-financed welfare plans. Legitimizing accounts for welfare benefits were also offered in the form of quotes from auto and other executives who support the concept of such plans. In the opening lines of its economic brief sent to Ford in late June of 1949, the UAW printed a quote taken from Henry Ford's biography, My Life and Work.

The man who comes to the day's job feeling that no matter how much he may give, it will not yield him enough of a return to keep him beyond want, is not in shape to do his day's work. He is anxious and worried … The day's productive work is the most valuable mine of wealth that has ever been opened.

Certainly it ought to be made to take care of the worker's sunset days when labour is no longer possible to him – and should be no longer necessary (Bannon, 1949).
By establishing a business case and legitimizing accounts for pension and health care benefits, the Union provided both economic and normative rationales for why the Big Three should make these welfare practices a part of the firms' human resource practices.

*Counter-framing.* As in the 1945-46 negotiations, the automobile manufacturers argued that they could not afford to meet the UAW’s economic demands in 1949. Prior to receiving the Union's formal demands, Ford declared that it would not be granting any wage increases in light of what was expected to be a down year for the automobile manufacturers (Ruch, 1949a). In early March, in letters to Ford employees and in press releases, Ford warned that a wage increase would likely lead to job losses and that a pension plan would not be granted unless it was accompanied by a wage cut. John S. Bugas, Vice-President and Director of Industrial Relations at Ford, argued that economic concessions could not be financed out of past earnings as those had already been reinvested in the firm. He also argued that high labor costs were the reason for higher prices, and that pension benefits would push prices even higher. "Our labor rates right now are at an all-time high. As a result, the prices of our products are at record high level" (Ruch, 1949a). See also (W. P. Reuther, 1949b).

Once again, however, the firms' primary counter-framing efforts were to argue that the firm was looking after the public interest and underscore the greed and power of the Union in asking for these economic concessions.

There are times when, in the interest of employees [sic] and the economy, wage increases can and should be made. But in today's circumstances, it would be utter folly to take any action which would increase the prices of our products. The post-war buggy-ride of ever-higher wages, costs and prices is over. We will, therefore, reject any change in our contract which mean higher labor costs – whether in the form of wage increases or pensions, and other welfare funds (letter from John S. Bugas in W. P. Reuther, 1949a).
During the Chrysler strike, the firm took out a series of full-page newspaper ads criticizing the Union's desire to strike and its adverse consequences for society. "The hardships this strike inflicts on the public, on Chrysler employees, its dealers and stockholders are wasteful and unnecessary. They follow the utmost effort on the part of the Chrysler negotiators to work out this problem in a sensible and reasonable way” (Chrysler's Real Benefits, 1950). In a particularly scathing advertisement, the firm also questioned whether striking was un-American.

"Oh yes, strikes are legal – but are they loyal to our America – when they throw your community and the nation's whole economy out of gear? Aren't they a virus that's slowly poisoning the minds of men whose toil and skill are needed most in the struggle for world survival?" (It may be LEGAL, 1950).

Chrysler also made efforts to underscore its contention that workers care only about benefits – not how they are funded. The company charged that the Union's insistence on the pension and health care plans be funded on a cents-per-hour basis and administered by a trust, were born of the leadership's desires and not in the worker's best interest.

"The 10-cents-per-hour package demand that the Union makes for its own purposes has nothing to do with the superior benefits that the employees themselves would get. But evidently the Union is more interested in its own peculiar arithmetic than in what the employees would get" (Chrysler Corp Press Release, 1950). See also (Chrysler's Real Benefits, 1950; Chrysler Negotiations, 1950).

The tag line "If the Union wants pensions, Chrysler's offer is a good way to get them" and its frequent reminders of the cost to the Chrysler workers in foregone wages reinforced the company's contention that the UAW was not interested only in benefits for its workforce ($28,530,546.48, 1950; Chrysler's Real Benefits, 1950).
Table 2. Framing and counter-framing in the 1949-50 negotiations

<table>
<thead>
<tr>
<th>Target</th>
<th>Frame</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers and Public</td>
<td>Legitimate cost</td>
<td>Workers' social security is legitimate responsibility of industry. Social security must be a cost of doing business ([Bargaining for Soc. Sec.], 1949).</td>
</tr>
<tr>
<td></td>
<td>Insufficiency of Social</td>
<td>Despite the persistent trends which have been broadening and deepening the problem of retirement security, little has been done to meet the problem. The Federal Social Security Act, adopted in 1935, has not been expanded and improved to keep pace with changing needs and conditions so as to permit it to fulfill its intended social and economic purpose ([UAW-CIO Workers], 1950).</td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td></td>
</tr>
<tr>
<td>Public interest and</td>
<td>social responsibility</td>
<td>Corporate managements can no longer evade their responsibilities on pensions and social security … We shall insist that they face up to their responsibilities both as employers and as citizens ([UAW-CIO Admin. Letter], 1949).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gearing the Ford Pension plan to the Federal Social Security … breaks the log jam in Congress and compels industry to fight for the Government Social Security for all the workers. In the long run, this is the only way we can achieve a universal old age security program … ([Contract Improvements], 1949).</td>
</tr>
<tr>
<td>Justice</td>
<td></td>
<td>It is obvious that this strike is more than a struggle between the Chrysler and its workers; it is a fight by all of industry against all American workers to prevent an extension of contract settlements which recognize the social and economic justice of sound and adequate pension and security programs for workers ([Emergency Strike Assessment], 1950).</td>
</tr>
<tr>
<td>Firm power and greed</td>
<td></td>
<td>Chrysler's blind selfishness denies its workers justice, and so blocks the road to industrial peace. … The Chrysler strike will be settled when blind selfishness gives way to reason ([How Much Blind Selfishness?], 1950).</td>
</tr>
<tr>
<td>Big Three</td>
<td>Business case</td>
<td>Security, health and economics are interrelated. Insecurity is a significant cause of illness. Illness represents one of the greatest sources of economic waste. … It is good economics to remove the fear and insecurity and the financial burden of illness from the worker and his family ([Matthews], 1949a).</td>
</tr>
<tr>
<td></td>
<td>Legitimize practice</td>
<td>Stockholder report from Alleghany-Ludlum, used in the Chrysler negotiations, explaining why the firm entered into an agreement to liberalize its healthcare plan with the United Steel Workers: “1) protecting the earning power of the Company, 2) insure production operations on an economic level that would permit the Company to compete with other producers of electrical stainless steel, and 3) promote higher productivity through better relations with employees” ([Matthews], 1949a).</td>
</tr>
</tbody>
</table>
### Discussion

The data show that rather than abandon its ideological commitments to industrial democracy and fighting for the interests of all Americans, the UAW leadership couched the organization’s demands for pension and health benefits as part of its ongoing interest in looking after the welfare of all. In examining these framing efforts, we see a great deal of consistency in the types of frames used across the two rounds. Dramatizing the power differential between the firms and the average man and casting their demands in terms of social justice was an attempt by the Union leadership generate public support while also maintaining an air of militancy necessary to appease the rank-and-file.

The UAW also played upon the public’s desire for economic stability in both periods as the Union called for the firms to meet their responsibilities to the general
public as part of a larger effort to achieve a measure of economic and social justice for all American workers. Much akin to contemporary SMOs pressuring American corporations to implement socially-responsible and equitable practices (see Briscoe & Safford, 2008), the UAW and other unions in the post-War period were instrumental in motivating firms to adopt human resource practices that benefited millions of American workers – and not just those protected by collective bargaining agreements.

In discussions with the automobile manufacturers, however, the UAW used slightly different frames, though in both rounds the language was corporatist in nature. In 1945-46, the UAW attempted to get GM to discuss "arithmetic" – to use the financial calculations made by both parties to determine whether the wage and pricing demands were affordable. Though attempting to make a business-like appeal for allowing objective financial figures to serve as the foundation for talks, the notion of "open the books" strongly impinged upon managerial rights. The focus on "arithmetic" was a way to make the more ideologically confrontational demand seem less ideological. Though ultimately unsuccessful, the framing efforts during this time underscore that the UAW attempted to frame their demands in a way that would appeal to the logic of management.

In 1949-50, the UAW was better able to appeal to managerial logic by making a business case for their demand for welfare benefits. By focusing specifically upon the benefits to the firms for offering such forms of remuneration – higher productivity, greater worker loyalty, the ability to regulate retirement flows – the UAW cast their demands as being ultimately beneficial to the firm. Moreover, by including data highlighting other firms’ use of welfare benefits, the UAW had the advantage of showing
the Big Three that other businesses had come to accept and benefit from welfare practices. This fact stands in stark contrast to the 1945-46 negotiations, where GM was the first firm in industry to be targeted for price regulation by a union.

Another challenge facing the UAW across the two negotiations was the need to rationalize and legitimize its demands. Because of the differing nature of those demands, the UAW posed different frames to its workers and the public in the two periods. In 1945-46, the Union referred to the economic logic supporting its call for higher wages and price control. The UAW's demands were born directly out of Keynesian/Veblenian economics, necessitating that the organization explain this logic to constituents less likely versed in this logic.

Economic logic was largely absent in the Union's discourse in 1949-50. However, the rationale provided in the leadership's discourse was that pension and health benefits were a legitimate cost of doing business. Establishing legitimacy for the demands was necessary in part due to the Union's prior stance against company-sponsored benefits. Therefore, the UAW leadership emphasized that such benefits were not charitable contributions to workers. The frames used to rationalize and legitimize the claims differed across the two rounds due to the specific nature of the demands.

There was, however, a significant point of departure in the frames used by the Union during the two rounds. Framing theorists emphasize that social movement organizations draw upon contemporary cultural symbols to frame their demands (Benford & Snow, 2000). Because WWII dominated American society in the first half of the 1940s, using terms like "battle" and "war" and casting the opponent as the "enemy" most
certainly resonated with the American public. Though in 1949-50 the Union did draw
upon several of these metaphors – making references to the Cold War and referring to the
Chrysler strike as a crusade for peace and economic security – references to "war" were
largely absent from the UAW leadership's discourse by that time.

Limitations and future directions

One challenge in this analysis is establishing that the UAW possessed a well-
accepted ideology. Prior historical research emphasizes that labor leaders, both in and
out of the UAW, had differing opinions on the role organized labor should play in
challenging the US’s existing economic system (e.g. Babson, 1999, pp. 124-125). To
argue that in 1945-46 the UAW had an ideological commitment to using the Union as a
lever for social change is challenged by the fact that some union leaders, such as R.J.
Thomas, made no such claims and later admonished Walter Reuther for his decision to
strike against GM over price control (Labor News, 1946; see also Zieger, 1995, pp. 220-
221). What historians debate less is that Reuther himself viewed the UAW as a
mechanism for social change (Barnard, 2004; Lichtenstein, 1995).

Interestingly, however, the leaders of GM during the 1945-46 strike ignored
Reuther's demands, in part, because they felt they were simply made to raise his profile
within the Union and obtain its presidency. Stephen DuBrul, vice-president of General
Motors, was quoted in saying that the firm did not see Reuther as an ideologue, but rather
as a pragmatist, who was willing to change his demands to serve his own personal
interest (McMillan, 1975, pp. 59-60). Therefore, a limitation of this analysis is that
because this is a case study of a single organization that was primarily led by one man, is
in separating Reuther's ideology from that of the entire organization. By 1949-50, Reuther had centralized the power of the UAW and his supporters held most of the top ranks in the organization (Barnard, 2004, chap. 7), which would seemingly have given him an even greater opportunity to seek out his own social vision for the organization. That the demands of the Union became more insular over time lends credence to the claim that either much of Reuther's social vision was abandoned over time or that Reuther was truly a pragmatist and his social vision simply rhetoric.

Even if that is the case, however, this study still sheds considerable light on the role framing played in articulating Reuther's stated goals and ideology. Specifically, Reuther positioned the UAW as being the "vanguard of America" (Barnard, 2004) – a Union that could spearhead social change on a variety of fronts. In 1945-46 and 1949-50, despite the Union's change in bargaining strategy, Reuther and most of the UAW leadership maintained a stated commitment to looking after the interests of the public and establishing a more democratic form of industrial organization. Future work in this area may take advantage of comparative case studies, either across movement organizations or over time where a change in leadership has occurred to determine whether the framing efforts by leaders of organizations undergoing strategic change are as consistent as the data here indicate.

Another limitation of this study is that it I am unable to determine the impact framing efforts had on workers and public and the firms. Tangential evidence, such as the overwhelming support from the rank-and-file in the GM and Chrysler strikes, Reuther winning and maintaining the presidency of the UAW, public opinion polls taken during
the GM strike and Reuther's rise in status during the period offer some evidence that the efforts made by the Union during this time were effective (Lichtenstein, 1995, pp. 237-238; Matthews, 1949b, 1950). However, there is no counter-factual to determine whether the framing efforts were behind these shows of support. Future work could also benefit from a more complete examination of the possible effects of the framing efforts. Interviews and personal histories of members of the general public, the target firm and workers in lower tiers of the organization would provide additional detail on the efficacy of leaders’ framing efforts.

Conclusion

The goal of this case study was to determine how the UAW framed its demands to workers and the public and firms across two rounds of negotiations that differed in the extent to which they were consistent with the ideology of the organization. Between the first and fourth-round post-War contract negotiations, the UAW changed its strategy from bargaining for the public interest to the more insular demand for welfare benefits. Though not consistent with its commitment to use the power of the Union to establish industrial democracy, the UAW continued to frame its demands as being in the public interest and to achieve a measure of justice for its workers and the public. This finding suggests an important extension to our understanding of how frames are used in the symbolic management of organizational change efforts. Specifically, leaders develop a discursive repertoire that is consistent with the organization’s ideology and resonates with its constituents. Having accomplished that, leaders explain, rationalize and
legitimize their organizational strategies, and changes to them, using the same set of previously established frames.

The 1945-46 and 1949-50 contract negotiations between the UAW and the Big Three were instrumental in constructing the post-War economic system in America. The legacy of these negotiations, particularly the Treaty of Detroit, remains ever-present as American workers largely remain beholden to their employers for access to retirement and health care benefits. It is therefore of keen interest to organizational scholars to examine these historical branching points to glean insights on the manner in which important societal institutions are erected. Moreover, as organized labor in the US continues to struggle for legitimacy, we can look back to these two negotiations to help us better understand why unions have become much derided economic institution. By failing in their attempts to bargain for the betterment of all Americans, unions such as the UAW were unable to generate the public and political support necessary to stave off corporate attempts to curtail labor's influence. Instead, what was once the most powerful movement organization in appealing for corporate social responsibility lost its ability to spearhead social change.
CHAPTER 4:
THE EMPLOYMENT CONTRACT BROKEN? THE (NON) ABANDONMENT OF DEFINED BENEFIT PENSIONS

Introduction

In the US in the years following World War II, a set of institutional arrangements were erected to encourage stable, long-term employment (Osterman, Kochan, Locke, & Piore, 2001). A key component of this previous employment system was the role played by firms in buffering workers from external market forces. A new logic of workplace governance was introduced in the early 1980s, one where maximizing shareholder interests often came at the expense of employee welfare (Davis, 2009; Fligstein & Shin, 2007). Mirroring this change is an emphasis on individual responsibility for career, health and old age security (Hacker, 2008) and rhetoric highlighting the virtues of the "boundaryless career" (Arthur & Rousseau, 1996). Given these developments, in the past several decades scholars have made numerous efforts to make sense of the shift to a post-industrial system of employment (e.g. Appelbaum & Batt, 1994; Cappelli, 1999a; Osterman, et al., 2001). This research typically emphasizes that these changes in employment are the result of broad economic and institutional forces, such as increased product-market competition due to globalization and deregulation, declines in organized labor and the ongoing transition from a manufacturing to a service-oriented economy.
Comparative research in political science has also made important contributions to our understanding of labor market institutions. In this line of inquiry, a nation state’s institutional arrangements, in particular its political institutions (Pagano & Volpin, 2005; Roe, 2003), are the foundation upon which organizations establish their corporate governance regimes. Those corporate governance systems, in turn, influence the relationships between managers, owners, workers and other constituent groups by allocating wealth among them (Gourevitch & Shinn, 2005). In short, this perspective emphasizes that national political institutions drive the power relations within the firm.

While offering important insights, these accounts suffer from two main limitations. First, they oversimplify the process through which supra-organizational forces lead to changes in a firm’s workplace governance. Specifically, these theories view organizations and organizational actors as passive recipients of institutional and market forces. The employment relationship is a firm-level construct (cf. Baron & Bielby, 1980) and as such, focusing attention solely on the broader environment neglects the role played by competing interests within organizations in determining key aspects of the employment relation (Kalleberg, 2009). As a result, these perspectives overlook important differences between organizations in the types of bonds they create with their workers (Kochan, 1996). Second, these theories fail to consider how changes in organizational practices, in aggregate, subsequently alter the environment and affect important societal-level outcomes (Barley, 2010; Perrow, 1991).

In this study, I take a mechanisms-based approach to the study of US employment. Mechanisms are “…bits of theory about entities at a different level of
analysis than the main entities being theorized about …” (Stinchcombe, 1991, p. 367).

Mechanisms explain variation at a macro level by showing how macro states at one point at time influence the actions of individual actors and how these actions, in aggregate, subsequently generate a new macro state (Hedström & Swedberg, 1998). A mechanisms-based approach is particularly germane to organizational researchers, who are tasked with understanding disaggregation and aggregation processes: how the structures and actions of collectives influence the actions of individual actors (persons, organizations) and how the actions of individual actors become the structures of collectives (cf. Davis, 2006).

Hedström and Swedberg (1998) identify three types of social mechanisms: (1) situational, in which actors are exposed and affected by a social situation, (2) action-formation, in which the actor processes the social situation and acts based upon its interests and opportunities, and (3) transformational, in which the actions by individual actors are transformed into a collective outcome.

Current perspectives on the study of employment have been predominately concerned with situational mechanisms – the ways in which market and institutional forces alter workplace governance arrangements. I add to our understanding of post-industrial employment by theorizing about and testing the role intra-firm power dynamics serve as action-formation mechanisms that determine how a given firm responds to environmental demands. I view firms as shifting political coalitions where organizational actors have varying and competing interests (Cyert & March, 1963; March & Simon, 1958). Viewing firms through this lens is relevant to the study of employment because interests between workers and firms often collide, and what is good for one is frequently costly for the other (Edwards, 1979, p. 12). I contend that the way a company structures
its employment relationships is not determined solely by institutional and market forces, but is also affected by the outcome of these struggles. I argue also that the interests and power of different organizational actors influence decisions made by firms on an organization-by-organization basis. These decisions can, in aggregate, help explain post-industrial employment in the US. That is, the changing power structure within US firms is an important transformational mechanism that can be used to explain the changes in workplace governance in the US occurring since the early 1980s.

In this study, I highlight the role played by firms within the multi-level arrangement that facilitates a system of employment (Davis-Blake, 2010). I do so through an analysis of firm-sponsored retirement plans, which provide an excellent context to study the employment relationship. One of the points of evidence researchers and pundits use to argue that employment in the US has changed over the past thirty years is the transition from firms offering defined benefit (DB) to 401(k) and other defined contribution (DC) retirement plans (e.g. Cappelli, 1999a; Gandel, 2009). In a DB arrangement, the firm, not the worker, bears the risk of the investment. This transition is indicative of a broader trend where many social risks, which were once born in large part by corporate employers, are now being shifted onto individuals (Hacker, 2008). While these changes in retirement practices are consequential in their own right, a firm’s choice of retirement policy also tells us a great deal about the employment relationship.

Because the [DB] pension promise involves an explicit and relatively well-documented set of statements regarding future contingent payment and employment, an examination of the design and operation of employer-sponsored group pension plans can yield important insights into the long-term employment relationship (Gustman, Mitchell, & Steinmeier, 1994, p. 415).
DB pensions are designed to encourage long-term employment, whereas DC plans, in which vesting periods are legally limited in duration, are not. DB pensions, therefore, provide a window through which to examine whether a firm is structuring its employment contract to be long term.

In this study, I argue that intra-firm power dynamics play an important role in determining a firm’s retirement plan strategy – and in so doing, shaping key aspects of the employment contract. The results demonstrate that firms differentially respond to market and institutional forces, and that the power and interests of different organizational actors are important in determining the extent to which firms use DB pensions to structure their employment contracts to be long-term. In aggregate, the changing power structure of US corporations is a proximal cause for changes in the retirement practices and workplace governance more generally. Specifically, the re-concentration of ownership, largely by the growth of financial investors, and the concomitant decline in manager autonomy and employee power has left few countervailing forces able to combat the impact that shareholder value maximization strategies have on firms’ employment relationships.

The Employment Contract

The employment contract consists of a variety of dimensions. Though some of its features may be unique to the individual (Rousseau, 1989), many contend that there are significant elements of the contract that are shared across firms and become taken for granted by workers (D. Allen, 1964; Baron, 1988; Hallock, 2009). I consider the employment contract to be a governance instrument that links a firm to its workers in order to specify the terms of employment for both parties. This instrument consists of a
collection of different facets; some specifically stipulated and codified (e.g. wages), while others are tacit understandings between workers and the organization (Simon, 1951). One key, but implicit, dimension of the employment contract, and the feature of interest in this study, concerns the socially expected duration of employment. Socially expected durations (SEDs) are "socially prescribed or collectively patterned expectations about temporal durations imbedded in social structures" (Merton, 1984: 265-266). SEDs are important because these patterned beliefs link social structure to individual action. Expectations on the length of time a relationship will last, for example, alter the behaviors of the parties engaged. Though there are few legal mechanisms in place that require firms and workers to take part in long-term relationships (Alchian & Demsetz, 1972), within firms, the locus of power, norms and embedded interests help shape the expected duration of employment.

Post-war employment

Prior to World War II, wage work much more resembled an arms-length transaction where contracting and temporary employment arrangements were common (Jacoby, 2004; Jensen, 1993). New Deal legislation, in response to the Great Depression, ushered in an era whereby the government took a more proactive stance in regulating the market in order to bring about economic and social stability. As Jennifer Klein has shown (2001, 2003), the New Deal placed security at the center of economic life. Borrowing New Deal rhetoric emphasizing security, insurance companies promoted life insurance, health benefits and retirement coverage, which led large firms to offer unprecedented levels of social welfare in order to protect workers from the vagaries of
the marketplace (Dobbin, 1992; Jacoby, 1997; Klein, 2003). This had a lasting effect in not only creating America's unique system of employer-sponsored welfare, but also in altering the way workers conceptualized the trade-offs between economic opportunity and security (Chinoy, 1955; Whyte, 1956).

With the encouragement of federal policy, the diffusion of human resource practices that began during the Great Depression (see Klein, 2001) and continued during World-War II (see Baron, et al., 1986) helped establish a system of employment based upon the idea of security. The major tenets of this arrangement were the linking of wage increases to improvements in productivity and the assurance of secure, long-term employment in exchange for worker loyalty (Osterman, et al., 2001, chap. 1). The end result, as Carl Kaysen stated, was that "[t]he whole labor force of the modern corporation is, insofar as possible, turned into a corps of lifetime employees, with great emphasis on stability of employment" (1957, p. 312). In sum, secure, long-term employment relationships characterized the system of employment in the US from post-World War II until the early 1980s.

Post-industrial employment

A number of scholarly accounts have chronicled the impact of the widespread implementation of shareholder value maximization strategies among publicly traded firms beginning in the 1980s (e.g. Davis, 2009; Davis, Diekmann, & Tinsley, 1994; Fligstein, 2001). Leveraged buy-outs, mergers and acquisitions, and divestures of unrelated businesses became increasingly common tools used to restructure organizations in order to maximize shareholder returns (Davis & Cobb, 2010; Davis & Stout, 1992;
Holmstrom & Kaplan, 2001). One important byproduct of the emergence of these strategies was their impact on the labor force. Layoffs became a more prevalently used technique by firms to show the investment community that it was dedicated to maximizing shareholder value (Budros, 1997; Hallock, 2009). Other trends, such as the growth of contract and temporary work (Kalleberg, 2000) and offshoring and outsourcing of labor (Davis-Blake & Broschak, 2009) have also altered the relationship between workers and firms. Moreover, corporate leaders have changed their views of the importance of providing secure, long-term employment.

As late as the end of the 1970s, survey evidence from the Conference Board indicated that management’s priorities in setting employment practices were to build a loyal, stable workforce. A decade later, however, by the end of the 1980s, that priority had clearly shifted to increasing organizational performance and reducing costs. …[A]nother Conference Board Survey finds more than two-thirds of the large employers in the sample reporting that they have changed their practice and no longer offer employment security; only three percent said they still offered job security to employees (Cappelli, 1999b, p. 156)

The end result has been a systematic weakening of the bonds between workers and firms as the perceived value of attending to employee welfare was replaced by an emphasis on appeasing the financial community (Davis, 2009, chap. 3).

Retirement plans and the employment contract

From the post-World War II period until the early 1980s, the largest American firms typically offered defined benefit (DB) pension plans as their standard retirement practice. DB plans are essentially promises made by firms to pay employees a post-retirement annuity benefit in exchange for foregone wages in the present period (Kruse, 1995). Because DB plans typically rise in value as employees age and their length of service in the firm increases, an implied pension contract (Ippolito, 1987) binds workers
and employers together.\textsuperscript{16} Coinciding with the advent of 401(k) plans in the early 1980s, a trend began whereby many firms supplanted company-funded DB pensions with employee-financed 401(k) and other defined contribution (DC) plans. 401(k) plans, the most prominent type of DC plan today, are structured such that employees voluntarily contribute a portion of their pre-tax income to an account and employers often match a portion of these deposits (Ippolito, 1997, chap. 10). Such arrangements are not structured to incent long-term relationships (Friedberg & Owyang, 2002). By replacing a retirement system that rewards longevity to one that shifts the onus of retirement planning and market risk to the individual worker, firms have seemingly repudiated the notion of secure, long-term employment. In this study, I investigate firm- and industry-level factors that have potentially accelerated or impeded firms’ utilization of 401(k) and other DC plans in place of DB plans between 1982 and 2006.

\textbf{Table 3. Summary of pension characteristics}

<table>
<thead>
<tr>
<th>Type of pension</th>
<th>Defined contribution (DC)</th>
<th>Defined benefit (DB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculating the cost of benefits</td>
<td>Easily determined, based upon contribution</td>
<td>Cost unknown until consumed</td>
</tr>
<tr>
<td>Timing of pension wealth accruals</td>
<td>Smooth accrual</td>
<td>Most pension wealth accrues late in career</td>
</tr>
<tr>
<td>Owner of assets</td>
<td>Employee</td>
<td>Employer</td>
</tr>
<tr>
<td>Portable</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Responsibility for portfolio</td>
<td>Employee</td>
<td>Employer</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form of pension benefit</td>
<td>Lump sum</td>
<td>Annuity</td>
</tr>
</tbody>
</table>

\textsuperscript{16} By structuring the defined benefit plan in a manner that rewards employees at a higher percentage as tenure increases without a subsequent drop in pay to offset the reward indicates that firms are, in effect, structuring their defined benefit plans as a long-term contract (Kotlikoff & Wise, 1985).
Historical accounts offer no indication that 401(k) plans were developed with the intent of replacing DB pensions (Medill, 2000), but rather were seen as a supplement to existing DB arrangements (Whitehouse, 2003). While, as my data shows, many firms have both types of plans operant simultaneously, there has been a general trend over the past 30 years for pension coverage to be of the DC rather than the DB variety (see Figure 1).

**Figure 1. Retirement plan trends: Participation by plan type, 1978-2006 (private-sector, active-workers)**

The most common explanation for the trend toward DC plans is that they are less costly. Ghilarducci and Sun (2006) found that a 10 percent increase in the use of DC

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plans reduces employer pension costs per worker between 1.7 and 3.5 percent. Anecdotal evidence also supports the notion that firms transition their retirement plans due to cost savings. Companies such as GAF Corp (Rankin, 1983) and Hershey Foods Corp (M. Levy, 2006) replaced long-standing DB with DC plans and cited the considerable cost savings as the primary motive in the decision.

The cost savings rationale, while providing a likely explanation for some of this trend, is still limited. 401(k) plans, the most popular DC plan, are more costly than money purchase and profit sharing plans, which predate the 401(k) and have historically not replaced DB pensions (Ippolito, 1995). The firm also garners additional benefits, such as lower employee turnover, by utilizing DB plans (Friedberg & Owyang, 2004), which is not considered by researchers purporting that cost is the causal factor for the shift. Moreover, researchers argue DB pensions are a tool to improve productivity (S. G. Allen, Clark, & McDermed, 1993) and decrease shirking by forcing employees to take account of the implications of their behavior for the long-run future of the firm (Gustman, et al., 1994). There may be short- but not long-term cost savings and past research has not accounted for this alternative.

When AM International and Wells Fargo replaced their DB plan with a DC plan, Robert Bradshaw, VP of Grumman Corporation when asked if Grumman would consider doing the same stated that the primary reason the firm would not do so is the adverse effect on employee relations. "Many of our employees are getting along in age … You start monkeying around with pensions and employees take notice" (Moskal, 1984). One reason employees might react negatively to a change in retirement plans is that evidence
shows that DB pensions pay out greater, more stable benefits than do 401(k) and other types of DC plans (Ghilarducci, 2006; Wolff, 2003). Evidence also shows that individuals with 401(k) plans retire later than those with DB pensions (Friedberg & Webb, 2005). Delayed retirement is due, in part, because individuals must work longer to offset declines to their retiree benefits. In sum, there is a tradeoff between the cost advantages of DC plans and the benefits to managers and employees of DB arrangements as a beneficial human resource practice and as a lower-risk source of retirement income.

This transition from DB to DC plans has significant implications. First, in the US, Social Security replaces approximately forty percent of an average earner’s pre-retirement income.18 Most experts contend that a replacement rate of seventy to eighty percent is necessary to ensure income security during retirement. Employer-sponsored retirement plans play a central role in filling this gap. However, DB and DC plans offer different levels of retirement income security. Research on employer retirement plans indicates that the growth in DC in place of DB arrangements has resulted in an upsurge in pension wealth inequality as DC plans are more likely to generate very low retirement wealth outcomes (Poterba, Rauh, Venti, & Wise, 2007). And from the end of 2007 until the end of 2009, the average 401(k) balance declined 31 percent (Gandel, 2009), highlighting the potentially negative consequences created by having individuals bear the responsibility of their retirement portfolios.

Second, the structure of employer-sponsored retirement plans has important implications for the employment contract. DB pensions are specifically designed to encourage long-term employment (Kotlikoff & Wise, 1985; Lazear, 1986), and research

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18 www.oecd.org/els/social/ageing/PAG
has shown that DB pensions increase employee tenure through a reduction of employee-quit rates (Friedberg & Owyang, 2004). DC plans, on the other hand, do not provide an incentive for long-term employment and some evidence suggests they may actually encourage worker mobility (Munnell, Haverstick, & Sanzenbacher, 2006). As such, a firm’s utilization of DB, as opposed or in addition to DC plans, serves as an indicator of whether or not a firm is structuring its employment relationship to be long-term.

Theory and Hypotheses

The goals and strategies of an organization are set by a negotiation process that occurs among different coalitions (Cyert & March, 1963). Coalitions consist of groups of individuals with similar interests seeking to have their preferences met by the organization. Coalitions themselves often have divergent interests, and in most cases, no single group is able to determine the goals pursued by the organization. In Emerson’s (1962) account of power-dependence relations, he argues that the outcomes from an exchange relationship derive from the dependence one party has upon another in obtaining a needed resource (see also Pfeffer & Salancik, 1978). What determines the outcome of the negotiations between coalitions is determined, in part, by the relative power of each. Coalitional power, and changes therein, should be reflected in the goals, strategies and practices used by the organization.

The employment contract a firm develops and maintains with its workers represents a series of practices and policies that determine the socially expected duration of employment. There are three organizational coalitions with a vested interest in how the firm structures its employment contract: owners, managers and employees. All are
necessary for the organization to function, and as such, interdependence exists between the three. Power differentials between owners, managers and employees exist; therefore, the organization’s goals will be shaped by their relative power. Specifically, my expectation is that the power-dependence relations between these three actors help determine whether a firm structures its employment relationships to be long- or short-term (see also Dencker, 2009 for a similar argument). In the following section, I discuss each of these constituency groups in turn, identifying their sources of power, their interests pertaining to long-term employment and retirement plans, and offer predictions of how these groups influence a firm’s choice in using DB and DC plans. I then consider the role played by embedded interests in affecting firms’ retirement plan strategy.

*Owners*

Since the writings of Berle and Means (1932), social scientists have been interested in understanding how ownership structure influences organizational action. In most every private enterprise, ownership is an important basis for power because owners provide necessary capital for the firm to function. This power is evidenced by large-block owners’ ability to influence firm outcomes by constraining certain decisions (Herman, 1981), thereby altering a firm's ability to respond to changes in its environment (Connelly, Tihanyi, Certo, & Hitt, 2010; Salancik & Pfeffer, 1980). Such owners are able to do so because they help dictate how the control of assets is allocated to various actors within a corporation (Kang & Sørensen, 1999). In sum, a firm's controlling interest helps shape the political dynamics within a corporation and directly affects the firm’s goals and structure (Chaganti & Damanpour, 1991; Fiss & Zajac, 2006).
Owners, however, have differing abilities to influence corporations, so we must consider the extent of power an owner possesses. Power in this context refers to, "the capacity of one social actor to restrict the options available to another social actor in such a way that the ultimate action taken is consistent with the dominating institution's interest" (Glasberg & Schwartz, 1983, p. 327). Mintzberg (1983) suggests there are two primary dimensions of ownership that dictate the extent to which an owner has power; involvement/detachment and concentration/dispersion. Involvement/detachment refers to the extent to which owners influence the decisions or actions of the firm. Concentration/dispersion refers to the extent to which the shares of a firm's stock are closely held. The more involved the owners and the more concentrated their holdings, the greater their ability to influence the organization.

A key insight from ownership research is that different types of owners have different interests, such as maintaining their position of control (Palmer, Friedland, Jennings, & Powers, 1987), maximizing their financial returns (Useem, 1996) and/or protecting their reputation (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010). In this study, I focus on four types of ownership: passive financial, active financial, dispersed (i.e. manager control) and employee. In following sections, I consider each of these types of owners’ preferences for DB and DC participation. In the analyses, I also control for four other types of owners: family, mutual and cooperative, private and ‘miscellaneous’ ownership – which serves as the comparison group for the hypotheses below. The miscellaneous category encompasses ownership by entities such as another firm, a state or foreign government or a foundation.
Financial owners. Though research has shown that different types of owners have different interests, financial investors are likely to prefer firms use strategies to maximize shareholder returns (Useem, 1996). Neo-classical price theory suggests that owners prefer short-term employment relationships, where the external labor market determines wages based on relative worker productivity. Following the dictums from economic theory, several of the strategies used by firms to increase shareholder value, such as layoffs and market-mediated employment relationships, were implemented specifically to reduce labor costs by creating more flexible employment contracts. Moreover, pension research highlights the cost advantages of DC plans and the negative impact that DB pensions have on short-term profitability. As such, I expect that financial owners, with their ability to pressure firms to be more attuned to shareholder value, will affect the types of retirement plans firms establish with their workers. I distinguish between two types of financial owners, passive and active, and argue that the two types will influence firm retirement choices differently.

Passive financial investors, which include mutual funds, insurance companies and investment banks, are the most prevalent owner type of US corporations today. In recent years, scholars have noted the growth of passive financial investors and have begun to study their impact on corporate action and decision-making (e.g. David, Hitt, & Gimeno, 2001). The increased prevalence of these investors is due primarily to the rapid growth of mutual funds over the past twenty years. In 1990, mutual funds accounted for eight percent of US corporate ownership compared with nearly thirty percent in 2008 (Davis, 2008). Notwithstanding their large corporate holdings, these investors are considered passive because they typically do not engage in issues related to corporate governance
(see Bogle, 2005). For example, Davis and Kim found that mutual fund owners tend to side with management with their proxy votes. The authors argue the risk of alienating (potential) corporate clients and losing their business is more salient than the forgone opportunity of increasing portfolio value through shareholder activism (2007, p. 553).

Despite their unwillingness to engage actively in corporate governance, these passive investors possess an ability to constrain corporate decision making due to their concentrated holdings. The threat of liquidating these holdings discipline firms because each exit reduces the value of the company (Parrino, Sias, & Starks, 2003). Research has shown that these investors tend to have short investment horizons, which partly explains the high velocity with which they tend to trade in and out of stocks (Bushee, 1998). These owners pressure management to engage less in long-term strategic decision-making and instead motivate firms to engage in tactics to increase shareholder value in the short-term. As such, I expect these owners to negatively impact DB participation rates.

**Hypothesis 1a:** Passive financial ownership will be negatively related to the number of defined benefit participants.

In addition to the short-term cost savings, passive investors have an additional incentive to promote the utilization of 401(k) plans. Because the primary investment vehicles for individuals in a 401(k) plan are mutual funds, one of the benefactors in the growth of 401(k) plans is mutual fund companies. The growth in assets managed by mutual funds is in large part due to rapid growth of 401(k) pension plans (Davis, 2008).
Thus, the switch not only provides a boost to short-term corporate earnings in the firms in which these owners invest, it expands the customer base for mutual fund companies.

**Hypothesis 1b:** Passive financial ownership will be positively related to the number of defined contribution participants.

In contrast to passive financial investors, other financial investors are more active due to their willingness to engage in the corporate governance of the firms in which they invest. Included in this category are private equity, venture capital (a specific type of private equity firm), hedge funds and other private investors and groups known for taking an active role in management (e.g. Carl Ichan and Frank Lorenzo). I refer to these owners as active financial investors because they typically participate in the management and/or corporate governance of their investments.

One of the advantages of private equity arrangements is they allow the owners to have direct oversight over managers and their performance (Jensen & Murphy, 2009). Private equity firms can influence organizations through two mechanisms: 1) through their large ownership holdings, and 2) by using debt. The weight of debt leverage forces management to focus on short-term profits in order to meet the firm’s interest commitments. Hedge funds, though not considered to be as involved in their investments as private equity firms, are thought to have an even shorter investment time horizon (Cumming, Siegel, & Wright, 2007). And large private investors, while not homogenous in their preferences, are also considered to prefer firm strategies that encourage wealth appropriation from workers and other stakeholders (Shleifer & Summers, 1988).
Several scholars argue that active financial investors are disruptive to existing employment relations due to their market focus (e.g. Clark, 2009; Thompson, 2003). However, studies examining the effects of private equity investments on employee welfare have produced mixed findings (see M. Wright, Bacon, & Amess, 2009). Given these mixed results, it is important to investigate further the role active financial owners play in affecting employee welfare.

Because DB pensions are more costly to administer and their benefits are long-term and difficult to quantify, I expect active financial owners to be hostile to this type of retirement system. Though no study of which I am aware examines the role played by such investors in altering firms’ retirement plan preferences, some evidence indicates that such investors are antagonistic to DB arrangements. Ippolito and James (1992) found that some leveraged buy-outs were accomplished for the purpose of terminating DB plans and reverting those pension assets to boost company earnings. Anecdotal evidence shows that private equity and other private investor groups were responsible for "pension dumping," whereby firms file for bankruptcy in large part to rid themselves of their DB pension liabilities (see Hawthorne, 2008). I expect there to be a negative relationship between active financial ownership and DB participation rates. Moreover, because of these owners’ level of involvement in firms, I expect them to have even fewer participants than in firms controlled by passive financial owners.

**Hypothesis 2a**: Active financial ownership will be negatively related to the number of defined benefit participants. This effect will be greater than that of passive financial ownership.
It is less clear how active financial ownership affects DC participation rates. These owners may prefer firms utilize these plans in place of DB arrangements. Conversely, they may prefer that firms have lower levels of all employee benefits in order to minimize costs. Because cutting all retirement benefits negatively impact employee morale and productivity (Rousseau, 1989), and the use of stock ownership plans (a type of DC plan) are thought to help align worker and shareholder interests (Robinson & Zhang, 2005), I expect that active financial investors will encourage the use of DC arrangements.

**Hypothesis 2b**: Active financial ownership will be positively related to the number of defined contribution participants.

**Managers**

Owners of large corporations in the US typically delegate control over organizational resources to managers, who are tasked with acting as agents of owner interests. Since the firm’s owners often do not have direct oversight of the firm’s operations, managers develop power to the extent that owners become dependent on their expertise in the administration of the firm. Managers have varying degrees of autonomy because there are costs and challenges for owners to monitor management, and when ownership is dispersed among a large number of shareholders these problems are magnified (Demsetz & Lehn, 1985). Managers with greater autonomy are more likely to undertake self-serving strategies and investments rather than act in the best interest of owners (Walsh & Seward, 1990).
Throughout most of the twentieth century, managerial power was high in comparison to other organizational participants, largely because of the widely dispersed ownership present in most large US corporations. However, beginning in the early 1980s, the gap between ownership and control for many large US corporations was reduced, leading to an increased emphasis on maximizing shareholder value (Davis, et al., 1994). Pressure to maximize financial returns can make managers more short-term focused. According to stakeholder theory, if attention to stakeholders is associated with long-term returns, managers will be less likely to cater to stakeholder demands when compelled to pursue short-term profit goals (see Kacperczyk, 2009). The absence of owner pressure, therefore, can free management to attend to broader stakeholder interests and pursue long-term strategies.

In addition to dispersed ownership, managers obtain power from their ability to stave off corporate takeovers. Takeovers are typically associated with a change in corporate management, thus the market for corporate control raises the cost to managers of self-dealing (Davis, 1991; Manne, 1965). The threat of takeover, a source of owner power, serves as a tool in ensuring management attends to the interests of owners (Fama, 1980). Because hostile takeovers discipline managers to pursue the interests of owners, takeover protection increases managerial autonomy and discretion (Kacperczyk, 2009).

In the present study, I focus on state laws protecting firms from hostile takeovers. Though there are differences across states in these statutes, four types of laws are argued to severely inhibit hostile takeovers: control share acquisition, fair price, business combinations (or freeze-outs) and directors’ duties. Descriptions of these laws are taken
from *State Takeover Laws*, published by Investor Responsibility Research Center (Isaacs, 1998) and Cheng and colleagues (2005). Control share acquisition laws give shareholders the ability to determine whether to allow the suitor the ability to vote on the takeover. Fair price laws require the suitor to pay a “fair price” for shares purchased for the takeover. These laws prevent the suitor from paying a lower price for shares once they have purchased a controlling stake of the target firm. Business combination, or freeze-out, laws prevent the suitor from takeover activities for a specified number of years (typically three to five). In effect, these laws make it impossible for a suitor to use the target firm’s assets to pay down the debt incurred in the acquisition. Directors’ duties laws provide the board of directors discretion to stop a proposed takeover when it harms other stakeholders such as employees, communities and customers. Because these four types of laws are effective in deterring takeovers, the presence of such statutes suggests that managers have more autonomy to pursue their own interests.

Research on internal labor markets suggests that managers prefer “closed” employment contracts, which are characterized by stable, long-term employment relationships. Such contracts are beneficial because they protect managers from external market forces (Dencker, 2009). I expect, therefore, managers to prefer DB pensions because they are a mechanism through which firms are able to create stable, long-term relationships. Managers also seek to manage their workforce more effectively. DB plans make the job of motivating, monitoring and retaining employees easier. Having discretion to pursue long-term goals affords managers the ability to utilize and take advantage of DB pensions as a human resource practice. A third interest of management is to maximize their remuneration. Manager-controlled firms are more likely to have
compensation schemes based on firm growth rather than firm performance, which is much less manipulable (P. Wright, Kroll, & Elenkov, 2002). And managers protected by state takeover laws have been found to extract higher pay for themselves and their workers (Bertrand & Mullainathan, 1999, 2003). Anecdotal accounts of the early growth in popularity of 401(k) plans indicates that these arrangements gained much of their popularity early on as a mechanism to provide supplementary, tax-deferred retirement benefits to company executives and were not seen as replacements for DB arrangements (Whitehouse, 2003). Because managers gain directly from the company offering better benefits, I expect that in situations where managers have more discretion to pursue their own interests, both DB and DC participation will be greater.

**Hypothesis 3a:** Dispersed firm ownership will be positively related to the number of defined benefit participants.

**Hypothesis 3b:** Dispersed firm ownership will be positively related to the number of defined contribution participants.

**Hypothesis 4a:** Protection by state takeover laws will be positively related to the number of defined benefit participants.

**Hypothesis 4b:** Protection by state takeover laws will be positively related to the number of defined contribution participants.

*Employees*
Labor is a critical resource for the proper functioning of the firm as organizations depend on worker skill and effort to transform resources into output. Individually, employees have very little power to affect an organization’s goals and strategies. But employee power can be enhanced greatly when workers mobilize and act collectively. They are able to do so primarily through two ways: ownership and unionization. In recent years, there has been increased interest in how employee ownership affects a variety of individual and firm outcomes (see Kruse, Freeman, & Blasi, 2010b for a review). Employee ownership occurs when employees, usually through employee-stock ownership or stock purchase plans, constitute the largest ownership block in the firm. Equity ownership gives employees more opportunities to participate in the decision-making process (Blasi, Kruse, & Bernstein, 2003) and has been shown to increase workers' desire for increased control over firm strategy (Knapp, 1988). Moreover, “[i]f employees as a group hold a sufficient amount of stock to affect the outcome of a shareholder vote or tender, that ownership decreases the power inequality typically found in US employee-employer relations” (Muir, 2006, p. 9). Therefore, I consider employee ownership to be a source of employee power – a power providing workers with the ability to influence a firm's human resource practices.

Though no previous study of which I am aware examines how employee ownership affects DB participation, previous research has shown that employee ownership is associated with firms having other worker-friendly labor practices (Kruse,
Despite some examples of firms requiring wage concessions in place of large ownership stakes by workers, evidence shows that workers in employee stock ownership plans (ESOPs) receive higher employee wages. Kim and Ouimet (2008) found that employee compensation increased following a firm’s adoption of an ESOP, and this positive relationship is magnified when the ESOP owns more than 5 percent of a company (see also Blasi, Conte, & Kruse, 1996).

The impetus behind a firm’s decision to implement/grow employee stock ownership and purchase plans can vary – from using it as a mechanism to improve worker productivity by more closely aligning worker and shareholder interests, to using it as a takeover defense (Bartkus, 1997). Employee ownership may be a reflection of existing influence, a source of employee power or both. Kim and Ouimet’s (2008) finding that the introduction of an ESOP leads to higher wages offers some evidence of the causal ordering between employee ownership and employee power. However, the mechanism between employee ownership and firm strategy is difficult to specify. Despite this limitation, it is still worth exploring the role employee ownership plays in influencing other outcomes related to employee welfare. In particular, because DC plans (of which employee stock ownership and purchase plans are a type) are often seen as substitutes for DB plans, the impact employee ownership has on DB participation levels is not clear.

Though unionization rates in the US have declined dramatically over the past several decades, organized labor maintains influence over firms by the nature of their control of labor resources. Through engaging in or threatening strikes and slowdowns
and expressing their demands through collective bargaining, unions are able to acquire power for their members. Beginning in the mid to late 1940s, organized labor made a strong push for company sponsored DB pension plans (Brown, 1999, chap. 4; Lichtenstein, 1995, chap. 13), continuing the trend that began during World War II of firms offering generous welfare benefits to workers. Historical analyses of welfare capitalism highlight that some nonunion firms felt pressure to match or exceed the benefits offered in union settings (Jacoby, 1997). Firms in the same industry can have different levels of unionization but converge around the same types of practices due to coercive pressures. Industry-levels of labor organization may motivate nonunionized companies to offer substantial benefits as a means to forestall efforts to unionize at their firm. Similarly, organized labor’s small and/or declining presence in many industries lessens employee power and provides firms with increased autonomy to reduce employee benefits.

One potential interest of employees, and one that is particularly germane in the case of unionization, is the desire for security. In a collective bargaining setting, the interests of the average worker predominate. Because the average worker is likely to be older and have higher exit costs, when workers bargain collectively, they will tend to seek more security (Goldberg, 1980). Because of the stability and risk-sharing features of DB pensions, workers likely prefer to maintain these benefits. A second interest of employees is to maximize their remuneration. As it pertains to DB plans, evidence indicates that such plans pay out greater, more stable benefits to retirees than do DC plans (Ghilarducci, 2006; Wolff, 2003). In a DB arrangement, firms, rather than workers, bear most of the investment risk, which would seemingly make such plans attractive to
workers *ceteris paribus* (Zelinsky, 2004). Therefore, I expect to see DC plans be used as a *supplement* to existing DB arrangements rather than as a replacement when employees have more power.20

**Hypothesis 5a**: Employee ownership will be positively related to the number of defined benefit participants.

**Hypothesis 6a**: The percentage of unionization in the firm’s focal industry will be positively related to the number of defined benefit participants.

**Hypothesis 6b**: The percentage of unionization in the firm’s focal industry will be positively related to the number of defined contribution participants.

*Organizational inertia*

An argument central to several foundational works in organizational theory is that organizations develop standard operating procedures that, over time, become taken-for-granted (Hannan & Freeman, 1977; March & Simon, 1958; J. W. Meyer & Rowan, 1977). Firm members have a tendency to become committed to previously adopted strategies and maintain courses of action after they have outlived their usefulness (Salancik, 1977). Embedded practices reduce an organization’s ability to change (Hannan & Freeman, 1984), because the they become taken-for-granted (Zucker, 1977). As a result, organizational change is difficult because individuals develop shared beliefs that legitimize and institutionalize the existing structures of the organization. Thus, I

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20 Because employee stock plans are a type of DC plan, I do not hypothesize a relationship between employee ownership and DC participation rates, though I expect it to be positive.
predict that firms with a longer history of offering DB pensions are less likely to abandon them.

There are two related explanations for why companies with a history of offering DB plans are more likely to maintain a preference for such plans. First, embedded interests within the organization can lead to inertia (Stinchcombe, 1965), preventing firms from making changes. Employees may become accustomed to DB plans, and many may have chosen to work at the firm because of these benefits (Salop & Salop, 1976). As the quote above from the Grumman Corp executive highlights, fear of upsetting, and potentially losing, employees may make firms reluctant to change. Second, companies implementing DB plans in prior periods may view them as a beneficial human resource practice. Inertia in this case may derive also from the first-hand experience firms have with the benefits of a DB arrangement. As DB plans became a more prevalent human resource practice, transitioning to DC plans is likely more difficult as inertial tendencies and vested interests make change more challenging.

**Hypothesis 7a:** The length of time in which a firm offers a defined benefit pension plan will be positively related to the number of defined benefit participants.

**Hypothesis 7b:** The length of time in which a firm offers a defined benefit pension plan will be negatively related to the number of defined contribution participants.

**Data and Methods**

*Sample*
It is well established that over the past thirty years there has been a general trend whereby firms have replaced their DB plans with DC plans. The question remains, however, whether some firms faced different pressures to maintain or change their existing retirement practices. Historical analyses have suggested that the most likely adopters of DB plans were large firms serving national markets (Jacoby, 1997, chap. 1). Prior empirical work has shown that economic pressures and environmental uncertainty can lead to the alteration or abandonment of long-held practices (e.g. Ahmadjian & Robinson, 2001; Davis, et al., 1994). Beginning in the 1980s, the largest US firms faced increased pressure from shareholders (Useem, 1996), fear of takeovers (Davis, 1991) and increased global competition (Thurow, 1996). These factors coincided with the advent of 401(k) plans to provide both the rationale and the means to replace an institutionalized retirement plan system. Therefore, a relevant peer group for an analysis of retirement plans is the largest US industrial and service firms.

Because the study covers a long period with considerable upheaval among the largest corporations, I wanted to ensure that I was able to capture these dynamics by sampling companies across multiple points in time. The initial sample included all firms in either the 1980 Fortune 500 list of largest industrials, the 1994 Fortune 1,000 list, consisting of the 500 largest industrial and 500 largest service firms or the Fortune 500 for 2006. This generated an unbalanced sample of 1,391 firms; however, 34 of those were acquired between 1980 and 1982, yielding a sample of 1,357 firms. The sample consists of firms that were large in the beginning, middle and/or end of my period of study. By repopulating my sample over time, I can better take into account the role played by organizational attrition in firm retirement plan choices. As the US has
continued to shift away from manufacturing and toward service-based economy, this
sampling strategy also creates additional diversity in the types of firms being analyzed.

Variables

In this study, I use annual firm-level counts for the two dependent variables – the
number of DB and DC plan participants. Each year, firms with 100 employees or more
in a retirement plan are required to submit a Form 5500 report to the IRS. Within this
report, employers provide information relevant to each of their retirement plans. The
Pension Benefit Guarantee Corporation (PBGC) provided retirement data for the years
1982 to 1989. The Center for Retirement Research (CRR) at Boston College provided
the retirement data for 1990 to 2006.21 The PBGC data were provided in a text format,
necessitating that I manually construct a codebook in order to extract and analyze the
data. Because new fields are added, old fields dropped and field names change over time,
constructing a longitudinal dataset necessitated manually matching actual company Form
5500 paper submissions for a small number of firms each year to ensure the validity of
my coding. The data provided by the CRR are in a spreadsheet format, which greatly
assisted in this process. However, annual changes to both the file format and variable
names were also crosschecked using the paper submissions.

The company identifier in the Form 5500 is the Employer Identification Number
(EIN). These numbers can change over time and companies can have multiple EINs
operant in any given year. To ensure no data loss, I manually identified firm EINs for
each year. I then verified, at the plan level (120,144 observations), each firm’s retirement

21 http://crr.bc.edu/frequently_requested_data/data_on_the_form_5500_annual_reports.html
data. Consistent with prior research (Ippolito, 2001; Kapinos, 2009), I exclude all multi-employer plans from my analysis. Companies can have multiple plans operating simultaneously in a given year. In order to create firm-level figures, I aggregate across all plans to create an overall participant count for each firm, for each type of plan, for each year of the study.

In any given year there are a certain number of plans for which there is no or incomplete data. Having run a pilot study using this data, reviewing numerous empirical studies and talking with other pension researchers, there does not appear to be anything systematic about the missing data on a plan level. Though missing data is always an issue, one reason that it is especially troublesome in this study is that the retirement data are at the plan (not firm) level. Take a hypothetical firm that has five DB plans operating every year – one large plan and four smaller plans. In 1990, the data are missing for the largest plan. In this example, I will still have a participant count for 1990 for this firm (rather than a missing value), but that participant count will be significantly understated.

I handled the missing data problem in two ways. First, I identified instances where plan-level data appears to be missing. For example, in year $t$, Firm X had a DB plan numbered 101, in year $t+1$ there was no plan number 101 and year $t+2$ plan 101 reappeared. I found these instances through visually inspecting the data at the plan-year level. I also ran analyses of the aggregated firm-year level to examine year to year changes in the data by firm. I then manually examined instances when a firm experienced a 10 percent or greater decrease in the percentage of participants in each type of plan from the previous year. I also examined instances when changes in the number of
firm participants decreased in one year and increased the next year. After determining whether these instances were explainable – for example the firm terminated a plan, spun-off a division or acquired a firm – I coded all instances where missing data seemed to be present. From there, I ran analyses determining there was no systematic bias with the missing data. Second, having identified possible instances of missing data, I interpolated these missing figures by taking the average of the prior year and subsequent year participation counts at the plan-level. I coded these interpolations allowing me to run all analyses with and without these estimates. See Appendix A for additional details on how the dependent variable data were constructed.

I took the data on dominant ownership blocks from the Corporate Data Exchange Stock Ownership Directory (CDE, 1981), Spectrum 5% Stock Holdings for various years (CDA Investment Technologies, Spectrum 5, 1982 - 1994), Compact Disclosure, data graciously provided by Gerald Davis and online company proxy statements. Based on the typology described in Kotz (1978) and Herman (1981), I include dummy variables to test whether types of owners influence firms’ retirement plan participation levels. Ownership is determined by identifying the largest ownership block greater than five percent. Though I only hypothesize about the relationship between, passive financial, active financial, management and employee control, I include dummies for other types of owners as well. I code for Passive Finance ownership, Active Finance ownership, Management control, Employee ownership, Family ownership, Mutual/Coop ownership, Other Private ownership and Miscellaneous ownership. Passive finance owners include mutual funds, insurance companies and investment banks. Active finance owners include

22 http://www.sec.gov/edgar/searchedgar/webusers.htm
private equity, hedge fund and other private investors or groups. I consider a firm where no entity owns more than five percent of the stock to be management controlled.

Employee-ownership occurs when the largest blockholder is an employee stock plan(s).

To determine whether a member of the family controlled a firm, I took company history data from Mergent, Hoovers, fundinguniverse.com, company 10k and proxy filings. Data on mutual and cooperative, and other privately owned firms was taken from annual company history data from Mergent, Hoovers, fundinguniverse.com, and company websites. Other private ownership consists of firms that are not publicly traded and not elsewhere classified (e.g. as a mutual). Miscellaneous ownership, the omitted category, includes firms where the largest shareholder controlling at least five percent was another entity such as a company, a state or foreign government or a foundation.

To determine the effect of state takeover laws (Takeover law) on firm retirement strategy, I identified the years in which states had each of the four types of laws: control share acquisition, fair price, business combination and directors’ duties. These data were taken from State Takeover Laws, published by the Investor Responsibility Research Center (Isaacs, 1998). I then identified the state of incorporation for every year, for each firm in my sample. These came from Compact Disclosure, company 10k reports, Mergent, Hoover’s and from a dataset provided by Gerald Davis. Data are coded ‘1’ for the years in which a firm is covered by any of the four types of takeover laws and ‘0’ otherwise.

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23 I also examined whether the dominant owner being a member of the founding family was meaningfully different from a firm being controlled by a non-founding family owner. T-tests confirmed the two were similar in their DB and DC participant coverage rates.

24 Mutuals and cooperatives were collapsed into one category based on the small number of cooperatives in my sample. T-tests confirmed the two types of firms were similar in their DB and DC participant coverage rates.
Industry unionization (Industry unionization %) rates are available for each year since 1983 from unionstats.com (see Hirsch & Macpherson, 2003 for details). This dataset uses CPS industry codes; to translate SIC and NAICS industry codes into CPS codes I utilized a conversion table provided by the US Bureau of Labor Statistics. The coding scheme changed twice during the period of study, in 1992 and again in 2002. The change in 1992 is relatively minor; however, beginning in 2002 CPS codes are matched to NAICS codes rather than SIC codes. I took each firm’s SIC and/or NAICS code annually from Compustat, Compact Disclosure, 10k statements, Standard & Poor’s Register of Corporations, Directors and Executives (S&P Register) and Ward’s Business Directory of US Private & Public Companies (Ward’s). I use 1983 data as an approximation of 1982 unionization levels.

Data on DB plan age, the amount of time each firm has been offering a DB plan, are not available directly. However, in the Form 5500 reports firms are required to provide the date when each pension plan started. I took the first year the firm offered a DB plan, and then subtracted that number from the year of study. Though it is possible that this date does not capture the introduction date of the first DB plan, it should serve as a useful proxy for the length of time in which a firm has offered a DB plan.

The transition from DB to DC plans may relate to several factors not included in the discussion of the hypotheses. Because larger firms are likely to have more employees and a greater ability to pay for DB plans, I include two measures of firm size. First, I take the total number of Employees of the firm. Employee counts are necessary as the number of participants in the two types of plans is bound by the number of employees in

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25 [http://www.bls.gov/cps/cpsoccind.htm](http://www.bls.gov/cps/cpsoccind.htm)
the firm. I also use the total Revenues for each firm each year, as revenues may indicate a firm’s ability to pay for retirement plans. To measure firm performance, I took a three-year moving average of the company’s return on assets (ROA). Because the ROA figures measure had a few extreme values, I winsorized the ROA figures at the 1st and 99th percentiles (-25.61 and 21.71 percent respectively) prior to averaging. I included a measure of long-term debt to total assets (LT Debt/Assets) as a proxy for the firm’s relative covenant constraints. Furthermore, owners often demand that firms take on more debt to increase shareholder returns and firms with higher debt are subject to more monitoring by capital markets. Though this number cannot be lower than zero, this measure also has some extreme values at the upper end. I therefore winsorized this figure at the 99th percentile (84.38 percent). The employee and financial data come from Compustat, Compact Disclosure, company 10k reports, the S&P Register and Ward’s. Because 10.96 percent of firm-years in my sample represent non-publicly traded companies, the financial performance and debt variables are not always available. Therefore, I run analyses excluding and including these measures and restrict some analyses to only publicly traded companies.

The ownership structure of firms can change dramatically during a firm’s bankruptcy. Moreover, anecdotal evidence shows that several firms went through bankruptcy in part to shed themselves of their DB pension liabilities (Hawthorne, 2008). Therefore, I created a binary measure for when a firm is in bankruptcy (Bankrupt) – ‘0’ for years not bankrupt, ‘1’ for years firm is bankrupt. These data were taken from several sources including Lynn LoPucki’s Bankruptcy Research Database (LoPucki, 2010) and
company history data found in Mergent, Hoover's, fundinguniverse.com, company 10k statements and various newspaper sources.

I also control for *Firm Age* as it has been found to be related to the adoption of certain employee governance practices (Gomez-Mejia, Larraza-Kintana, & Makri, 2003). I calculate firm age by subtracting the year of incorporation from each year of the study. I found incorporation dates using Mergent, Hoover's, fundinguniverse.com, company 10k statements and company websites. Firm age is not included in some models due to collinearity with DB plan age.

Several industry-level controls may be germane to the study of pensions as well. A rationale pension researchers use to help explain the growth of DC and the decline of DB pensions is that more individuals work in service-related industries than in manufacturing, which has historically had higher rates of DB participation. Therefore, to control for the growth and contraction of different industries, I include a measure of industry size, which is the number of employees in each industry (*Industry Employees*). I took these data from unionstats.com. Consistent with predictions from neo-institutional theory, I also control for possible effect of the retirement practices of industry peers on a firm’s retirement policy. I calculate industry retirement data by collapsing the dependent variable data for each firm at the 2-digit SIC code level and creating an industry participant number for each plan type (DB and DC). I then subtract the number of participants for each firm for each plan type from the overall industry DB and DC figures and divide this number by the total number of employees of the other firms in the industry – thereby creating two variables, *Industry DB Rate* and *Industry DC Rate*. These
numbers represents the percentage of employees participating in DB and DC plans among firms in my sample sharing the same 2-digit SIC code.

I include a measure of stock market performance as the growth or decline of the stock market can differentially alter firm and employee preferences for the two types of retirement plans. I measure stock market performance by taking the three-year moving average of returns in the S&P 500 index. In a DB arrangement, a firm’s pension assets are invested primarily in the stock and bond markets. Increasingly, however, stocks make up a larger percentage of investments of firm DB assets. Stock market declines therefore make DB pensions more costly to firms, as the firm has to make up for the shortfall with increased contributions to their DB plans. However, stock market declines make DB pensions more appealing to employees as the firm bears the risk and makes up for the shortfall. For employees, individual investments in a DC plan are almost solely in mutual funds. Therefore, stock market declines negatively affect individual retirement balances. Alternatively, in periods of stock market growth, DC plans may be more appealing to individuals as they directly benefit in the form of investment returns.

Because this study is longitudinal, I control for time using year dummy codes.
Table 4. Descriptive statistics and correlation matrix

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<th>Variables</th>
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<th>3</th>
<th>4</th>
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<td>9 Other private own</td>
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<td>0.00</td>
<td>0.01</td>
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<td>-0.05</td>
<td>-0.23</td>
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<td>0.04</td>
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<td>-0.07</td>
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<td>15.70</td>
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<td>-0.04</td>
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<td>16 Institutional ownership (%)</td>
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<td>25.89</td>
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<td>0.08</td>
<td>0.44</td>
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<td>17 Revenues (M)</td>
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<td>13,408.86</td>
<td>0.51</td>
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<td>18 ROA (3-yr avg) (%)</td>
<td>4.01</td>
<td>5.36</td>
<td>0.01</td>
<td>0.04</td>
<td>-0.05</td>
<td>-0.19</td>
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<tr>
<td>19 LTD/Total Assets t-1 (%)</td>
<td>22.21</td>
<td>17.28</td>
<td>-0.05</td>
<td>-0.04</td>
<td>-0.05</td>
<td>0.24</td>
<td>-0.04</td>
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<td>-0.08</td>
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<td>0.06</td>
<td>0.01</td>
<td>0.07</td>
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<td>0.10</td>
<td>-0.03</td>
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<td>0.01</td>
<td>0.00</td>
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<td>21 Industry employees (000s)</td>
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<td>0.06</td>
<td>-0.02</td>
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<td>-0.04</td>
<td>-0.01</td>
<td>0.06</td>
<td>0.02</td>
<td>0.01</td>
<td>-0.04</td>
<td>0.06</td>
<td>-0.17</td>
</tr>
<tr>
<td>22 Ind DB rate t-1 (%)</td>
<td>41.09</td>
<td>20.75</td>
<td>0.15</td>
<td>-0.01</td>
<td>-0.06</td>
<td>-0.10</td>
<td>0.25</td>
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<td>-0.01</td>
<td>-0.16</td>
<td>0.35</td>
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<tr>
<td>23 Ind DC rate t-1 (%)</td>
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<td>19.28</td>
<td>0.09</td>
<td>0.10</td>
<td>0.02</td>
<td>-0.09</td>
<td>0.21</td>
<td>0.05</td>
<td>-0.17</td>
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<td>-0.04</td>
<td>0.10</td>
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<td>24 S&amp;P 500 return (3-yr avg) (%)</td>
<td>11.35</td>
<td>8.49</td>
<td>-0.02</td>
<td>-0.05</td>
<td>0.01</td>
<td>0.02</td>
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<td>Institutional ownership (%)</td>
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<td>Revenues (M)</td>
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<tr>
<td>ROA (3-yr avg) (%)</td>
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<td>.06</td>
<td>-.06</td>
<td>.10</td>
<td>.02</td>
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<tr>
<td>LTD/Total Assets _t-1 (%)</td>
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<td>-.02</td>
<td>-.08</td>
<td>-.13</td>
<td>-.06</td>
<td>-.28</td>
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<tr>
<td>Bankrupt</td>
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<td>-.02</td>
<td>.00</td>
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<td>-.02</td>
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<td>Industry employees (000s)</td>
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<td>-.07</td>
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<td>-.06</td>
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<td>Ind DB rate_t-1 (%)</td>
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<td>.21</td>
<td>-.14</td>
<td>-.04</td>
<td>-.08</td>
<td>-.05</td>
<td>-.02</td>
<td>-.20</td>
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<tr>
<td>Ind DC rate_t-1 (%)</td>
<td>.17</td>
<td>-.03</td>
<td>.14</td>
<td>.01</td>
<td>.06</td>
<td>-.15</td>
<td>.08</td>
<td>-.01</td>
<td>.01</td>
<td>.63</td>
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<tr>
<td>S&amp;P 500 return (3-yr avg) (%)</td>
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<td>-.02</td>
<td>-.02</td>
<td>-.06</td>
<td>-.05</td>
<td>.06</td>
<td>.00</td>
<td>-.03</td>
<td>.00</td>
<td>.03</td>
<td>-.02</td>
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Descriptive statistics and correlations presented in table 4 highlight several points of interest. First, the correlation between DB and DC participation is large and positively significant, offering evidence that firms in my sample use both types of plans concurrently. Both management control and employee ownership, as predicted, are positively correlated with the number of DB and DC participants, whereas the two measures of financial ownership have modest but negative correlations with the dependent variables. The length of time a firm has had a DB plan is positively correlated with the number of DB participants, and not surprisingly, it is also correlated with the age of the firm. And supporting the claim that active financial investors discipline management by using debt, there is a relatively large correlation between active financial ownership and the debt-to-assets ratio.

Additional data on the differences in DB and DC participation across different ownership groups and at select time points are provided in tables 5 and 6. The data in table 5 indicate a marked decline in the percentage of employees covered by DB plans and a concomitant increase in the ratio of employees covered by DC plans. However, while the percentage of firms that have at least one DB pension plan declines over time, the decline is much less dramatic than the percentage of employees covered. This provides some evidence that broad trends in retirement plan coverage are not due simply to firms abandoning the use of DB plans but are due rather to the gradual shifting of employees to DC plans. There is also growth in the number of firms that have a DC plan, and by 1994, almost all companies in the sample have employees covered by a DC arrangement. Furthermore, we see a dramatic change in the ownership structure of the firms in the sample. The percentage of firms owned by passive financial investors more
than tripled, while the percentage of active financial owners more than doubled. The data also indicate a re-concentration of ownership among the firms in this sample during the period of study, as firms with dispersed ownership declined considerably during the period. By 1988, almost all of the firms in the sample are covered by one of the four takeover laws, meaning there is little variance between firms with and without laws. Takeover laws are therefore unlikely to have an effect on DB or DC participation.

Table 5. Variable averages for selected years

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<td>1,079</td>
<td>1,106</td>
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<td>Firms with DB plan (%)</td>
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<td>75.81</td>
<td>75.05</td>
<td>71.88</td>
<td>70.49</td>
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<td>% of Employees in DB Plans</td>
<td>51.01</td>
<td>46.67</td>
<td>42.72</td>
<td>34.17</td>
<td>29.38</td>
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<tr>
<td>Firms with DC plan (%)</td>
<td>77.52</td>
<td>91.84</td>
<td>97.47</td>
<td>97.57</td>
<td>96.63</td>
</tr>
<tr>
<td>% of Employees in DC Plans</td>
<td>35.85</td>
<td>48.02</td>
<td>56.67</td>
<td>59.32</td>
<td>63.81</td>
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<td>Employees (000s)</td>
<td>21.33</td>
<td>22.62</td>
<td>22.67</td>
<td>32.88</td>
<td>38.61</td>
</tr>
<tr>
<td>Revenues (M)</td>
<td>2,537.38</td>
<td>3,467.40</td>
<td>4,469.05</td>
<td>8,958.39</td>
<td>13,957.89</td>
</tr>
<tr>
<td>Firm age</td>
<td>59.94</td>
<td>62.80</td>
<td>66.96</td>
<td>70.77</td>
<td>76.15</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>5.99</td>
<td>4.36</td>
<td>2.64</td>
<td>4.00</td>
<td>3.76</td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td>19.25</td>
<td>21.97</td>
<td>22.49</td>
<td>24.14</td>
<td>20.89</td>
</tr>
<tr>
<td>Bankrupt (%)</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Passive finance owned firms (%)</td>
<td>18.04</td>
<td>20.76</td>
<td>33.09</td>
<td>42.94</td>
<td>55.26</td>
</tr>
<tr>
<td>Active finance owned firms (%)</td>
<td>3.52</td>
<td>8.71</td>
<td>8.50</td>
<td>7.29</td>
<td>8.49</td>
</tr>
<tr>
<td>Management controlled firms (%)</td>
<td>25.35</td>
<td>21.32</td>
<td>12.75</td>
<td>10.65</td>
<td>6.06</td>
</tr>
<tr>
<td>Employee owned firms (%)</td>
<td>7.31</td>
<td>6.95</td>
<td>10.94</td>
<td>8.45</td>
<td>5.53</td>
</tr>
<tr>
<td>Family owned firms (%)</td>
<td>24.88</td>
<td>23.73</td>
<td>19.17</td>
<td>17.71</td>
<td>14.15</td>
</tr>
<tr>
<td>Mutuals/cooperatives (%)</td>
<td>3.89</td>
<td>3.61</td>
<td>3.53</td>
<td>3.36</td>
<td>2.96</td>
</tr>
<tr>
<td>Other privately owned firms (%)</td>
<td>9.16</td>
<td>6.30</td>
<td>3.16</td>
<td>2.20</td>
<td>1.35</td>
</tr>
<tr>
<td>Miscellaneous owned firms (%)</td>
<td>7.86</td>
<td>8.62</td>
<td>8.86</td>
<td>7.41</td>
<td>6.20</td>
</tr>
<tr>
<td>Firms covered by takeover law (%)</td>
<td>5.00</td>
<td>93.23</td>
<td>95.12</td>
<td>96.76</td>
<td>96.77</td>
</tr>
<tr>
<td>Avg industry unionization (%)</td>
<td>23.49</td>
<td>18.66</td>
<td>16.54</td>
<td>12.98</td>
<td>10.97</td>
</tr>
<tr>
<td>Avg DB plan age</td>
<td>22.78</td>
<td>24.72</td>
<td>27.61</td>
<td>29.70</td>
<td>32.37</td>
</tr>
<tr>
<td>Industry employees (000s)</td>
<td>738.80</td>
<td>914.60</td>
<td>930.40</td>
<td>1,022.50</td>
<td>1,036.19</td>
</tr>
</tbody>
</table>
Table 6. Comparison of means by ownership type

<table>
<thead>
<tr>
<th>Variables</th>
<th>Miscellaneous</th>
<th>Passive Finance</th>
<th>Active Finance</th>
<th>Manager</th>
<th>Employee</th>
<th>Family</th>
<th>Mutuels &amp; Cooperatives</th>
<th>Other Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB Participants</td>
<td>7,129.47</td>
<td>7,988.91*</td>
<td>5,545.95*</td>
<td>20,379.77</td>
<td>23478.45*</td>
<td>5,106.09*</td>
<td>9,667.64*</td>
<td>2,706.93*</td>
</tr>
<tr>
<td>% of Employees in DB Plans</td>
<td>43.03</td>
<td>40.07*</td>
<td>32.96*</td>
<td>57.25*</td>
<td>58.36*</td>
<td>26.99*</td>
<td>69.06*</td>
<td>30.20*</td>
</tr>
<tr>
<td>DC Participants</td>
<td>8,641.70</td>
<td>12,142.00*</td>
<td>6,651.88*</td>
<td>22,778.16*</td>
<td>28,373.85*</td>
<td>9,818.06*</td>
<td>8,148.77*</td>
<td>4,024.90*</td>
</tr>
<tr>
<td>% of Employees in DC Plans</td>
<td>51.01</td>
<td>57.07*</td>
<td>44.55*</td>
<td>60.56*</td>
<td>64.07*</td>
<td>45.08*</td>
<td>63.81*</td>
<td>40.30*</td>
</tr>
<tr>
<td>Takeover law</td>
<td>0.75</td>
<td>0.85*</td>
<td>0.81*</td>
<td>0.65*</td>
<td>0.77*</td>
<td>0.71*</td>
<td>0.70*</td>
<td>0.49*</td>
</tr>
<tr>
<td>Ind Unionization (%)</td>
<td>18.11</td>
<td>15.78*</td>
<td>16.18*</td>
<td>23.24*</td>
<td>21.77*</td>
<td>14.43*</td>
<td>7.69*</td>
<td>12.31*</td>
</tr>
<tr>
<td>DB Age</td>
<td>24.77</td>
<td>32.92*</td>
<td>32.52*</td>
<td>38.38*</td>
<td>37.45*</td>
<td>20.91*</td>
<td>43.34*</td>
<td>13.49*</td>
</tr>
<tr>
<td>Employees (000s)</td>
<td>19,381.99</td>
<td>22,772.98*</td>
<td>18,059.09*</td>
<td>40,855.05*</td>
<td>46,509.00*</td>
<td>22,214.24*</td>
<td>12,601.60*</td>
<td>10,755.26*</td>
</tr>
<tr>
<td>Revenues (M)</td>
<td>5,341.02</td>
<td>5,163.12*</td>
<td>2,623.21*</td>
<td>9,273.05*</td>
<td>9,462.03*</td>
<td>3,875.45*</td>
<td>5,552.81*</td>
<td>2,012.8*</td>
</tr>
<tr>
<td>Firm age</td>
<td>60.55</td>
<td>68.22*</td>
<td>62.23*</td>
<td>80.56*</td>
<td>77.91*</td>
<td>53.42*</td>
<td>98.06*</td>
<td>40.79*</td>
</tr>
<tr>
<td>Institutional own (%)</td>
<td>43.69</td>
<td>62.35*</td>
<td>29.89*</td>
<td>42.80*</td>
<td>46.48*</td>
<td>41.15*</td>
<td>0.00*</td>
<td>0.00*</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>3.57</td>
<td>3.66*</td>
<td>0.23*</td>
<td>4.68*</td>
<td>4.09*</td>
<td>5.58*</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Debt/Assets t-1 (%)</td>
<td>22.73</td>
<td>21.07*</td>
<td>37.48*</td>
<td>20.49*</td>
<td>21.68*</td>
<td>19.56*</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>0.01</td>
<td>0.01*</td>
<td>0.06*</td>
<td>0.01*</td>
<td>0.01*</td>
<td>0.00*</td>
<td>0.01*</td>
<td>0.01*</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>710.49</td>
<td>858.58*</td>
<td>1,034.12*</td>
<td>791.84*</td>
<td>867.90*</td>
<td>1,030.64*</td>
<td>1,644.96*</td>
<td>1,031.03*</td>
</tr>
<tr>
<td>Ind DB Rate t-1 (%)</td>
<td>41.14</td>
<td>40.11*</td>
<td>34.04*</td>
<td>53.50*</td>
<td>46.53*</td>
<td>36.67*</td>
<td>53.37*</td>
<td>37.65*</td>
</tr>
<tr>
<td>Ind DC Rate t-1 (%)</td>
<td>48.67</td>
<td>51.50*</td>
<td>44.48*</td>
<td>59.95*</td>
<td>53.67*</td>
<td>44.79*</td>
<td>55.70*</td>
<td>42.94*</td>
</tr>
</tbody>
</table>

*p < .05

Tests are two-tailed
Table 6 includes a series of sample means-comparison tests of the dependent and select independent variables across the ownership categories. For the measures of DB and DC participation, the results are largely consistent with the hypotheses. Firms owned by passive and active financial owners have a lower percentage of employees covered by DB pensions than the comparison group. However, passive financial owned firms have a higher percentage of employees covered by DC plans while active financial owners have a lower percentage. Management controlled and employee owned companies, as expected, have higher percentages of DB and DC coverage. Interestingly, measures of firm size and age are quite different across ownership categories, as management controlled and employee owned firms are nearly twice as large and are much older on average than the comparison group, as well as those owned by passive and active investors.

Statistical analyses

In this study, the unit of analysis is the firm, and the unit of observation is the firm-year. My primary dependent variables are log values of the counts of the number of participants in each type of plan. However, one of the challenges in modeling these data is the prevalence of firms not offering a DB or DC plan in a given year. In my sample, firms do not offer a DB plan in 6,032 firm-years and no DC plan in 1,606 firm-years. To combat this issue, I utilize several different regression techniques.

In the case of DB plans, there are two main types of companies with no DB plan in a given year – those who have never offered a DB plan during the period of study (229 firms, 4,440 firm-years) and those who abandon the use of DB plans (136 firms, 1,030
firm-years from the time of abandonment forward). The remaining 562 firm-years (59 firms) in which there is a zero value for the number of DB participants occur in the years prior to the presence of the firms’ first DB plan. Companies with fewer than 100 participants in a plan do not have to file a Form 5500 report annually, and I identified seventeen firms (82 firm-years) for which a firm appeared to have a DB plan, but likely did not have over 100 participants. Twenty-six firms without a DB plan acquired a firm with one, which I ascertained by examining the plan names in the Form 5500 files. The years prior to these acquisitions account for an additional 261 firm-years of zero observations. Fourteen firms established a DB plan during the period of study – the years prior account for 79 firm-years. I was unable to ascertain the reason the other firms did not have a DB plan in a given year but had one in subsequent years.

Table 7 contains descriptive statistics of these three different categories of firms with no DB plan compared to firms with a DB plan. Firms that abandoned their DB plans or had no DB plan during the period of study have lower rates of DC participation, providing evidence that these firms are not substituting the use of DB for DC pensions. Additionally, firms not utilizing DB pensions and those who stop using them operate in industries with lower levels unionization and DB participation rates – though both rates are lower for firms not using DB pensions during the period of study. One of the most striking differences is that firms without a DB plan during the period of study are much younger than those that abandoned and those who maintained their DB plan. This finding is consistent with the idea organizations arising in a given period, because they confront similar competitive and institutional circumstances, converge around the same sets of workplace governance arrangements (Stinchcombe, 1965).
Table 7. Sample t-tests of firms with and without DB pension plans

<table>
<thead>
<tr>
<th>Variables</th>
<th>All other firms</th>
<th>No DB during study</th>
<th>Abandon DB</th>
<th>Other DB missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB Participants</td>
<td>13,692.85</td>
<td>--</td>
<td>6.528.10*</td>
<td>--</td>
</tr>
<tr>
<td>% of Employees in DB Plans</td>
<td>55.74</td>
<td>--</td>
<td>43.14*</td>
<td>--</td>
</tr>
<tr>
<td>DC Participants</td>
<td>14,774.47</td>
<td>10,576.95*</td>
<td>9,686.36*</td>
<td>6,732.56*</td>
</tr>
<tr>
<td>% of Employees in DC Plans</td>
<td>55.61</td>
<td>50.62*</td>
<td>48.84*</td>
<td>51.62*</td>
</tr>
<tr>
<td>Takeover law</td>
<td>0.75</td>
<td>0.76</td>
<td>0.74</td>
<td>0.54*</td>
</tr>
<tr>
<td>Ind Unionization (%)</td>
<td>18.98</td>
<td>10.18*</td>
<td>14.91*</td>
<td>13.51*</td>
</tr>
<tr>
<td>DB Age</td>
<td>36.83</td>
<td>--</td>
<td>28.21*</td>
<td>--</td>
</tr>
<tr>
<td>Employees (000s)</td>
<td>27,881.82</td>
<td>22,226.22*</td>
<td>20,192.35*</td>
<td>13,969.29*</td>
</tr>
<tr>
<td>Revenues (M)</td>
<td>6,379.76</td>
<td>4,018.46*</td>
<td>3,727.93*</td>
<td>2,346.20*</td>
</tr>
<tr>
<td>Firm age</td>
<td>76.77</td>
<td>30.58*</td>
<td>62.33*</td>
<td>35.61*</td>
</tr>
<tr>
<td>Institutional own (%)</td>
<td>46.37</td>
<td>42.10*</td>
<td>39.81*</td>
<td>35.47*</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>3.95</td>
<td>4.99*</td>
<td>2.75*</td>
<td>2.79*</td>
</tr>
<tr>
<td>Debt/Assets t-1 (%)</td>
<td>22.10</td>
<td>21.40*</td>
<td>24.39*</td>
<td>25.86*</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>0.01</td>
<td>0.01</td>
<td>0.04*</td>
<td>0.00</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>818.04</td>
<td>1,195.88*</td>
<td>1,120.55*</td>
<td>1,089.52*</td>
</tr>
<tr>
<td>Ind DB Rate t-1 (%)</td>
<td>45.17</td>
<td>28.73*</td>
<td>35.54*</td>
<td>41.45*</td>
</tr>
<tr>
<td>Ind DC Rate t-1 (%)</td>
<td>52.50</td>
<td>45.30*</td>
<td>47.39*</td>
<td>50.07*</td>
</tr>
</tbody>
</table>

* p < .05; tests are two-tailed

Table of years prior to when firm abandoned use of DB pensions

Because firms abandoning a DB plan differ along several dimensions from those who never offered a DB plan, I analyze these two in separate equations. I ran analyses on two different binary outcomes for whether a firm has a DB plan: (1) predicting whether a firm abandoned its DB plan during the period of observation, and (2) analyzing firms that did not have a plan during the period of study. To model the effects of the covariates on firms forgoing the use of DB pensions, I use a random-effects pooled logit regression analysis to estimate the hazard of a firm dropping their DB pensions during the period of
study. A random-effects logit addresses the issue of unobserved heterogeneity due to repeated observations on the same firm across years.

Using the aforementioned covariates to estimate the causes for firms not offering a DB pension is more complicated as these variables change over time. For example, ownership, one of the main explanatory variables in my analyses, can change annually, thus making it difficult to ascertain the role played by firm ownership on the likelihood a firm offers a DB pension between 1982 and 2006. Because there is no year-to-year variance in the outcome variable in an analysis of firms not offering a DB pension during the period of study, a time-series analysis is unwarranted. In order to provide some analysis of what leads firms to utilize DB plans during the study period, I perform a series of logit models for the year 1982, examining how the covariates affect a firm’s decision to not offer a DB pension in the study period.

Regarding DC plans, there were 18 firms, accounting 167 firm-years, that never had a DC arrangement, and 53 firms, accounting for 197 firm-years, who abandoned their DC plans during the course of study. The remainder of the DC participant zero observations are for the years prior to the 320 firms adopting their first DC plan during the study period. Table 8 provides descriptive statistics for each of these types of firms. The results indicate that firms with no DC plan, those who abandoned their DC plan and those who added their first DC plan during the period of study are significantly younger, smaller, with lower rates of unionization and are in industries with lower rates of both DB and DC participation. These firms have fewer DB participants than firms that had a DC plan throughout the period of study.
### Table 8. Sample t-tests of firms with and without DC pension plans

<table>
<thead>
<tr>
<th>Variables</th>
<th>All other firms</th>
<th>No DC during study</th>
<th>Abandon DC</th>
<th>Added DC Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB Participants</td>
<td>12,168.21</td>
<td>1,548.57*</td>
<td>3,693.83*</td>
<td>3,965.89*</td>
</tr>
<tr>
<td>% of Employees in DB Plans</td>
<td>46.66</td>
<td>34.21*</td>
<td>36.88*</td>
<td>27.69*</td>
</tr>
<tr>
<td>DC Participants</td>
<td>16,008.42</td>
<td>--</td>
<td>5,121.05*a</td>
<td>9,350.50*b</td>
</tr>
<tr>
<td>% of Employees in DC Plans</td>
<td>57.93</td>
<td>--</td>
<td>52.10*a</td>
<td>54.83</td>
</tr>
<tr>
<td>Takeover law</td>
<td>0.76</td>
<td>0.56*</td>
<td>0.72*</td>
<td>0.76</td>
</tr>
<tr>
<td>Ind Unionization (%)</td>
<td>18.70</td>
<td>13.95*</td>
<td>17.83*</td>
<td>11.83*</td>
</tr>
<tr>
<td>DB Age</td>
<td>31.02</td>
<td>12.18*</td>
<td>22.40*</td>
<td>17.12*</td>
</tr>
<tr>
<td>Employees (000s)</td>
<td>30,161.28</td>
<td>5,460.99*</td>
<td>10,611.20*</td>
<td>29,759.99*</td>
</tr>
<tr>
<td>Revenues (M)</td>
<td>6,414.16</td>
<td>1,741.87*</td>
<td>2,071.62*</td>
<td>6,325.68*</td>
</tr>
<tr>
<td>Firm age</td>
<td>73.05</td>
<td>54.31*</td>
<td>65.06*</td>
<td>48.72*</td>
</tr>
<tr>
<td>Institutional own (%)</td>
<td>46.58</td>
<td>19.48*</td>
<td>35.13*</td>
<td>41.57*</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>4.10</td>
<td>2.72*</td>
<td>2.83*</td>
<td>3.90</td>
</tr>
<tr>
<td>Debt/Assets t-1 (%)</td>
<td>22.54</td>
<td>25.05</td>
<td>25.61*</td>
<td>20.45*</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>0.01</td>
<td>0.02</td>
<td>0.03*</td>
<td>0.02*</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>863.71</td>
<td>550.27*</td>
<td>733.65*</td>
<td>1,096.38*</td>
</tr>
<tr>
<td>Ind DB Rate t-1 (%)</td>
<td>43.13</td>
<td>36.23*</td>
<td>38.51*</td>
<td>35.71*</td>
</tr>
<tr>
<td>Ind DC Rate t-1 (%)</td>
<td>51.83</td>
<td>43.95*</td>
<td>47.32*</td>
<td>47.63*</td>
</tr>
<tr>
<td>Abandon DB plan ever</td>
<td>0.10</td>
<td>0.52*</td>
<td>0.44*</td>
<td>0.20*</td>
</tr>
<tr>
<td>Abandon DB plan t or t-1</td>
<td>0.01</td>
<td>0.08*</td>
<td>0.05*</td>
<td>0.02*</td>
</tr>
</tbody>
</table>

*p < .05; tests are two-tailed

*a Test of years prior to when firm abandoned use of DC pensions

*b Test of years after firm introduced its first DC pension

In the analyses examining DB participation, I restrict my sample to firms that had a DB pension plan and those that appeared to have had a DB plan but information on the plan was not reported due to the number of participants being less than 100. For DC pensions, I restrict my sample to firms that had a DC plan. To examine the relationship between pension plan participants and owner, manager and employee power and

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embedded interests, I used fixed-effects, pooled time-series regression analysis. A fixed-effects model implicitly accounts for firms’ unobserved characteristics that do not vary over time and that may affect DB and DC plan participation. This specification is achieved by subtracting the values of each observation from the firm mean removing all between-firm differences and leaving only within-firm variation to be explained by the covariates (Woolridge, 2002). Specifically, I estimate the effects of the covariates on the log of firm DB (DC) participation counts:

\[
Y_{ij} = \beta_0 + \beta_1 X_{1ij} + \ldots + \beta_p X_{pij} + \alpha_j + \epsilon_{ij}
\]

where all firm-specific effects are accommodated by \(\alpha_j\), and within-firm effects being explained by the covariates. A fixed-effects framework strengthens the causal inferences about the effects the covariates have on firm retirement practices by ruling out the possibility that organizations that adopted those practices had stable unobserved preferences for one type of plan over the other. A Hausman test indicated that the fixed-effects model was appropriate (\(\chi^2 = 83.76, df = 35, p < .001\)).

Results

The results of the analyses on the factors leading to firms abandoning their DB pension plans during the study period are shown in Table 9. Model 1 includes the control variables only, except for firm revenues, financial performance and the debt measure. Model 2 adds the ownership information and includes a measure of the number of other firms in the sample in the focal firm’s target industry that previously dropped their DB plans. There are a few instances with only one firm in a 2-digit SIC code in a given year, thus I include industry participation separately in Model 3. Because I was able to obtain
revenue information for several of my privately owned firms, revenues were entered in Model 4. Model 5 includes all of the covariates, and the analysis was run only on the publicly traded firms in the sample. One issue in these analyses was that the percentage of institutional ownership introduced problems of multicollinearity as passive financial and institutional ownership are highly correlated. I excluded the percentage of institutional ownership from all analyses. I also made three changes to the variables in order conduct the analysis on the predictors of firms abandoning their DB plans. First, due to issues of collinearity with the year dummies, I was unable to include stock market performance in the logit models. Second, because DB plan age is equal to zero when a firm does not have a DB plan, I lagged DB plan age in this models. Last, I created a count variable of firms in a two-digit SIC code that completely abandoned the use of DB pensions in prior years (Industry DB Abandon), to account for the possibility of competitive pressures and/or a “safety-in-numbers” effect (Ahmadjian & Robinson, 2001), whereby once similar firms stop using DB pensions, it is less normatively costly for others to do so.

The results indicate that older firms are less likely to abandon the use the use of DB pensions as are companies in industries with higher rates of DB coverage. Firms going through bankruptcy, those whose largest owner is a family and those in industries where other firms have previously abandoned the use of DB plan are also more likely to stop using DB pensions. None of the variables I hypothesized would affect the number of participants are significant predictors of whether a firm stopped using DB pensions.
Table 9. Time-series, logit regression on firms abandoning DB plans, 1982-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td>-0.009</td>
<td>-0.013</td>
<td>-0.021</td>
<td>-0.009</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.007)</td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.015</td>
<td>-0.026</td>
<td>-0.028</td>
<td>-0.021</td>
<td>-0.026</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.007)</td>
<td>(0.008)</td>
<td>(0.007)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>2.367***</td>
<td>2.720***</td>
<td>2.756***</td>
<td>2.660***</td>
<td>2.578**</td>
</tr>
<tr>
<td></td>
<td>(0.354)</td>
<td>(0.530)</td>
<td>(0.580)</td>
<td>(0.549)</td>
<td>(0.761)</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>0.217***</td>
<td>0.075</td>
<td>-0.064</td>
<td>-0.092</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(0.154)</td>
<td>(0.171)</td>
<td>(0.150)</td>
<td>(0.224)</td>
<td></td>
</tr>
<tr>
<td>Passive financial</td>
<td>--</td>
<td>1.163</td>
<td>1.395</td>
<td>0.916</td>
<td>1.731</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.722)</td>
<td>(0.873)</td>
<td>(0.753)</td>
<td>(1.207)</td>
</tr>
<tr>
<td>Active financial</td>
<td>--</td>
<td>1.913***</td>
<td>2.005***</td>
<td>1.287</td>
<td>2.053</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.864)</td>
<td>(0.970)</td>
<td>(0.850)</td>
<td>(1.364)</td>
</tr>
<tr>
<td>Manager control</td>
<td>--</td>
<td>0.585</td>
<td>1.078</td>
<td>0.642</td>
<td>1.460</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.906)</td>
<td>(1.028)</td>
<td>(0.892)</td>
<td>(1.336)</td>
</tr>
<tr>
<td>Employee own</td>
<td>--</td>
<td>0.367</td>
<td>0.626</td>
<td>0.427</td>
<td>0.969</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.974)</td>
<td>(1.098)</td>
<td>(0.958)</td>
<td>(1.408)</td>
</tr>
<tr>
<td>Family</td>
<td>--</td>
<td>2.686**</td>
<td>3.107**</td>
<td>2.299**</td>
<td>3.703**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.831)</td>
<td>(0.931)</td>
<td>(0.958)</td>
<td>(1.434)</td>
</tr>
<tr>
<td>Mutual/cooperative</td>
<td>--</td>
<td>-0.349</td>
<td>-0.029</td>
<td>-0.145</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.165)</td>
<td>(1.305)</td>
<td>(1.243)</td>
<td></td>
</tr>
<tr>
<td>Other private</td>
<td>--</td>
<td>1.022</td>
<td>0.546</td>
<td>1.111</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.167)</td>
<td>(1.324)</td>
<td>(1.179)</td>
<td></td>
</tr>
<tr>
<td>Takeover law</td>
<td>--</td>
<td>0.230</td>
<td>0.159</td>
<td>0.307</td>
<td>0.570</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.590)</td>
<td>(0.667)</td>
<td>(0.620)</td>
<td>(0.817)</td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td>--</td>
<td>0.008</td>
<td>0.033</td>
<td>-0.009†</td>
<td>0.025</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.014)</td>
<td>(0.017)</td>
<td>(0.015)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>DB plan age t-1</td>
<td>--</td>
<td>-0.013</td>
<td>-0.008</td>
<td>-0.010</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.006)</td>
<td>(0.015)</td>
<td>(0.013)</td>
<td>(0.024)</td>
</tr>
</tbody>
</table>
Table 10 contains the results of the logit regressions examining firms that never had a DB pension. Model 6 contains the non-financial controls. Models 7 through 9 add unionization, industry DB coverage rate and revenues respectively. Because of the aforementioned issue with using ownership to predict whether a firm never had a DB pension, I add ownership in model 10. Model 11 includes the results of all covariates on the publicly traded firms in the sample. All mutuals and cooperatives in my sample had a DB plan in 1982, therefore I excluded these firms in the analyses.

The results indicate that firm age, firm size and industry DB participation rates in 1982 are negatively related to whether a firm has a DB pension between 1982 and 2006. In model 11, when all the covariates are added, bankruptcy has a negative effect on whether a firm has a DB pension. That bankruptcy is also a significant indicator of firms

<table>
<thead>
<tr>
<th>Variables</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues (B)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.059†</td>
<td>-0.059</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.036)</td>
<td>(0.059)</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.030</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.035)</td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.012)</td>
</tr>
<tr>
<td>Ind DB rate t-1 (%)</td>
<td>--</td>
<td>--</td>
<td>-0.064***</td>
<td>-0.059***</td>
<td>-0.070***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.008)</td>
<td>(0.011)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>Ind DB abandon</td>
<td>--</td>
<td>1.068***</td>
<td>1.305***</td>
<td>1.115***</td>
<td>1.516***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.110)</td>
<td>(0.122)</td>
<td>(0.121)</td>
<td>(0.283)</td>
</tr>
<tr>
<td></td>
<td>(688.53)</td>
<td>(531.791)</td>
<td>(750.236)</td>
<td>(604.035)</td>
<td>(677.205)</td>
</tr>
<tr>
<td>Observations</td>
<td>18,993</td>
<td>18,856</td>
<td>18,773</td>
<td>18,174</td>
<td>17,067</td>
</tr>
<tr>
<td>Firms</td>
<td>1,071</td>
<td>1,069</td>
<td>1,069</td>
<td>1,068</td>
<td>1,020</td>
</tr>
<tr>
<td>ρ</td>
<td>0.27</td>
<td>0.85</td>
<td>0.91</td>
<td>0.83</td>
<td>0.91</td>
</tr>
<tr>
<td>Wald χ²</td>
<td>79.12</td>
<td>168.01</td>
<td>194.51</td>
<td>140.69</td>
<td>57.66</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-702.76</td>
<td>-635.69</td>
<td>-613.14</td>
<td>-597.07</td>
<td>-555.66</td>
</tr>
</tbody>
</table>

† p < .10; †† p < .05; ††† p < .01; †††† p < .001
Standard errors are in parentheses; tests are two-tailed
abandoning the use of DB pensions suggests that firms in bankruptcy in 1982 may have previously used DB pensions but stopped as a result of restructuring.

Table 10. Logit regression on firms without a DB plan during the period of study, 1982

<table>
<thead>
<tr>
<th>Variables</th>
<th>M6</th>
<th>M7</th>
<th>M8</th>
<th>M9</th>
<th>M10</th>
<th>M11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.008)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-0.020**</td>
<td>-0.019**</td>
<td>-0.022**</td>
<td>-0.022**</td>
<td>-0.017</td>
<td>-0.018</td>
<td></td>
</tr>
<tr>
<td>(0.005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1.043)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bankrupt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.110)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passive financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee own</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other private</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues (B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind DB rate t-1 (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Observations                  | 1,048| 1,048| 1,047| 987  | 967  | 920  |
| χ²                            | 221.42 | 227.07 | 246.42 | 223.77 | 238.21 | 189.03 |
| Log likelihood                | -286.09 | -283.26 | -271.51 | -239.29 | -229.61 | -197.92 |
| psuedo-R²                     | 0.28  | 0.29  | 0.31  | 0.32  | 0.34  | 0.32  |

† p < .10; * p < .05; ** p < .01; *** p < .001

a During the period of study no mutuals or cooperatives never had a DB pension

Standard errors are in parentheses; tests are two-tailed.
The results of the OLS regressions on DB and DC participation are in tables 11 and 12, respectively. Model 12 in table 11 and 17 in table 12 have the results for the effect of the non-financial controls on DB and DC participation. In models 13 through 15 and 18 through 20, I add the predictor variables and the financial controls separately. Models 16 and 21 show the results of the full model for publicly traded firms.

Across models, several control variables significantly affected DB and DC plan participation. The number of participants in DB plans is positively related to firm size; as measured by the number of employees and firm revenues. For DCs, the number of employees is positively related to plan participants, but firm revenues are not a significant predictor of the number of DC participants when all covariates are added. Industry size is positively associated with the number of DC participants but has no effect on DB participants. Company performance is positively related to firm DB and DC participation. Firm bankruptcy has a negative effect on participation in both types of plans, though this effect goes away in the full model for DC plans. Contrary to expectations, firms’ debt constraint, as indicated by the ratio of long-term debt to total assets, is positively associated with DB participation. Industry rates of DB and DC participation are associated with presence of and participation in DB and DC plans respectively. The relationship between stock market performance and DB participation is positive, but stock market performance seems to have no effect on DC participation.26

---

26 I also used measures firm and stock market performance in the prior year rather than three-year averages. The effect of prior year firm performance on DB participation remains positive, but is not significant in the full model. The other covariates and those in the DC models are not significantly impacted.
### Table 11. Time-series, fixed-effects regression on log of participants in DB plans, 1982-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>M12</th>
<th>M13</th>
<th>M14</th>
<th>M15</th>
<th>M16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td>0.010</td>
<td>0.009</td>
<td>0.009</td>
<td>0.008</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Age</td>
<td>0.002†</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bankrupt</td>
<td>-0.305***</td>
<td>-0.305***</td>
<td>-0.295***</td>
<td>-0.226***</td>
<td>-0.160***</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.042)</td>
<td>(0.041)</td>
<td>(0.042)</td>
<td>(0.046)</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>-0.004</td>
<td>-0.010</td>
<td>0.009</td>
<td>0.003</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.014)</td>
<td>(0.013)</td>
<td>(0.013)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>S&amp;P 500 return (3-yr avg) (%)</td>
<td>0.001</td>
<td>0.001*</td>
<td>0.001†</td>
<td>0.002**</td>
<td>0.002*</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Passive financial</td>
<td>--</td>
<td>-0.054†</td>
<td>-0.045†</td>
<td>-0.046†</td>
<td>-0.045†</td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.025)</td>
<td>(0.025)</td>
<td>(0.025)</td>
<td>(0.025)</td>
</tr>
<tr>
<td>Active financial</td>
<td>--</td>
<td>-0.134***</td>
<td>-0.119***</td>
<td>-0.125***</td>
<td>-0.113**</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.033)</td>
<td>(0.033)</td>
<td>(0.035)</td>
<td></td>
</tr>
<tr>
<td>Manager control</td>
<td>--</td>
<td>0.021</td>
<td>0.030</td>
<td>0.019</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td>(0.027)</td>
<td>(0.027)</td>
<td>(0.027)</td>
<td></td>
</tr>
<tr>
<td>Employee own</td>
<td>--</td>
<td>-0.007</td>
<td>0.006</td>
<td>-0.006</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.032)</td>
<td>(0.032)</td>
<td>(0.032)</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>--</td>
<td>-0.139***</td>
<td>-0.116***</td>
<td>-0.136***</td>
<td>-0.148***</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.032)</td>
<td></td>
</tr>
<tr>
<td>Mutual/cooperative</td>
<td>--</td>
<td>-0.066</td>
<td>-0.097</td>
<td>-0.190†</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.081)</td>
<td>(0.095)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other private</td>
<td>--</td>
<td>-0.465***</td>
<td>-0.440***</td>
<td>-0.356***</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.047)</td>
<td>(0.055)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takeover law</td>
<td>--</td>
<td>0.011</td>
<td>0.003</td>
<td>-0.016</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.021)</td>
<td>(0.021)</td>
<td>(0.023)</td>
<td></td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td>--</td>
<td>0.010***</td>
<td>0.006***</td>
<td>0.005***</td>
<td>0.004***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>DB plan age</td>
<td>--</td>
<td>0.007***</td>
<td>0.012***</td>
<td>0.011***</td>
<td>0.010***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Variables</td>
<td>M12</td>
<td>M13</td>
<td>M14</td>
<td>M15</td>
<td>M16</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Revenues (B)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.008***</td>
<td>0.008***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.006***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.001*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>Ind DB rate_t-1 (%)</td>
<td>--</td>
<td>--</td>
<td>0.011***</td>
<td>0.012***</td>
<td>0.012***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>8.234***</td>
<td>7.860***</td>
<td>7.251***</td>
<td>7.297***</td>
<td>7.307***</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.072)</td>
<td>(0.078)</td>
<td>(0.079)</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Observations</td>
<td>18,556</td>
<td>18,545</td>
<td>18,469</td>
<td>17,872</td>
<td>16,761</td>
</tr>
<tr>
<td>Firms</td>
<td>1,085</td>
<td>1,084</td>
<td>1,083</td>
<td>1,082</td>
<td>1,032</td>
</tr>
<tr>
<td>ρ</td>
<td>0.83</td>
<td>0.82</td>
<td>0.82</td>
<td>0.82</td>
<td>0.82</td>
</tr>
<tr>
<td>R²</td>
<td>0.26</td>
<td>0.31</td>
<td>0.34</td>
<td>0.34</td>
<td>0.34</td>
</tr>
</tbody>
</table>

† p < .10; * p < .05; ** p < .01; *** p < .001

Standard errors are in parentheses; tests are two-tailed
Table 12. Time-series, fixed-effects regression on log of participants in DC plans, 1982-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>M17</th>
<th>M18</th>
<th>M19</th>
<th>M20</th>
<th>M21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td>0.007***</td>
<td>0.006***</td>
<td>0.006***</td>
<td>0.006***</td>
<td>0.006***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td></td>
<td>0.045***</td>
<td>0.056***</td>
<td>0.045***</td>
<td>0.045***</td>
<td>0.049***</td>
</tr>
<tr>
<td>Age</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>-0.222***-0.213***-0.216***-0.215***-0.094*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.042)</td>
<td>(0.041)</td>
<td>(0.042)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>0.161<em><strong>0.141</strong></em>0.119<em><strong>0.111</strong></em>0.102***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.012)</td>
<td>(0.012)</td>
<td>(0.012)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>S&amp;P 500 return (3-yr avg) (%)</td>
<td>0.001†</td>
<td>0.001†</td>
<td>0.001†</td>
<td>0.001†</td>
<td>0.001†</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Passive financial</td>
<td>0.121<em><strong>0.121</strong></em>0.107*<strong>0.087</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.024)</td>
<td>(0.025)</td>
<td>(0.025)</td>
<td></td>
</tr>
<tr>
<td>Active financial</td>
<td>-0.156***-0.150***-0.146***-0.129***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td>(0.033)</td>
<td>(0.033)</td>
<td>(0.034)</td>
<td></td>
</tr>
<tr>
<td>Manager control</td>
<td>0.250<em><strong>0.244</strong></em>0.233<em><strong>0.215</strong></em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.028)</td>
<td>(0.028)</td>
<td>(0.028)</td>
<td></td>
</tr>
<tr>
<td>Employee own</td>
<td>0.179<em><strong>0.188</strong></em>0.182<em><strong>0.179</strong></em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
<td>(0.032)</td>
<td>(0.033)</td>
<td>(0.033)</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-0.065**-0.035†-0.056†-0.094**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
<td>(0.030)</td>
<td>(0.030)</td>
<td>(0.031)</td>
<td></td>
</tr>
<tr>
<td>Mutual/operative</td>
<td>0.399<em><strong>0.484</strong></em>0.285†--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.092)</td>
<td>(0.090)</td>
<td>(0.107)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other private</td>
<td>-0.624***-0.541***-0.561***--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.044)</td>
<td>(0.051)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takeover law</td>
<td>0.054*</td>
<td>0.024</td>
<td>0.009</td>
<td>-0.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.022)</td>
<td>(0.022)</td>
<td>(0.022)</td>
<td>(0.023)</td>
<td></td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td>0.008<em><strong>0.005</strong></em>0.005<em><strong>0.005</strong></em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>DB plan age</td>
<td>-0.013***-0.012***-0.012***-0.013***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
</tr>
</tbody>
</table>
Several ownership control variables also have a significant impact on firm retirement arrangements. Family ownership is related negatively to both the number of DB and DC participants, though the effect on DC participation changes is contingent, in part, on the covariates being specified in the model. Mutuals and cooperatives have higher numbers of DC participants, and firms with other types of private ownership have a lower number of both DB and DC participants.

Turning to my hypotheses, 1a and b predicted that passive financial ownership would be negatively related to the number of DB and positively related to the number of DC participants. In examining models 13 through 16, we see that passive financial ownership has a marginally significant, negative relationship with the number of DB participants, offering partial support for hypothesis 1a. Models 18 to 21 show that passive financial ownership is positively related to the number of employees covered by DC plans, thus hypothesis 1b is supported.
Hypothesis 2a stated that active financial ownership will be negatively related to DB participation, and that this effect will be greater than that of passive financial ownership. Active financial ownership is significantly and negatively related to the number of DB participants. In the full model there is also a marginally significant difference in DB participation between active and passive financial ownership (F1,5691 = 1.97, p > .10), however, in models 13 to 15, there is no significant difference between the two. The results provide only partial support for hypothesis 2a. Contrary to expectations, there is also a negative and significant relationship between active financial ownership and DC participation. Hypothesis 2b is therefore rejected. My original prediction was that DC participation would increase when active financial investors control firms; however, the actual result is consistent with the idea that these owners desire to cut costs – particularly labor costs – as a means to improve short-term profitability.

I hypothesized that when managers have more autonomy to pursue their interests, firms will cover more employees in both DB and DC plans. Counter to expectation, dispersed ownership has no effect on DB participation, thus hypothesis 3a is rejected. However, manager control is significantly and positively associated with the number of DC participants, thereby offering support for hypothesis 3b. Another measure of manager power, the prevalence of takeover protection laws, has no effect on DB participation. In examining model 18, we see there is a positively significant relationship between takeover protection and DC participation; however, these effects are lost once the full model is specified. Therefore, there is no support for hypotheses 4a or b.
Because employees have a vested interest in having greater levels of remuneration and increased protection of their retirement assets, I expected that employee power would be positively associated with both DB and DC participation. One measure of employee power, employee ownership, has no effect on DB participation. Hypothesis 5a is thereby rejected. In support of hypotheses 6a and b, industry unionization, a second source of employee power, is positively and significantly related to the number of participants in DB and DC plans.

Consistent with the organizational inertia hypotheses, results indicate the length of time a firm has offered a DB plan is positively related to the number of DB and negatively related to the number of DC participants. For firms with a DB plan, however, DB plan age and the age of the firm are perfectly correlated. It is possible there is no effect of DB plan age beyond that of firm age. The effects of the length of time a firm has had a DB plan is not attenuated, however, once firm age is included the DC models. This finding lends some credence to the claim that the length of time a firm has had a DB plan has an effect on a firm’s retirement plan strategy beyond that of the effect of the age of the firm.

Supplemental analyses

Hypotheses 3a and 4a predicted that management control and employee ownership would be associated with higher DB participation. Though these two hypotheses were not supported, the descriptive data indicated that these firms controlled by these two ownership groups had among the highest rates of DB coverage. In post-hoc analyses, I collapsed the eight ownership categories used in the formal test to three types:
management control, employee ownership and other. Table 13, models 22 through 25, indicate that both management controlled firms and those owned by employee groups have significantly higher numbers of DB participants than other firms in the sample. These results provide some evidence of the validity of my argument that dispersed and employee ownership are associated with greater DB participation.

Because there are differences between the covariates’ impact on the presence and size of the two types of plans, attempting to model these two steps simultaneously would alleviate some of the issues with running the logit and OLS regressions separately. As an initial step to that end, I tested the models using a zero-inflated, negative binomial framework. Zero-inflated models are designed specifically to handle situations when the dependent variable consists of excess zeros (Lambert, 1992). One of the advantages of zero-inflated models, as opposed to other two-step models, is that zero-inflated models change the mean structure to allow zeros to be generated by two distinct processes: as part of the binary process determining whether a plan is present, as well as part of the negative binomial count process. Tables 14 and 15 contain the results from the zero-inflated models for DB and DC participants respectively.

---

27 In these models, I cluster the error variances by firm to help account for the longitudinal design of my data panel. However, this is not the ideal way to model repeated measures in a zero-inflated framework. There are several researchers utilizing on different techniques longitudinal zero-inflated data, and at present, I am working to incorporate these and other two-step, longitudinal design techniques into my analysis.
Table 13. Time-series, fixed-effects regression on log of participants in DB plans using reduced ownership categories, 1982-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>M22</th>
<th>M23</th>
<th>M24</th>
<th>M25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td>0.010***</td>
<td>0.009***</td>
<td>0.008***</td>
<td>0.008***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>-0.315***</td>
<td>-0.305***</td>
<td>-0.235***</td>
<td>-0.202***</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.041)</td>
<td>(0.042)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>-0.010</td>
<td>0.009</td>
<td>0.003</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.013)</td>
<td>(0.013)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>S&amp;P 500 return (3-yr avg) (%)</td>
<td>0.001</td>
<td>0.001†</td>
<td>0.002*</td>
<td>0.002*</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Manager control</td>
<td>0.094***</td>
<td>0.093***</td>
<td>0.081***</td>
<td>0.072***</td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(0.016)</td>
<td>(0.016)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Employee own</td>
<td>0.069***</td>
<td>0.072**</td>
<td>0.058*</td>
<td>0.059*</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.023)</td>
<td>(0.023)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Takeover law</td>
<td>0.013</td>
<td>0.006</td>
<td>-0.013</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.021)</td>
<td>(0.023)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td>0.010***</td>
<td>0.006***</td>
<td>0.005***</td>
<td>0.004***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>DB plan age</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.011***</td>
<td>0.011***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Revenues (B)</td>
<td>--</td>
<td>--</td>
<td>0.008***</td>
<td>0.008***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.001)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.006***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.001)</td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.001†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>Ind DB rate t-1 (%)</td>
<td>--</td>
<td>0.011***</td>
<td>0.012***</td>
<td>0.012***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>7.729***</td>
<td>7.123***</td>
<td>7.183***</td>
<td>7.214***</td>
</tr>
<tr>
<td></td>
<td>(0.069)</td>
<td>(0.074)</td>
<td>(0.076)</td>
<td>(0.080)</td>
</tr>
</tbody>
</table>

Observations 18,545 18,480 17,883 16,761
Firms 1,084 1,084 1,083 1,032
ρ 0.82 0.82 0.82 0.82
R² 0.31 0.33 0.34 0.34
Year dummies Yes Yes Yes Yes

† p < .10; † p < .05; ** p < .01; *** p < .001

Standard errors are in parentheses; tests are two-tailed
Table 14. Zero-inflated negative binomial regression on DB participants, 1982-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>M26</th>
<th>M27</th>
<th>M28</th>
<th>M29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td>0.022***</td>
<td>0.022***</td>
<td>0.021***</td>
<td>0.020***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Age</td>
<td>0.002*</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>0.042</td>
<td>0.060</td>
<td>0.079</td>
<td>0.119</td>
</tr>
<tr>
<td></td>
<td>(0.098)</td>
<td>(0.096)</td>
<td>(0.097)</td>
<td>(0.099)</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>0.014</td>
<td>-0.005</td>
<td>-0.004</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td>(0.030)</td>
<td>(0.030)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>S&amp;P 500 return (3-yr avg) (%)</td>
<td>-0.078**</td>
<td>-0.034</td>
<td>-0.053*</td>
<td>-0.033</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.023)</td>
<td>(0.027)</td>
<td>(0.028)</td>
</tr>
<tr>
<td>Passive financial</td>
<td>-0.006</td>
<td>-0.039</td>
<td>-0.030</td>
<td>-0.042</td>
</tr>
<tr>
<td></td>
<td>(0.059)</td>
<td>(0.058)</td>
<td>(0.059)</td>
<td>(0.059)</td>
</tr>
<tr>
<td>Active financial</td>
<td>-0.248**</td>
<td>-0.189*</td>
<td>-0.178†</td>
<td>-0.109†</td>
</tr>
<tr>
<td></td>
<td>(0.091)</td>
<td>(0.093)</td>
<td>(0.095)</td>
<td>(0.101)</td>
</tr>
<tr>
<td>Manager control</td>
<td>0.125†</td>
<td>0.028</td>
<td>0.030</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.068)</td>
<td>(0.068)</td>
<td>(0.068)</td>
<td>(0.069)</td>
</tr>
<tr>
<td>Employee own</td>
<td>0.163‡</td>
<td>0.099</td>
<td>0.105</td>
<td>0.107</td>
</tr>
<tr>
<td></td>
<td>(0.076)</td>
<td>(0.074)</td>
<td>(0.074)</td>
<td>(0.076)</td>
</tr>
<tr>
<td>Family</td>
<td>-0.191**</td>
<td>-0.167**</td>
<td>-0.156**</td>
<td>-0.196*</td>
</tr>
<tr>
<td></td>
<td>(0.086)</td>
<td>(0.082)</td>
<td>(0.084)</td>
<td>(0.085)</td>
</tr>
<tr>
<td>Mutual/cooperative</td>
<td>0.041</td>
<td>-0.070</td>
<td>-0.028</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.153)</td>
<td>(0.152)</td>
<td>(0.182)</td>
<td>--</td>
</tr>
<tr>
<td>Other private</td>
<td>-0.620***</td>
<td>-0.613***</td>
<td>-0.542*</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.151)</td>
<td>(0.159)</td>
<td>(0.212)</td>
<td>--</td>
</tr>
<tr>
<td>Takeover law</td>
<td>0.043</td>
<td>0.057</td>
<td>0.059</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
<td>(0.057)</td>
<td>(0.060)</td>
<td>(0.061)</td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td>0.004*</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>DB plan age</td>
<td>0.006***</td>
<td>0.005**</td>
<td>0.004**</td>
<td>0.004**</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Revenues (B)</td>
<td>0.005</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>0.009*</td>
<td>0.009*</td>
<td>0.009*</td>
<td>0.009*</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Ind DB rate t-1 (%)</td>
<td>0.012**</td>
<td>0.012***</td>
<td>0.012***</td>
<td>0.012***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>8.770***</td>
<td>7.987***</td>
<td>8.185***</td>
<td>8.011***</td>
</tr>
<tr>
<td></td>
<td>(0.239)</td>
<td>(0.248)</td>
<td>(0.275)</td>
<td>(0.290)</td>
</tr>
</tbody>
</table>

Observations: 24,384, 24,256, 23,465, 21,877
Firms: 1,302, 1,301, 1,300, 1,252
Wald $\chi^2$: 522.34, 602.98, 573.85, 555.70
Log psuedolikelihood: -194,334.10, -192,897.60, -186,951.10, -175,623.90

† p < .10; * p < .05; ** p < .01; *** p < .001

Standard errors are in parentheses; tests are two-tailed.
### Table 15. Zero-inflated negative binomial regression on DC participants, 1982-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>M30</th>
<th>M31</th>
<th>M32</th>
<th>M33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td>0.022***</td>
<td>0.022***</td>
<td>0.021***</td>
<td>0.020***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
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<tr>
<td>Age</td>
<td>0.001*</td>
<td>0.001*</td>
<td>0.001*</td>
<td>0.001*</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>-0.017</td>
<td>0.031</td>
<td>0.034</td>
<td>0.078</td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.095)</td>
<td>(0.097)</td>
<td>(0.098)</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>0.006</td>
<td>-0.010</td>
<td>-0.007</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.020)</td>
<td>(0.020)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>S&amp;P 500 return (3-yr avg) (%)</td>
<td>0.202**</td>
<td>0.125***</td>
<td>0.116***</td>
<td>0.132***</td>
</tr>
<tr>
<td></td>
<td>(0.052)</td>
<td>(0.052)</td>
<td>(0.052)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Passive financial</td>
<td>-0.307**</td>
<td>-0.300**</td>
<td>-0.283**</td>
<td>-0.182*</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.081)</td>
<td>(0.082)</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Manager control</td>
<td>0.251**</td>
<td>0.138*</td>
<td>0.139*</td>
<td>0.143*</td>
</tr>
<tr>
<td></td>
<td>(0.067)</td>
<td>(0.066)</td>
<td>(0.066)</td>
<td>(0.064)</td>
</tr>
<tr>
<td>Employee own</td>
<td>0.331***</td>
<td>0.293***</td>
<td>0.301***</td>
<td>0.279***</td>
</tr>
<tr>
<td></td>
<td>(0.074)</td>
<td>(0.073)</td>
<td>(0.073)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>Family</td>
<td>-0.197**</td>
<td>-0.157*</td>
<td>-0.150*</td>
<td>-0.162**</td>
</tr>
<tr>
<td></td>
<td>(0.067)</td>
<td>(0.067)</td>
<td>(0.067)</td>
<td>(0.066)</td>
</tr>
<tr>
<td>Mutual/cooperative</td>
<td>-0.092</td>
<td>-0.172</td>
<td>-0.241</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.144)</td>
<td>(0.136)</td>
<td>(0.156)</td>
<td></td>
</tr>
<tr>
<td>Other private</td>
<td>-0.703***</td>
<td>-0.672***</td>
<td>-0.650***</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.119)</td>
<td>(0.124)</td>
<td>(0.159)</td>
<td></td>
</tr>
<tr>
<td>Takeover law</td>
<td>-0.006</td>
<td>0.007</td>
<td>0.002</td>
<td>-0.020</td>
</tr>
<tr>
<td></td>
<td>(0.056)</td>
<td>(0.054)</td>
<td>(0.053)</td>
<td>(0.052)</td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td>0.002</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>DB plan age</td>
<td>0.000</td>
<td>0.002</td>
<td>0.000</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Revenues (B)</td>
<td>--</td>
<td>--</td>
<td>0.005</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.007*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.003)</td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.002*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.001)</td>
</tr>
<tr>
<td>Ind DC rate t-1 (%)</td>
<td>--</td>
<td>0.010***</td>
<td>0.010***</td>
<td>0.010***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>6.030***</td>
<td>6.447***</td>
<td>6.546***</td>
<td>6.408***</td>
</tr>
<tr>
<td></td>
<td>(0.235)</td>
<td>(0.220)</td>
<td>(0.241)</td>
<td>(0.246)</td>
</tr>
</tbody>
</table>

| Observations                               | 24,384   | 24,260   | 23,469   | 21,880   |
| Firms                                      | 1,302    | 1,301    | 1,300    | 1,252    |
| Wald χ²                                   | 1034.74  | 1120.00  | 1000.28  | 933.16   |
| Log psuedolikelihood                      | -234,331.60 | -232,822.20 | -226,275.80 | -213,011.00 |

† p < .10; * p < .05; ** p < .01; *** p < .001

Standard errors are in parentheses; tests are two-tailed
In examining models 26 through 33, several results of the zero-inflated models are consistent with those in the OLS regressions. There is a significant and negative relationship between active financial ownership and DC participation, and a moderately negative relationship with DB participation. Also consistent with the results of the OLS regressions, management control and employee ownership have a positive and significant relationship with DC participation. The length of time a firm has had a DB plan is positively related to the number of DB participants, however in the zero-inflated model DB plan age has no effect on DC participation. Passive financial ownership and unionization have no effect on DB or DC participation in the zero-inflated model though both were significant predictors of DB and DC participation in the OLS regressions.

One challenge in the study of pensions is that decisions in one period can affect the number of participants for several years. For example, were a firm to close its DB pension to all new employees, the decline in DB participants would show in the data over several years. My predictor variables are annual, making it difficult to capture these multi-period dynamics. In an attempt to account for this concern, I conducted an event history analysis to see if covariates in time period one can predict declines in DB participation over subsequent years.

In this analysis, the dependent variable is a DB participant reduction event. I defined a DB participant reduction event as a decrease in the percentage of employees covered by a DB plan of 20 percent or more between year $t$ and $t+5$. The rationale for using this ratio is that participant counts can decrease due to reductions in the workforce rather than due to changes in a firm’s retirement policy. This dichotomous measure of
changes in DB participation helps account for the multi-period effects of changes to the hypothesized covariates. Changes of this magnitude (over 20 percent) are also most likely to occur through concentrated efforts to reduce the ratio of employees covered by DB plans.

Table 16, models 33 to 36 show the results of the analysis. Again, several covariates that predict DB participation in the OLS regressions are indicators of a firm experiencing a 20 percent decrease in its DB participation rate within five years. The number of employees is negatively related to a firm experiencing a DB participant reduction event, though in model 36, with only publicly traded firms, the negative relationship is insignificant. There is also a moderately negative relationship between passive and active financial ownership and DB reduction events, though in the full model, active financial ownership is insignificant. This is largely consistent with my expectation that financial owners are likely to institute policies that encourage firms to diminish the use of DB pensions. Firms with more experience offering DB pensions are less likely to have DB reduction event, suggesting organizational inertia plays a role in preventing firms from undergoing significant changes to their retirement policies. Interestingly, rates of unionization and firm bankruptcy have no effect on DB participation rate declines, though both have a significant effect in the OLS models. Though it is not possible to trace the changes in plan participation to a specific alteration of a firm’s retirement policy, the results offer some evidence that certain covariates influence whether firms make concentrated efforts to reduce the number of employees covered by DB plans.
Table 16. Time-series, logit regression on DB participation reduction events, 1982-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>M33</th>
<th>M34</th>
<th>M35</th>
<th>M36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (000s)</td>
<td>-0.012***</td>
<td>-0.012***</td>
<td>-0.009**</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Age</td>
<td>0.008†</td>
<td>0.007†</td>
<td>0.007†</td>
<td>0.006†</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Bankrupt</td>
<td>-1.273</td>
<td>-1.270</td>
<td>-1.166</td>
<td>-0.892</td>
</tr>
<tr>
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<td>(0.867)</td>
<td>(0.863)</td>
<td>(0.852)</td>
<td>(0.762)</td>
</tr>
<tr>
<td>Industry employees (M)</td>
<td>-0.142</td>
<td>-0.107</td>
<td>-0.136</td>
<td>-0.117</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.104)</td>
<td>(0.103)</td>
<td>(0.089)</td>
</tr>
<tr>
<td>Passive financial</td>
<td>0.653†</td>
<td>0.608†</td>
<td>0.593†</td>
<td>0.457†</td>
</tr>
<tr>
<td></td>
<td>(0.317)</td>
<td>(0.313)</td>
<td>(0.305)</td>
<td>(0.270)</td>
</tr>
<tr>
<td>Active financial</td>
<td>0.709†</td>
<td>0.742†</td>
<td>0.736†</td>
<td>0.507</td>
</tr>
<tr>
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<td>(0.402)</td>
<td>(0.397)</td>
<td>(0.388)</td>
<td>(0.351)</td>
</tr>
<tr>
<td>Manager control</td>
<td>0.231</td>
<td>0.143</td>
<td>0.116</td>
<td>0.016</td>
</tr>
<tr>
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<td>(0.350)</td>
<td>(0.347)</td>
<td>(0.337)</td>
<td>(0.285)</td>
</tr>
<tr>
<td>Employee own</td>
<td>-0.355</td>
<td>-0.411</td>
<td>-0.392</td>
<td>-0.235</td>
</tr>
<tr>
<td></td>
<td>(0.413)</td>
<td>(0.409)</td>
<td>(0.397)</td>
<td>(0.336)</td>
</tr>
<tr>
<td>Family</td>
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<td>0.104</td>
<td>0.074</td>
<td>0.038</td>
</tr>
<tr>
<td></td>
<td>(0.356)</td>
<td>(0.351)</td>
<td>(0.341)</td>
<td>(0.286)</td>
</tr>
<tr>
<td>Mutual/cooperative</td>
<td>0.469</td>
<td>0.280</td>
<td>-0.192</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.666)</td>
<td>(0.653)</td>
<td>(0.741)</td>
<td></td>
</tr>
<tr>
<td>Other private</td>
<td>-0.036</td>
<td>-0.062</td>
<td>0.111</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(0.506)</td>
<td>(0.505)</td>
<td>(0.531)</td>
<td></td>
</tr>
<tr>
<td>Ind unionization (%)</td>
<td>-0.005</td>
<td>-0.010</td>
<td>-0.010</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>DB plan age t-1</td>
<td>-0.068***</td>
<td>-0.066***</td>
<td>-0.059***</td>
<td>-0.037***</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>Revenues (B)</td>
<td>--</td>
<td>--</td>
<td>-0.012</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.018)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>ROA (3-yr avg) (%)</td>
<td></td>
<td></td>
<td>--</td>
<td>-0.034†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.015)</td>
</tr>
<tr>
<td>LTD/Total Assets t-1 (%)</td>
<td></td>
<td></td>
<td>--</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>Ind DB rate t-1 (%)</td>
<td></td>
<td></td>
<td>0.018**</td>
<td>0.018**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Constant</td>
<td>-6.689***</td>
<td>-7.338***</td>
<td>-6.705***</td>
<td>-4.618***</td>
</tr>
<tr>
<td></td>
<td>(0.726)</td>
<td>(0.731)</td>
<td>(0.689)</td>
<td>(0.962)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statistics</th>
<th>M33</th>
<th>M34</th>
<th>M35</th>
<th>M36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations</td>
<td>16,001</td>
<td>15,927</td>
<td>15,389</td>
<td>14,236</td>
</tr>
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<td>Firms</td>
<td>1,302</td>
<td>1,301</td>
<td>1,282</td>
<td>1,207</td>
</tr>
<tr>
<td>ρ</td>
<td>0.79</td>
<td>0.79</td>
<td>0.76</td>
<td>0.53</td>
</tr>
<tr>
<td>Wald χ²</td>
<td>165.79</td>
<td>181.50</td>
<td>179.74</td>
<td>165.22</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-2,234.82</td>
<td>-2,226.50</td>
<td>-2,142.64</td>
<td>-1,971.64</td>
</tr>
</tbody>
</table>

† p < .10; †† p < .05; ††† p < .01; †††† p < .001

Standard errors are in parentheses; tests are two-tailed
In sum, across models with different specifications and operationalizations of the dependent variable there seems to be some consistency in the predicted relationships between the covariates and DB and DC participation. The results show, most notably, that firm ownership and organizational inertia do play an important role in a firm’s utilization of the two types of retirement plans.

Discussion

From the end of World War II until the early 1980s, employment in the largest US firms was typically characterized as being secure and long-term. However, since that time, employment in the US has undergone fundamental change. Internal labor markets have dissipated in favor of more flexible workplace arrangements (Davis-Blake & Broschak, 2009; Kalleberg, 2000) and financially sound firms have used layoffs as a means to generate a positive reaction from financial markets (Budros, 1997; Hallock, 2009). Furthermore, firms have increasingly shifted the onus of retirement planning and market risk as well as the costs of health care coverage to their workers (Hacker, 2008). These and other changes have led many to characterize employment relationships as resembling more closely that of a grocer and her patron (Alchian & Demsetz, 1972), rather than something akin to a stable and enduring social contract (Baron, 1988).

My analysis and discussion applies specifically to major US corporations’ retirement plan strategies, but the changes to privatized retirement represents broader transformations to post-industrial employment. Most explanations for the demise of stable, long-term employment relationships in many ways mirror the rationale given for the decline in DB pensions. In both cases, researchers argue that market, technological
and institutional factors are situational mechanisms, making firms less willing/able to protect workers from market forces and to be more focused on minimizing labor costs. These accounts have been instrumental in helping us develop a high-level understanding of changes to firm employment practices occurring since the early 1980s. However, firms, not institutions or markets, implement practices such as layoffs, outsourcing of jobs and the provision of health insurance and retirement benefits. Scholars have noted that organizations differ markedly in their responses to market and institutional demands for creating more flexible workplace arrangements (Kalleberg, 2009), suggesting that forces within firms exist that can mediate these external demands. The goal of this study was to examine whether power differentials, conflicting interests and organizational inertia help explain firm retirement strategy and thus further our understanding of the factors that influence the type of employment contract a firm develops with its workers.

Over the past thirty years, privatized retirement, and post-industrial employment more generally, have been affected profoundly by changing market forces and the spread of the shareholder value orientation. But the data here highlight the considerable variation across firms facing the same environmental and institutional demands in their choice of retirement strategy. The results of this study indicate that market and institutional pressures are mediated by factors internal to firms, such as the power of different organizational actors and inertial tendencies. The interests and power of an organization’s constituent groups and embedded interests within the firm are action-formation mechanisms that help determine whether a company uses DB pensions to structure its employment contract to be long term. In aggregate, these firm-by-firm contests over the use of DB pensions have led to dramatic changes in the structure of
company-sponsored retirement and old age income security, as well as the decline in stable, long-term employment relationships. Changes in privatized retirement and post-industrial employment can be better explained, therefore, by drawing attention to the ways in which the power structure of US corporations has changed over time. Specifically, as corporate ownership re-concentrates into the hands of financial investors, and unions become less prevalent, the interests of managers and employees are less likely to be realized due to their declining capacity to affect organizational strategies. By using organizational mechanisms to explain employment outcomes, this study joins a growing number of works studying the intersection between organizational theory and industrial relations (e.g. Bidwell, 2010; Briscoe, 2007). This study, however, extends existing work by illustrating the importance intra-firm power dynamics play in shaping facets of the employment contract not just within a single firm (e.g. Dencker, 2009), but also across the largest US employers over time.

One of the more important findings in this study is the prominent role played by a firm’s ownership structure in shaping the organization’s retirement strategy. The results here indicate that owners are able to affect employee welfare by influencing organizational decision-making. Two important trends in ownership occurred during the period of study that directly and indirectly affected most large US firms. The first was the prominent role played by active financial investors in restructuring many corporations. For example, leveraged buyouts, typically by private equity groups, became a prevalent tactic used in corporate takeovers in the 1980s (Davis & Stout, 1992). Threats of, and successful takeovers subsequently altered the corporate landscape in the US and forced organizations to become more firmly attuned to maximizing shareholder
value. Though there has been debate as to what effect these owners have on employee welfare, the results here show that fewer employees are covered in either DB or DC retirement plans when the largest owner in a firm is an active financial investor. These findings provide additional evidence that one of the means by which firms are able to provide more value to owners is by providing less to its employees (see Shleifer & Summers, 1988).

The second important trend has been the re-concentration of ownership in the US over the past twenty years, which has largely been the result of the growth of mutual funds (Davis, 2008). Though these owners tend to refrain from actively engaging in issues of corporate governance, research suggests that they have the ability to discipline management through the threat of exit, which reduces the market value of the firm. Though there has been increased attention on the impact these owners have on a variety of firm outcomes, to date little focus has been placed on the extent to which these owners are able to influence firms’ human resource practices. The results of this study provide evidence that these owners have some ability to limit firms’ use of DB pensions as a means by which to encourage long-term employment and offer workers more stable retirement benefits. Passive financial ownership is, however, associated with greater levels of DC participation. This provides evidence that while these owners may prefer that firms use more flexible employment relationships, they are less likely to pressure firms to completely abandon the use of retirement plans as a means through which to remunerate workers. One possible explanation for this finding is that passive financial investors benefit directly from the promulgation of 401(k) plans, whose funds are most commonly invested in mutual funds, because 401(k) plans enlarge their customer base.
I argued that active and passive financial investors, in their desire to increase shareholder value in the short-term, are likely to prefer corporate strategies that lead to lower short-term costs. As such, ownership by financial entities is a measure of the extent to which shareholder value influences corporate decision making across US corporations. In my sample, passive financial owners comprise the largest ownership group: they are the largest owner in 32.9 percent of all firm-years, and 44.3 percent of firm-years from 1995 to 2006. Passive and active financial investors combined comprise forty percent of the overall sample and 51.7 percent of the sample from 1995 to 2006. The prevalence of financial investors during the period of study serves as a powerful indicator of how attuned to shareholder value the firms included in my sample were likely to be. The fact that the results indicate these investors are hostile to DB arrangements offers an important extension to our understanding of the factors leading to the decline in DB plan participants over the past thirty years, and suggests that a proximal cause for the decline in long-term employment in the US is the changing ownership structure of the largest US corporations. By empirically demonstrating how financial owners negatively impact employee welfare, this study contributes to the growing literature examining the intersection between finance and labor market outcomes (Fligstein & Shin, 2007).

There are important differences between passive and active financial investors, particularly in how they influence DC participation. Active financial owners are shown here to be somewhat more hostile to DB arrangements than are passive financial owners. Additionally, whereas passive financial ownership is associated with higher levels of DC participation, active financial owners are antagonistic to their use. Though pension
research indicates that DB plans pay out greater, more stable retirement benefits than do DC plans, DC coverage does confer some benefits, such as portability, and are a better alternative for workers than having no retirement plan. By distinguishing between these two types of financial owners, I show that these entities play important, yet different, roles in affecting employee welfare.

Consistent with my expectations and existing research, unionization is related to greater levels of DB and DC coverage. It is important to note that the higher rates of DC participation may be due to firms covering different employees with different types of plans rather than covering the same employees in both. Despite the fact that the plans may cover different individuals, the presence of unions in an industry is an important determinant of retirement coverage of all employees – not just those under a collectively bargained agreement. As the prevalence of unions has declined in the US over the past several decades, there has not been an organizational actor able to counterbalance this loss of employee power. Unionization has played an important role in the adoption and spread of DB pension plans and the decline in unionization has led, not surprisingly, to a decline in DB pensions. That unions are able to secure better benefits for employees in the firms in which they have an industrial presence provides additional evidence that the loss of employee power is an important mechanism in explaining changes to the employment contract.

Notwithstanding the increased emphasis on shareholder value maximization and evidence showing that employee DB coverage has declined dramatically since the early 1980s, the results indicate that organizational inertia plays a critical role in determining a
firm’s retirement practices. As such, we can consider norms and embedded interests within organizations as latent resources that managers and employees can use as a means to protect their interests regarding issues of remuneration and long-term employment. These results indicate the important role inertia can play in mediating or moderating the influence market and institutional forces have on employment contracts.

Limitations and future directions

One limitation of this study is that it fails to include employee preference as a possible reason for the increased prevalence of DC plans. Aaronson and Coronado (2005), in one of the few empirical treatments of this hypothesis, examine employee retirement coverage among workers with different demographic characteristics and find a few of these to be important predictors of employee retirement coverage. Employees may sort themselves into firms based upon the retirement benefits offered (Salop & Salop, 1976), however, no empirical or anecdotal evidence of which I am aware suggests that employees pressured firms to replace DB with DC plans. Certainly different employees will have different preference sets for the type of benefits they receive, but firms, not employees, determine pension design (Ghilarducci, 2006, p. 13). Moreover, the history of 401(k) plans outlines the difficulties many firms had in getting employees to sign-up for and contribute into such plans (Benna, 2005; Whitehouse, 2003). Even if employee preference did play a part, that preference was likely actively and heavily influenced by campaigns from firms and mutual fund companies to encourage 401(k) plan participation (Zelinsky, 2004). In sum, while the employee preference rationale for shifts in retirement coverage is problematic, I cannot rule it out.
A second, and related, limitation is that there are differences in the role individuals play in determining whether to participate in a DB or DC plan. Specifically, in a DB arrangement, individuals do not actively choose to be in the plan and have no means through which to opt-out. However, in most DC arrangements, participation is voluntary. In a 401(k) arrangement, firms are motivated to encourage employee participation due to non-discrimination statutes. Essentially these laws mandate that a certain percentage of lower-wage employees participate in 401(k) plans in order for higher-wage workers to benefit from the tax-deferred status of these plans. While DC participant counts are potentially lower than they might be otherwise due to employee rather than firm choice, unless there is a systematic bias in which some covariates are associated with higher or lower levels of individuals choosing to participate, examining DC participation across firms can still yield important insights.

I argue that one way to study the employment contract is to examine the types of practices organizations use to structure key facets of the relationship, such as its expected duration. Future work can more definitively draw the link between changes in organizational retirement practices by examining the effect of such changes on different employee outcomes, such as turnover rates. Another potentially interesting line of inquiry would be to identify whether other types of human resource practices, such as high-performance work teams, participative decision-making, employee ownership and retiree health benefits are useful indicators of other dimensions of the employment contract. Examining bundles of these practices could also lead to a better understanding of the various types of employment contracts firms develop and maintain.
The results of this study suggest that accounting for firm ownership would also be a fruitful line of inquiry of future studies of employment practices and policies. One limitation of this study and in research on ownership more generally is that most examine only the firms’ largest owner or a class of owners such as employees or institutional investors. Future work could analyze how and whether different ownership blocks within a firm affect firm outcomes such as employee welfare. For example, there may be a difference between two firms whose largest owner is a financial investor, but in firm A, the second largest is an employee group while in firm B it is another financial investor. Such an analysis would allow for a more fine-grained measure of owner power and may yield interesting insights on how different types of owners interact to shape organizational action.

The relationship between DB and DC participation and family ownership is also interesting, as these owners are the most likely to abandon the use of DB pensions, and provide the lowest levels of DB and among the lowest levels of DC coverage. One possible explanation is that family owners are able to use less formal means to reward workers and to encourage long-term employment. Future work could examine whether family-owned firms utilize different sets of human resource practices than firms owned by other types of entities. Interestingly, however, historical and anecdotal evidence points to the importance of enlightened family-run businesses in establishing welfare capitalist benefits (Scheinberg, 1967; Tone, 1997; Zahavi, 1988). Moreover, there is a recent stream of research exploring the role family ownership plays in firm environmental performance. Berrone and colleagues (2010) find that family-controlled public firms pollute less than their nonfamily counterparts. They argue the reason is that
family owners are concerned about protecting their reputations, especially in the local communities in which they are embedded. That family owned firms are dedicated to environmental protection as a means to enhance their reputation, yet are reluctant to provide even average levels of DB and DC plan coverage to their employees may be an indicator that certain types of socially responsible behaviors are more normatively rewarding than others (Pfeffer, 2010). Understanding why owners do not see offering employee benefits as a reputation enhancing strategy is also a potentially interesting area for future inquiry.

Taking a firm-level approach to the study of employer-sponsored retirement practices has potentially important implications for the study of pensions and public policy. Prior research has shown that the changes in firm retirement arrangements have a significant impact on retiree wealth (e.g. Wolff, 2003). With ongoing concerns about the viability of Social Security, considerable attention has been, and will continue to be paid to the role of corporate welfare in addressing this social issue. Furthermore, legislation, such as the Pension Protection Act of 2006, uses corporations as levers of policy implementation. However, most large-scale studies on retirement are not conducted at the organizational-level of analysis. A complete examination of firm-level factors affecting retirement plan strategy is necessary to understand this phenomenon and to more effectively develop policy designed to address the old age income dilemma. Future work in this area could examine small and medium sized firms, and focus on recent trends in changes to company pensions such as pension freezes and the spread of cash balance retirement plans (see Kapinos, 2009).
Conclusion

In the post-World War II period, large corporations in the US typically sought to protect their employed from the vagaries of market forces and create enduring relationships with their workers by offering generous welfare benefits such as DB pensions. As attention to shareholder value increased, firms’ role as a primary risk-bearer has largely evaporated. One result of this transformation is its effect on individuals. In the US, one’s access to quality health care and post-retirement income is largely a function of the welfare practices used by their employer. Moreover, the extent to which individuals have secure, stable employment has declined, and employment in the last thirty years is more precarious than it has been since the end of the Great Depression (Kalleberg, 2009).

Intra-firm power dynamics and embedded interests are not the only factors affecting both a firm’s retirement plan strategies and whether it chooses to structure its employment contract to be long term. Nevertheless, the data presented here suggests an important theoretical role for organizational theory in linking market and institutional change to societal change by considering how firms react to external demands and how forces inside the firm potentially mediate those demands. Corporations, through their human resource practices and policies, play a central role in providing access to quality retirement and health benefits as well as how employment relationships are structured. By articulating the factors leading firms to introduce, maintain or change human resource practices, organizational theory can provide a distinctive contribution to understanding societal outcomes.
Appendix

Process by which pension participant counts are calculated

Because employees can be covered by more than one type of plan (i.e. a single employee can be covered by a DB and a DC plan), the construction of my dependent variables is not without complication. The CRR issued a set of instructions that details an estimation technique to account for the possibility of employees being double covered (see Buessing & Soto, 2006 for details). This procedure allows the researcher to create DB participant counts, DC participant counts and counts of individuals covered by both a DB and a DC plan.

The procedure makes the following assumptions: 1) in a firm with both DB and DC plans, participants are considered to be covered by both plans. For example, if a firm has 10,000 participants in a DB plan and 4,000 in a DC plan it is assumed that there are 6,000 participants in DB plans only and another 4,000 covered by both plans. 2) If a firm has multiple DB plans, it is assumed they cover different participants unless the plan description, one of the plans is identified as being “supplemental.” I went through each DB plan and identified whether it was a supplemental plan. 3) There are several different types of DC plans (e.g. profit sharing and stock bonus). Assume a firm has three DC plans, two profit-sharing plans and one stock bonus plan. The procedure assumes that the two profit-sharing plans cover different participants, while the stock bonus plan covers the same participants. For example, profit-sharing plan 1 has 3,000 participants, profit-sharing plan 2 has 1,500 participants and stock bonus plan 1 has 6,000 participants. It is assumed there are 6,000 total DC participants - 4,500 covered by both plans and 1,500 covered by a stock bonus plan only.
CHAPTER 5:
CONCLUSION

Introduction

As noted at the outset of this dissertation, my overall research focus is to develop a more complete understanding the historical development of and changes to the United States’ unique form of privatized welfare. I argue that to understand social welfare in the US one must understand the manner in which firms structure welfare benefits and how these benefits change (or not) over time. To study this phenomenon, I undertook a multi-method exploration of two aspects of privatized retirement. Chapter 2 presented some of the historical detail to adequately ground the later empirical investigations. Chapter 3 addressed how leaders of the UAW used framing to articulate their demands for retirement benefits. Chapter 4 examined the role played by intra-organizational power in explaining changes in firms’ retirement plan strategies. I now close with a brief overview of each of the studies, highlighting some of the limitations of each and directions for future research. I then conclude with a brief discussion on reconnecting the study of how organizations and organizational practices are promulgators of social change.

Summary of Results and Implications
In chapter 3, I explore the interaction between a social movement organization’s ideology, its strategy and the way its leaders frame their demands. The results of the study suggest a type of decoupling, whereby SMO leaders articulate an ideologically-inconsistent strategic change by using the same language used to describe the previous strategy. Leaders develop a discursive repertoire that is consistent with the organization’s ideology and resonates with its constituents. Having accomplished that, leaders explain, rationalize and legitimize their organizational strategies, and changes to them, using the same set of previously established frames.

The Treaty of Detroit also serves as a powerful example of the unintended consequences of social action (Merton, 1936). These unintended consequences solidified and helped diffuse the use of firm-sponsored health and retirement benefits in large American firms, thereby limiting the possibility of the US developing a welfare state along the lines of countries in Western Europe. The Treaty also undermined Walter Reuther and the UAW's broader social agenda and played a role in the declines of the labor movement in this country (Lichtenstein, 1995). Historical events, such as bargaining negotiations of the UAW in the post-War period, provide excellent cases to examine the role organizational action plays in intentionally and unintentionally changing societal institutions.

Limitations and future directions

Chapter 3 provides a different conceptualization of the role of symbolic management in articulating strategic change. That Reuther and the UAW used a relatively consistent set of frames to legitimize very divergent demands suggests that an
organization's rhetoric and framing efforts are more rigid than are its strategies. More specifically, once accepted by important constituents within and outside a movement, frames are used to explain, rationalize and legitimize an organization's strategy, even if that strategy changes and diverges from the purported ideology of the organization.

In this study, I make an implicit assumption that the UAW had a well-defined organizational ideology. As I stated previously, that ideology is difficult to separate from the ideology of its leader during the period, Walter Reuther. Most of the historical literature suggests that Reuther and the UAW abandoned its ideological commitment to using the Union as a mechanism for social change and instead focused on obtaining monetary gains for its members (Babson, 1999; Lichtenstein, 1995). This assumption is itself an empirical question.

Examining personal histories of individuals involved in and affected by the UAW’s change may shed some additional light as to how Union members, the public and the firms viewed the ideology of the UAW and Reuther during this period. McMillan's (1975) work provides an excellent example of this, as the author includes interview data from Stephen DuBrul, a key member of the General Motors negotiating team. DuBrul states that GM never saw Reuther as an ideologue but rather as a pragmatist who would engage in any strategy that would help solidify his rise to power within the UAW. This more jaundiced view of Reuther stands in stark contrast to the way most labor historians view him, yet this divergent opinion of the leader greatly influenced the tenor of negotiations between the firm and the Union. Future work studying this period in the UAW’s history would benefit from including perceptions of Reuther and the Union’s
framing efforts as a means through which to understand the effectiveness of the organization’s symbolic management.

Furthermore, chapter 3 provides a more nuanced depiction of the role decoupling can play in organizations – particularly activist organizations – in their quest to obtain legitimacy. Decoupling has typically been characterized by an organization ceremoniously adopting a new practice, while disassociating the practice with the core processes of the organization (Westphal & Zajac, 2001). That is, an organization adopts a practice to achieve some sort of legitimacy, but it does not affect the core operations or necessitate a redefinition the stated purpose of the organization. The findings here suggest that decoupling can also occur when an organization fundamentally departs from its stated purpose but its practices are made to seem consistent with its existing ideological commitments. Decoupling, therefore, does not simply occur when an organization ceremoniously adopts new practices. It can also occur when an organization adopts a practice and its leaders attempt to cast that practice as being consistent with an existing stated purpose of the organization.

The historical overview of welfare capitalism in chapter 2 and the analyses and findings from Chapter 3 have the potential to provide valuable insights to scholars interested in social movements and in corporate social responsibility (CSR). The study of the UAW during this period provides a cautionary tale for SMOs as they attempt to promote changes in organizational practices. Specifically, contemporary CSR is justified by its ability to appease activists (Spar & La Mure, 2003; Tucker & Melewar, 2005), to earn the "license to operate" in foreign countries (Porter & Kramer, 2006), as well as to
improve firm profitability through marketing, enhancing the firm’s reputation and increasing labor productivity (Kanter, 1999; London & Hart, 2004; Saiia, Carroll, & Buchholtz, 2003; Simmons & Becker-Olsen, 2006). Interestingly, the suggested rationales used to validate CSR today are similar to the justifications for welfare capitalism. Because welfare capitalism resembles contemporary CSR, the story of welfare capitalism provides us a window through which to understand the dynamics which may influence the CSR movement in the future. As the UAW began to redirect its stated purpose to one of looking after the welfare of its members, it lost its ability to promote broader change that would benefit all of society. With increased interest from organizational scholars in understanding the role SMOs play in affecting social, political and firm outcomes (e.g. Briscoe & Safford, 2008; Valocchi, 1996), and classic social theory's interest in the bureaucratization of movement organizations (Lipset, et al., 1956; Michels, 1962), examinations of how and why movement organizations change and the long-term effects of such change could benefit greatly from examining the pratfalls that befell the American labor movement.

In chapter 4, I ask, Who is responsible for declining retirement security in the US? Because of our corporate-sponsored retirement system, the ‘scene of the crime’ is clearly employers’ choice of pension plans, and specifically how they came to reduce or abandon the use of DB plans. These plans are organized at the firm level, so any explanation of our idiosyncratic retirement system has to translate to factors influencing firm choices. That is why organization theory is relevant, because it explains corporate decisions. A complete explanation has to be couched in terms of firm choices. In this study, I took a sample of over 1,300 of the largest US employers from 1982 to 2006 and focus on the
balance of power among three constituencies, with an interest in the firm level factors that are responsible for these trends. I argue that corporate choices around retirement are shaped by power differences at the firm level. As the results of the study highlight, as bases of power change this is reflected in pensions, and therefore in the employment relation.

My most immediate future research plans are to better specify the sources of organizational power that I theorize have an effect on a firm's retirement strategy. In this study, I assume there are three organizational constituents and that their relative power determines a firm's choice between defined benefit and defined contribution retirement plans. Capturing whether owners have an appointee on the board of directors can provide a more fine-grained measure of ownership power. Additional data, such as insider ownership and the extent to which CEO pay is tied to firm stock market performance and other metrics may provide a more nuanced examination of how manager interests can be more closely aligned with that of investors. The expectation being that when investor and manager interests are more closely aligned, managerial preferences pertaining to retirement plan practices and long-term employment may be more similar to that of investors. Employee power may also be related to other factors, such as the possession of firm-specific skills, which provide employees with further bargaining power and motivate firms to develop workplace governance systems designed to protect long-term employment. In sum, adding new and more fine-grained measures of constituent power may help clarify the findings of this study.
Another limitation of this study is that the variables I include in the statistical models have relatively small explanatory power in explaining the more general phenomenon. This suggests that other factors, including those purported in existing pension research, such as increasing competitive pressures, may be necessary to provide a more complete analysis of the dynamics behind the transition from DB to DC plans.

A third limitation which I hope to address is to better understand the interests of these different organizational constituents as it pertains to retirement plan preferences and long-term employment more generally. While existing empirical research suggests that these different constituents have relatively uniform and well-defined interests, additional qualitative and/or survey data would strengthen the claims I make regarding these organizational actors' preferences for DB and DC retirement plans. Moreover, these additional data may help clarify the process by which these constituent groups’ power leads to organizational decisions regarding a firm's human resource strategy.

While interesting in its own right, research on how organizational practices have broader social implications can benefit from further exploration and explication on the ways in which organizational action serves to influence supra-organizational outcomes. Are there a common set of mechanisms through which organizations became levers for (positive and negative) social change? Classic social theory, such as the behavioral theory of the firm, paid considerable attention to the role intra-firm power dynamics played in affecting firm outcomes. This study suggests these same mechanisms may also help us explain broader societal-level trends. With studies examining organizational and institutional change flourishing in the field of organizational theory, the findings of this
study suggest that accounting for the ways in which the power structure of US corporations has changed over time can enlighten our understanding of when, how and why organizational and institutional change occurs.

Because almost all collective action takes place inside of organizational contexts, organizations are central to understanding a host of phenomenon in society (Hannan & Freeman, 1989, p. 3; Perrow, 1991). The impact hierarchies have on individuals and society were a central concern in classical social theory (see Giddens, 1971), but in recent years few researchers have focused attention on organizations as promulgators of societal change (Barley, 2010). As open systems perspectives came to dominate organizational theory in the 1970s, increased attention was placed on whether and how organizations respond to their environment. While important in understanding the factors which influence organizational action, this shift led to a declining focus in how organizations shape the world around them (B. G. King, Felin, & Whetten, 2010; Perrow, 1986). In recent years, however, several studies have taken the basic argument that organizational practices shape important societal outcomes and analyzed phenomena like discrimination and workplace diversity (Hirsh & Kornrich, 2008; Kalev, Dobbin, & Kelly, 2006), income inequality (Sørensen & Sorenson, 2007) and economic development (Kanter, 1999; Sharma, Vredenberg, & Westney, 1994). The firm may serve as a mediator of societal and industrial forces (Baron & Bielby, 1980; Schverish, 1981), but these studies and the studies in my dissertation show, firm practices and policies can be causal drivers behind variety of societal outcomes.
BIBLIOGRAPHY


Action Follows Pay Parley Failure; General Motors Spurns CIO Demand. (1945, October 4). Chicago Tribune.

Addes, George F. (1945, October). Secretary Addes Says, United Automobile Worker.


Benford, Robert D. (1987). *Framing Activity, Meaning, and Social Movement Participation: The Nuclear Disarmament Movement*. PhD, University of Texas, Austin, TX.


*Chrysler Negotiations Transcript.* (1949, October 11). UAW Chrysler Department Collection series III, box 86, folder "Chrysler Wage Negotiations, 1949 (1)." Walter P. Reuther Library, Detroit, MI.

*Chrysler Negotiations Transcript.* (1950, January 5). UAW Chrysler Department Collection series III, box 86, folder "Chrysler Wage Negotiations, 1949 (1)." Walter P. Reuther Library, Detroit, MI.


GI's See Full Employment, Decent Pay in 30% Raise. (1945, October 10). United Automobile Worker.


*GM Negotiations Transcript*. (1945a, October 27). The UAW-GM Collection, series VI, box 28, folder "GM Negotiations Transcript." Walter P. Reuther Library, Detroit, MI.


GM Workers' Own Stories of Pay Cuts. (1945, October). *United Automobile Worker*.


Help the Poor! Workers Weep With Wilson at Wailing Wall. (1945, October 10). *United Automobile Worker*. 

180

High Wages are Essential to Provide Jobs for Everybody. (1945, October 10). *United Automobile Worker*.


It may be LEGAL, but is it LOYAL? (1950, February 2). Advertisement, *Detroit Times*.


Reuther States the Case for the 30% Increase. (1945, October 10). *United Automobile Worker*.


Scheinberg, Stephen J. (1967). *The Development of Corporate Policy, 1900-1940*. Doctor of Philosophy, University of Wisconsin, Madison, WI.


Servicemen Urge Large 'Yes' Vote. (1945, October). *United Automobile Worker*.


*Speakers and Notes: Local 230: UAW-CIO.* (1950). Flyer. UAW Chrysler Department Collection series III, box 87, folder "Chrysler Negotiations; Local 230; Correspondence and Material, 1949-50." Walter P. Reuther Library, Detroit, MI.


Strike Bulletin Number 22. (1950, February 27). UAW Chrysler Department Collection series III, box 87, folder "Chrysler Negotiations; Local 230; Correspondence and Material, 1949-50." Walter P. Reuther Library, Detroit, MI.


