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The Effects of Financial Conditions and Managerial Ideologies on Corporate Downsizing: Some Evidence from the U.S. Investor-Owned Electric Utilities Industry, 1992-1995

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Downsizing is frequently referred to as a cost reduction strategy, however reviews of the existing empirical evidence question if downsizing can actually reduce costs or contribute to long term increases in profitability and performance (Budros, 1997; Cascio, 1993). The current uncertainty about the financial consequences of downsizing suggests the need for a multivariate study to explain pervasive downsizing occurring in the 1990s. The purpose of this study is to explore the financial and ideological determinants of corporate downsizing. Relatively little research has explored the potential causes of downsizing, though several researchers have expressed concern over the lack of empirical studies investigating critical drivers of downsizing (Budros, 1997; Cameron, 1994; McKinley, Sanchez, and Schick, 1995).
Specifically, the model developed in this study explores multiple causal factors of downsizing in the investor-owned electric utilities industry. Several current studies have found that firms do not necessarily improve their financial situation or improve productivity through downsizing (Cascio, Young, and Morris, 1997; Mentzer, 1996). Given this, I propose that other causes of downsizing play a prominent role. In essence, I argue that ideological forces influence decisions to downsize in addition to other reported reasons, such as cost reduction. I hypothesize that the top managers' desire to conform to managerial ideologies can explain variance in downsizing over and above economic and financial causes.
One hundred and fifty-five investor-owned electric utility companies that were in existence over the time period 1992-1995 were studied. Data were collected by conducting a content analysis of the letters to shareholders portion of company annual reports and by consulting archival data. A structured questionnaire was administered to a select group of ten industry executives to discover managerial ideologies prevalent in the industry. A panel of experts was used at a later time to validate the ideological constructs.
Results of the study support the general proposition that variation in downsizing cannot be fully explained by the variation in company profits, productivity, or overhead costs. The findings indicate that negative change in return on sales and negative changes in overhead costs can explain some of the variance in downsizing levels. The findings also indicate that companies with senior executives who believe strongly in the benefits of market competition are more likely to later downsize. In addition, firms undergoing merger and acquisition activity are more likely to downsize in the following year, while firms that offer Employee Stock Option Programs are less likely to downsize.

INTRODUCTION

Historically, decisions to downsize or restructure have been justified as a necessary means of resuscitating a firm in decline (Perry, 1985; Ropp, 1987; Tomasko, 1987). An episode of downsizing was often viewed as the method of last resort to be undertaken only in dire financial situations. Since the late 1980s, reports have indicated that American firms now downsize in good economic times as well as bad (Greenburg, 1991; Pullinger, 1992; Hamel and Prahalad, 1994). One source estimated that downsizing has eliminated more than 43 million jobs in the United States since 1979 *(The New York Times,* 1996). A 1995 *Wall Street Journal* article reported that according to figures from the U.S. Bureau of Labor Statistics, «10.1 million American workers were "displaced" or lost their jobs between 1989 and 1992» (Gerlin, 1995, p. C1). This figure represents a 35% increase in job losses over the losses in the four-year period of 1985 through 1988 (Gerlin, 1995). These numbers suggest that downsizing, through employee attrition and layoffs, is becoming a widespread, common business practice (Cameron, Freeman, and Mishra, 1991; Cascio, 1993; Touby, 1993) that affects an increasing number of American workers. Reports in the popular business press have several quotes from top U.S. managers that state, or strongly imply, that downsizing should be integrated into strategic decision making (Richman, 1993; Lublin, 1994) and in some cases, layoffs are undertaken in anticipation of future economic downturns (Greenburg, 1991; Cascio, 1993). This suggests downsizing is perceived as a positive, proactive strategic activity.

The purpose of this paper is to explore some of the complex factors that influenced decisions to downsize in the 1990s. Most of the studies on downsizing so far have concentrated on the consequences of downsizing for the organization and its employees (McKinley, Sanchez, and Schick, 1995). Relatively little research has explored the potential causes of downsizing (for an exception, see Budros, 1997), though several researchers have expressed concern over the lack of empirical studies investigating critical drivers of downsizing (see, for example, Cameron, 1994; McKinley et al., 1995; McKinley, Mone, and Barker, 1998). Downsizing is frequently referred to as a cost reduction strategy, however recent reviews of the existing empirical evidence question if downsizing can actually reduce costs or contribute to long term increases in profitability and performance (Cascio, 1993; Budros, 1997). The current uncertainty about the financial consequences of downsizing suggests the need for a multivariate study to explain pervasive downsizing occurring in the 1990s.

Specifically, the model developed in this study explores various causes of downsizing in the investor-owned electric utilities industry. Given the contradictory reports of financial and productivity gains as outcomes of downsizing (Mentzer, 1996; Cascio, Young, and Morris, 1997), I propose that other causes of downsizing play a prominent role. In essence, I argue that ideological forces influence decisions to downsize in addition to other reported variables, such as cost reduction or "com-

petitiveness". I hypothesize that the top managers' desire for conformance to managerial ideologies will explain variance in downsizing over and above economic and financial causes.

PREVIOUS STUDIES ON DOWNSIZING

The consequences of downsizing as they affect the organization and its employees have been the main focus of academic literature on downsizing (McKinley et al., 1995). A second stream of related literature concentrates on describing how to reduce unintended consequences of downsizing by utilizing the practices of firms that have downsized "effectively".

The majority of papers that concentrate on the consequences of downsizing focus on how surviving employees are affected (Brockner, Davy, and Carter, 1985; Brockner, Grover, Reed, DeWitt, and O'Malley, 1987; Brockner, 1988), though there are at least five studies in the management literature that examine the organizational effects. These papers have analyzed the structural effects of downsizing (DeWitt, 1993), the effects of organizational downsizing on product innovation (Dougherty and Bowman, 1995), the effects of workforce decline on the symmetry of structural changes (Sutton and D'Aunno, 1989; McKinley, 1992) and the relationship between downsizing and organizational redesign processes (Freeman and Cameron, 1993). Several publications concentrate on how to "reduce the trauma" of downsizing (Noer, 1993) by enabling survivors to «overcome their reactions to the situation and recommit to being productive and motivated» (Rice and Dreilinger, 1991, p. 41; see also Ropp, 1987) or discuss the abandonment of job security as part of the psychological contract (O'Reilly, 1994; Leana, 1996) Many descriptive articles on downsizing target a practitioner audience with advice on implementation (Cameron et al., 1991), while academically oriented articles investigate the consequences of downsizing for organizational performance (e.g., Cascio, 1993; DeWitt, 1993). Another line of academic research focuses on workforce reactions to downsizing and the work performance of layoff survivors (e.g., Brockner et al., 1985; Brockner et al., 1987; Brockner, 1988) and on the role employees' trust plays as a mediator of the relationship between managerial beliefs and actions and subsequent downsizing outcomes (Mone, 1997).

Advice on how to overcome adverse affects of downsizing has been well publicized in the 1990s. Practitioner-oriented articles have described best practices for managing downsizings or layoffs (Cameron et al., 1991; Cameron, 1994; Feldman and Leana, 1994) while others stress the role that mutual trust within a top management team plays in effective downsizing strategies (Mishra and Mishra, 1994). Other articles concentrate on perfecting the "art" of managing workforce reductions (Tomasko, 1987) and offer advise on the «right way to downsize» (Heenan, 1991, p. 4). Overall, these articles focus on downsizing as a common taken-for-granted event in organizations that fail to consider why downsizing occurs in the first place.

EMPIRICAL RESEARCH ON DOWNSIZING

This section discusses the findings of empirical research on downsizing activities. In my review of the literature, I found that early studies concentrated on discovering the financial aspects or trends that surround downsizing events (Worrell, Davidson, and Sharma 1991; De Meuse, Vanderheiden and Bergmann, 1994), while the later works begin to explore additional theoretical perspectives (McKinley et al., 1995; Mentzer, 1996; Budros, 1997; McKinley et al., 1998). One common methodological trend throughout these works is the repeated use of downsizing and/or layoff announcements as the unit of analysis, though there are exceptions (e.g., Mentzer, 1996).

An early 1990's study looked at the strategic implications of organizational layoffs by investigating how the securities' market reacted to the announcements of 194 layoffs in large firms over a nine-year period, 1979-87. These researchers found that the documented reason for the layoff greatly affected the securities' market reaction to the layoff. Their results suggest «that managers should not fear adverse stock reactions if a layoff is attributable to consolidation and restructuring [purposes]» (Worrell et al., 1991, p. 672) as opposed to reasons of financial distress. This suggests that the securities market may tend to react favorably to layoffs related to restructuring as opposed to layoffs related to financial downturns.

De Meuse et al. (1994) examined several measures of organizational firm performance for 17 *Fortune* 100 firms making workforce reductions in 1989. They found that the performance of these firms decreased as compared to a group of *Fortune* 100 firms not making such reductions. One should keep in mind, however, that 1989 was a year of recession, therefore the performance of both groups should have been affected.

Cascio et al. (1997) examined the financial consequences of employment change decisions over a 15 year period using data from companies in the Standard and Poor's 500. The authors conclude that the research did not produce evidence that downsizing firms, defined as firms in which the decline in employment was greater than 5 percent over a one-year period, were generally and significantly able to improve profits. This empirical evidence confirms much of the anecdotal evidence in the practitioner literature on downsizing (Cameron et al., 1991; Cascio, 1993) and other empirical studies (see Worrell et al., 1991; De Meuse et al., 1994; Fiedler, 1996; Cascio et al., 1997) that suggest downsizing generally does not improve performance.

Though the lack of empirical support for the virtues of downsizing is significant, few authors have taken steps to understand why downsizings attributed to improving organizational performance continue. The following continues the discussion of the empirical works concentrating on those that introduce other theoretical views.

Budros (1997) introduces classic organization theory and institutional theory as explanatory underpinnings of downsizing. He views downsizing as being affected by three distinct forces: 1/ events associated with the "new capitalism"; 2/ institutional forces; and 3/ adopter traits.

Using a logistic regression model, he analyzed the respective effects of the independent variables on the probability of downsizing. His results show that for publicly traded firms, deregulation, economic peaks, takeover attempts, firm size, adoption effects and a “commercial culture” have positive effects on downsizing while market share and profits per employee (productivity) have negative effects. Budros suggests that «the institutional imagery surrounding publicly traded firms stresses efficiency and the bottom line, encouraging downsizing» (p. 21). Findings for the adoption effect show that downsizing rates accelerate as the percentage of firms with downsizing programs increases. He attributes this trend to the evolution of downsizing from a “socially dubious act” to one that represents “business-as-usual”. The analysis discloses that downsizers are motivated by noneconomic factors and that they receive noneconomic rewards, such as improved organizational reputation and positive reactions from stockholders, thus strengthening survival prospects through the display of legitimated practices.

Another empirical study conducted by Mentzer (1996), tested three competing models of downsizing: the “rational” (economic efficiency) approach, the asymmetrical/hysteretic approach and the institutional approach. Using ordinary least squares analysis, he tested the impact of corporate performance on the propensity to downsize with the extent of downsizing as the dependent variable (to test the causes of downsizing). In a second set of regressions, he tested the impact of downsizing on future corporate performance, with the extent of downsizing as the principal independent variable (to test the consequences of downsizing). He found no consistent relationship in the determinant of downsizing or in the consequences of downsizing. The time period of interest and the length of that period may affect this inconsistent relationship (Mentzer, 1996). The results may be sensitive to the degree of environmental uncertainty. Overall, these empirical studies (e.g., Mentzer, 1996; Budros 1997) offer tentative support for the institutional approach to downsizing.

THEORY AND HYPOTHESES

SOME THEORETICAL VIEWS OF DOWNSIZING

THE RATIONAL-ECONOMIC APPROACH

Downsizers invariably report that financial problems or changes in technologies trigger a downsizing event (Budros, 1997). A 1994 survey conducted by the American Management Association found that when managers were asked; «Why do businesses downsize?» almost 50% said downsizing is a response to economic downturns. While over 40% cited the need to «improve staff utilization» (Lublin, 1994) which translates into doing the same amount of work with fewer people (Greenburg, 1991). In addition, numerous reports suggest downsizing

be undertaken to remain competitive and to improve organizational performance (McKinley et al., 1995). This logic is consistent with an economic perspective that assumes firms are rational, self-interest seeking and efficiency driven entities. Economic theories assume there is a tight connection between actions and outcomes, and that managers understand those connections.

This view assumes managers are rational people who approach downsizing in a logical, systematic manner. Actions are undertaken because managers expect downsizing will contribute to future economic conditions or states that are considered desirable. It is believed that downsizing reduces costs by improving a firm's competitive positioning, which, in turn, leads to greater profits and secures future employment for layoff survivors (Mentzer, 1996).

The above argument relies on the idealistic notion that executives behave rationally (Mentzer, 1996; McKinley, Zhao, and Rust, 1999). If managers are making rational decisions about downsizing, then how can this model alone adequately explain observations that downsizing companies do not always gain a competitive edge in the future? How can this model explain the downsizing activities of firms even in times of prosperity? Social models of downsizing may compensate these explanatory weaknesses.

THE IDEOLOGICAL APPROACH.

The ideological approach to downsizing is in its early infancy. The most well-developed theoretical work suggests that ideologies promulgated in business press articles and popular management magazines have a positive influence on downsizing by helping to legitimate downsizing as an appropriate organization strategy (McKinley et al., 1998) or by emphasizing the changing nature of the psychological contract (Bridges, 1994; O'Reilly, 1994). McKinley et al. (1998) focus on two specific managerial ideologies: the ideology of employee self-reliance and the ideology of debureaucratization, and argue that belief in these two ideologies increases the likelihood of downsizing. In a later paper McKinley and his associates suggest that the ideology of shareholder value influences managers' cognitive processes resulting in a belief that downsizing is effective. This research effort continues McKinley et al.'s (1995, 1998) investigations into the social drivers of downsizing by empirically testing some of the proposed relationships between social influence and downsizing. **Table 1** compares these perspectives of organizational downsizing by focusing on key differences and similarities with respect to each theoretical foundation.

Table 1. Alternative Perspectives on Downsizing

	Economic/Rational Approach	Ideological Approach
Key Assumptions	Firms are rational, self-interest seeking and efficiency driven. Managerial actions and their outcomes are tightly connected, and managers understand those connections.	Ideologies 1/ guide managerial behavior, 2/ regulate managerial behavior, and 3 influence the way managers' cope with uncertainty. Over time, ideologies move away from the forefront of attention and become implicit and taken for granted.
Major Arguments	Firms downsize in order to reduce costs and improve efficiency and profitability	Managers' decisions to downsize are influenced by shared ideologies with respect to market competition, shareholder interest, and employee worth.
Empirical Focus and Results	Mixed evidence on the effect of downsizing on cost reduction and efficiency improvement	No empirical results yet available.
Representative Contributors	Cascio (1993); Freeman and Cameron (1993); Cascio, Young, and Morris (1997)	McKinley, Mone, and Barker (1998)
Paradigmatic Foundations	Rational/Economic paradigm	Micro-cultural approach

Following, I discuss the proposed relationships between downsizing and economic and social variables. This study concentrates on two sets of independent variables–financial and ideological. I expect to find a negative relationship between the financial variables (return on sales, productivity) and downsizing events, that is, the greater a firm's performance, the lower the likelihood of downsizing. I expect the financial variables to explain partial variance of downsizing levels, though I expect the variance explained will be relatively small as compared to the variance explained by the other independent variables. The focus of the model will be on the variance in downsizing explained by ideological variables over and above variance explained by the financial variables. I hypothesize that even though variance in financial variables will explain a relatively small amount of variance, these predictors are an important component of the multivariate model.

FINANCIAL FORCES

The following hypotheses test the notion that corporate performance can play a causal role in downsizing. The rational approach assumes that executives are rational people who approach downsizing in a logical, systematic manner (Mentzer, 1996) and downsizing is assumed to be caused by a search for efficiency and productivity which ultimately results in higher profitability (McKinley et al., 1998).

This rational, or economic approach, is based on the assumption that managers downsize as a response to decreased organizational performance (Mentzer, 1996), though empirical evidence confirms many of the reports in the practitioner literature on downsizing (Cameron et al., 1991; Cascio, 1993) and other empirical studies (Worrell et al., 1991; De Meuse et al., 1994) that suggest downsizing generally does not improve performance. For example, a study comparing the perfor-

mance of firms with different staffing levels found that the organizational performance of downsized firms underperformed firms with higher staff levels (Fiedler, 1996).
However, in a declining financial situation, managers are expected to take rapid action (McKinley et al., 1995) to repair or turnaround the downturn in performance. Due to the demands for rapid action (Eisenhardt and Tabrizi, 1995) compounded by the need for rational decision-making, managers believe that cutting costs by downsizing is an efficient way to satisfy the demand for a rapid turnaround. The following hypothesis tests the idea that firms with declining profit levels are more likely to downsizing

H1: A decrease in corporate profit levels is associated with later corporate downsizing.

Other researchers have correlated low productivity levels with downsizing. Budros (1997) found that as firms' productivity levels (profits per employee) fell, downsizing rates began to rise. This relationship was statistically significant, though it is not clear if the correlation is due to the common element (changes in employment levels) found underlying the dependent variable measure as well as the measure used for productivity. Other researchers state that though managers may believe that downsizing improves productivity, so far there is no clear causal connection between downsizing and productivity improvements (Dougherty and Bowman, 1995).
From an economic perspective, this trend suggests that productive resources be perceived to be idle for some given portion of the time they should be dedicated to job tasks. At a given level of productivity, resource idleness could be interpreted as the result of efficiency on the part of the employee, lack of motivation on the part of the employee, a lack of job skills, or an indication that technology is depleting the need for labor-intensive tasks. However, pondering the underlying reason for idleness is an onerous task, and not conducive to rapid action. Uncertainty surrounds the "true" cause of productivity loss, though most managers realize that removing extraneous workers is easier and less time consuming than removing (selling) inanimate objects (Downs, 1995), such as machinery. An economically rational manager is concerned with the diminishing marginal returns associated with loss in productivity and consequently determine that the removal of the perceived source of low productivity, the "underutilized staff", is a rational and efficient activity. This practice is exacerbated by what can be described as a «plug-in» mentality (Cascio, 1993, p. 101). That is, people have productive value to the company similar to that of machines, so employees can simply be "unplugged" when they are considered to be no longer needed. This relationship between low productivity and downsizing is expressed in the following hypothesis.

H2: A decrease in corporate productivity levels is associated with later corporate downsizing.

Another commonly given reason for downsizing is high overhead costs (Cascio, 1993). Overhead costs are costs incurred by the firm that cannot be directly attributed to the cost of production. Administrative and general costs are overhead costs that comprise approximately thirty to eighty percent of the costs associated with employees in most industries (Cascio, 1993). In capital intensive industries, such as commercial airlines, oil refineries and electric utilities, the cost is about thirty to forty percent (Cascio, 1993). The salaries of workers in departments such as accounting, legal affairs, and shareholder services are typically categorized as overhead expense. Overhead costs are typically allocated among some activity measure such as machine time, volume, or direct labor hours (Bettis, Bradley, and Hamel, 1992).

Cascio (1993) and Downs (1995) suggest that managers believe the outcomes of cost cutting activities is more predictable than future revenues, therefore cutting costs by cutting people (overhead) is a "safe bet" to increase earnings. Many managers automatically assume that the future costs of doing business are predictable and controllable (Downs, 1995). In addition, managers realize there are two basic ways to increase profits: cut costs or increase revenues (Downs, 1995; Hamel and Prahalad, 1994) or simply Revenues - Costs = Profits and cutting costs will bring the surest, quickest improvement in return on investments (Hamel and Prahalad, 1994). Perhaps the conciseness and the mathematical predictability of this rule, even if it is based on faulty assumptions (Downs, 1995), directs managers to downsize as a method to reduce costs associated with employees.

H3: An increase in corporate overhead costs is associated with later corporate downsizing.

IDEOLOGICAL FORCES

Ideologies are shared sets of beliefs and norms that both impel people to action and justify their actions to themselves and others (Beyer, 1981; Trice and Beyer, 1993). Ideological beliefs can be defined as expressions of cause and effect relations and the belief that particular behaviors will lead to desired outcomes. When ideologies are developed over time into relatively stable, unified and coherent clusters of beliefs, they provide the causal models for explaining and legitimizing collective and individual behavior (Trice and Beyer, 1993). In this manner, ideologies can serve a highly functional purpose within the organization.

Prior theory on managerial ideologies has argued that ideologies help guide as well as constrain managerial behavior (McKinley et al., 1998). McKinley et al. (1998) cite Meyer's (1982a, 1982b) work on the ideologies of hospital administrators. Meyer's extensive research revealed how administrators from different hospitals who expressed different ideologies with respect to strategies, structures and processes undertook a variety of responses to an environmental jolt, in this case a doctors' strike. A hospital he typified as "lean and mean" cherished the

ideologies of self-reliance, predictability, and efficiency and undertook actions to preserve these ideologies. Belief in these ideologies strengthened their commitment to employees without compromising organizational performance. The overriding “lean and mean” ideology helped foster actions that guided them through the crisis situation (Meyer, 1982a).

Beyer (1981) emphasized the regulatory role of managerial ideologies. She suggested that some ideologies specify that some courses of action are more likely to result in desired outcomes than others. This belief constrains managers to choose one action over another. In addition, ideologies influence how managers make decision and define problems (McKinley et al., 1998). Hirsch (1986) explained how ideologies and metaphors about hostile takeovers helped gained acceptance of the practice, even among executives whose status could be threatened by the takeover of their corporation. Organizations develop ideologies into standardized solutions that then tend to define the problems to which they are applied (Beyer, 1981). As Meyer (1982a, p. 530) states, «causation is circular because ideologies also shape their adherents’ world. They legitimize certain actions, render other actions heretical, and create meaning for events that have yet to occur.»

McKinley et al. (1998) and Beyer (1981) stress the role of ideologies as reducers of uncertainty. The standardizing effect of ideologies narrows the lens, so to speak, of the meaning attributable to events in the environment. This creates a sense of certainty that relieves the decision makers from overwhelming information processing requirements. This reduction in cognitive requirements allows managers to operate within the chronic information load of their environment (see Kiesler and Sproull, 1982; Schick, Gordon, and Haka, 1990).

In summary, ideologies are emotionalized, shared set of beliefs and norms that both impel people to action and justify their actions to themselves and others (Trice and Beyer, 1993). Multiple ideologies that express ideas that contradict as well as complement each other can exist simultaneously in managerial belief structures (Trice and Beyer, 1993). Through the passage of time, ideologies tend to move away from the forefront of people’s attention and become implicit and taken for granted (Trice and Beyer, 1993).

IDEOLOGICAL VIEWS OF DOWNSIZING

Over time within a given industry, individual managers’ beliefs about their environment (including identities of competitors, suppliers, and customers) become highly unified through a mutual enactment process (Hodgkinson, 1994). One information source contributing to the formation of beliefs about environmental characteristics is an organization’s “neighbors” (Porac, Thomas, and Baden-Fuller, 1989; Porac, Thomas, Wilson, Paton, and Kanfer, 1995). Organizations derive many of their beliefs from organizations that inhabit similar environments (Sproull, 1981). These shared beliefs establish the identity of firms and

help create a stable network in which the actions of competitors are at least somewhat predictable. In addition, managerial belief structures frame and filter their competitive environment. They serve as a guide to further action and justification for past action (Sproull, 1981).

Ideologies that form the substance of the organization are developed within the organization itself, though the content and framing of those ideologies are influenced by extraorganizational sources (Trice and Beyer, 1993). External sources of ideologies include national cultures, regional cultures, industry cultures, occupational cultures and the cultures of other organizations. Since the focus of this study is managerial belief structures found in American businesses, I will limit my study of managerial beliefs to those that are common to the capitalistic American business culture, such as rationality, organizational performance, and the concern for shareholders, (Trice and Beyer, 1993) and study the extent of those beliefs on an industry-wide level. This approach is congruent with prior work conducted by Porac and associates (1989, 1995) in the Scottish knitwear industry and by Whipp, Rosenfeld, and Pettigrew (1989) in the English woolen industry. These researchers found that an industry-wide creation of socially shared beliefs defined the industry's set of rivals in addition to guiding strategic choices about how to compete.

The competitiveness of an industry, its historical developments, dominant technologies, customer requirements, and societal expectations, all help channel the experiences of those working in an industry in certain directions, and not others (Gordon, 1991). These experiences then mold the beliefs and values of the industry members. In effect, within industries, people develop shared beliefs about what are appropriate strategies (Huff, 1982).

CULTURAL FORMS

Beliefs cannot be studied directly because they reside in the heads of people, such as managers; only statements about them or artifacts from them are accessible to description and measurement (Sproull, 1981). In this study, I assume that ideologies, though abstract in nature, are objectified in cultural forms. These forms are observable entities through which members of a shared belief system communicate with each other. The four major categories of cultural forms are symbols, language, narratives and practices (Trice and Beyer, 1993). Some researchers believe that the most important function of management is the use of these forms to construct and maintain a system of shared meanings, shared language and shared culture (Beyer, 1981, discussing Pfeffer, 1981). Pfeffer (1981, p. 5) has argued, «it is the task of management to provide explanations, rationalizations, and legitimization for the activities undertaken in the organization.» This task is accomplished through the expression of these ideas in cultural forms.

Managerial belief structures are accessible through the measurement of cultural forms. In order to access cultural forms shared by top managers of an electric utility firm, I conducted semi-structured interviews

with a select group of top managers from five different utilities. From this data, ideological constructs emerged that served as an inductive basis for justifying and developing the theoretical ideological constructs associated with downsizing.

TELEPHONE INTERVIEWS

Industry-level ideologies on downsizing are revealed in several cultural forms internal to the corporation and those externally available to the public. These forms include interviews with industry executives, annual reports, corporate policies, executive speeches and popular press articles. In this study, the primary source of data delineating ideologies was information obtained from semi-structured telephone interviews with investor-owned utility (IOU) executives. I used open-ended interviews combined with a pre-determined typology to elicit these ideologies. The data were collected over a five-week period. To begin, I mailed out letters to several CEO's of IOUs in the state of Illinois describing my study and explaining that I am a researcher who is conducting a study to determine the cultural beliefs shared by the top management teams of investor-owned utilities. In this letter of inquiry, I asked those interested in participating in the study to contact me by telephone or electronic mail. At the end of the scheduled interview that lasted, on average, 40 minutes, I asked the participant to name other executives they thought might be interested in participating in this research. I then contacted the executives referenced by the participant. I conducted interviews with five executives representing four different IOU's from three states: Illinois, Missouri and New York.

As mentioned above, respondents were instructed to describe their perceptions of dominant industry beliefs, or what they consider to be "common knowledge" with respect to several internal and external organizational issues. I asked the managers to describe beliefs as they pertained to two predetermined dimensions (external internal and internal forces) that I categorized into 12 sub-dimensions. External forces are phenomena in the environment that create outside pressure on firms in the industries as opposed to internal forces, which are domains pre-existing within each firm in the industry. The seven external domains or sub-dimensions were deregulation, shareholders, mergers and acquisitions, customers, suppliers and government agencies. The five internal domains were employees/human resources, organization design and structure, management, organization decision-making, and technology.

DATA ANALYSIS OF TELEPHONE INTERVIEWS

The information elicited from the telephone interviews was analyzed independently by a colleague and myself. Individually, we read the responses and grouped together common sets of shared beliefs. We subsequently shared with each other the set of shared beliefs we had extracted from the data and together we determined there were at

least three industry-level ideologies revealed in the open-ended responses: the ideology of market competition, the ideology of shareholder interest, and the ideology of employee worth. The ideology of market competition is the belief that market competition will be good for the industry by increasing the average benefit of the stakeholders. The ideology of shareholder interest is the belief that attendance to the needs and desires of the shareholders should be the focus of organization actions. The ideology of employee worth expresses the belief that employees are a valuable resource who contribute actively to the performance of the utility. The theoretical underpinnings of these ideologies are developed in the following section.

IDEOLOGIES AND DOWNSIZING

THE IDEOLOGY OF MARKET COMPETITION

Since about the early 1980's, the U.S. economy has been driven by stiff competition through the process of deregulation and the globalization of the economy (Budros, 1997). State deregulation has introduced previously protected industries (e.g., airline, telecommunications) to free market competition (Horwitz, 1986; Edelman, 1990; Budros, 1997). The benefits believed to be associated with deregulation include lower prices for customers, increased organizational efficiency, and improved managerial skills and actions. Regulated industries have, it is widely believed, been able to accumulate higher profits by maintaining price levels higher than they would be able to under competitive conditions (U.S. Energy Information Administration, 1996). In this sense, deregulation "levels the playing field" by exposing previously "protected" entities to the competitive environment. This, in turn, increases benefits to customers through price reductions as market forces push down electric utility rates. In order to maintain their profitability while reducing rates, firms are forced to reduce costs. Reduction of the workforce is perceived to be a cost cutting measure undertaken to improve the firm's chance of survival in the newly competitive environment.

Organization researchers have stated that downsizing is often justified as a means to "become more competitive" (e.g., Cascio, 1993; Mishra and Mishra, 1994; McKinley et al., 1995; Leana, 1996). To become more competitive, corporations cut costs and reduce their debt (Cascio, 1993). Advocates of this view perceive outcomes of downsizing activities to be beneficial to the firm by lowering overhead, decreasing bureaucratic inefficiencies, speeding up decision making, and increasing productivity (Cascio, 1993). To become competitive suggests the firm is "flexible" and able to quickly respond to constituents needs (McKinley et al., 1995). This ability is important in hypercompetitive environments where the pressure for fast strategic decision making and fast adaptation (Bourgeois and Eisenhardt, 1988; Eisenhardt and Tabrizi, 1995) is viewed as necessary for survival. This suggests that managers who believe in the need to become more

competitive should initiate cost-cutting activities, such as downsizing. The more that top managers believe that market competition will benefit their corporation and their industry, the more they will become receptive to downsizing to prepare for such competition. The perceived benefits from competition for the majority of those with vested interest in the organization (e.g., stockholders, customers) overshadows the cost to others (e.g., employees). The costs and benefits of competition are born from the perception that certain actions must be undertaken to become "more competitive", such as downsizing. This belief is exemplified in the following statement made by William H. Grigg, CEO of Duke Power, «We've had all the programs du jour to emphasize competition… we've done a lot of training, we're forcing competitiveness by eliminating fat.» (Stewart, 1997, p. 169). Through the elimination of "fat", this corporate leader hopes to position the firm in a light favorable for competition.

The "ideology of market competition" is defined as the belief that market competition is beneficial to the industry, to its customers, and to other constituents as revealed in cultural forms. The strength of the belief in this ideology influences the likelihood of downsizing. This relationship is formally stated in the following hypothesis.

H4: The greater the strength of revealed belief in an ideology of market competition, the greater the likelihood of subsequent downsizing.

This hypothesis is purposely stated to address the beliefs revealed by organizational actors. This approach is taken for two important reasons: 1/ for a researcher, revealed beliefs are easier to access because cultural forms of beliefs are available in the public domain, and 2/ "true" beliefs «reside in the heads of managers' and are often difficult to capture» (Narayanan and Fahey, 1990, p. 111). Assuming that beliefs revealed in cultural forms are correlated with actual beliefs, revealed beliefs can be a valid measure of actual beliefs (Narayanan and Fahey, 1990). Narayanan and Fahey (1990) made similar assumptions in their study using causal mapping techniques.

THE IDEOLOGY OF SHAREHOLDER INTEREST

Since about the early 1980's, institutional investors have become influential shareholders of most American firms (Leana, 1996; Budros, 1997). At approximately the same time, popular press articles began to cite shareholder pressure as a reason for eliminating workers (Budros, 1997). This is supported by Leana's (1996) findings that a publicly traded firms' dependency upon the stock market for stock market valuation can affect strategic decision making. In some firms, a variety of decisions are judged by a central measure of shareholder value: company stock price and its dividends (Useem, 1993).

Useem (1993) conducted an extensive study of an electric-products company and found shareholder value was a strongly believed ideology. For example, the Corporate Financial Officer had this to say about the relationship between the firm's agents and the shareholders, «We

work for the shareholders. We think we can increase stock value by increasing our earnings» (Useem, 1993, p. 224). Underpinning and sustaining these managerial beliefs was the conviction that managerial actions significantly contributed to shareholder return. The belief in the ideology of shareholder value or interest meant that top management was able to improve company wealth in the near term through specific action. When investors pressured management to act, they assumed their decisions would make a difference. When they pressed for management to change, they made a similar assumption. Managers agreed: their major actions would, they believed, have a significant bearing on shareholder return (Useem, 1993).

Investors have identified low shareholder values as indicators of inefficiency and have pressured firms experiencing low stock prices and dividends to become more efficient by cutting costs (Budros, 1997). In addition, the enthusiasm displayed by the investment community toward organizational downsizing can encourage managers to believe downsizing is an appropriate strategy (McKinley et al., 1995). This is compounded by popular press rhetoric that challenges nondownsizers with the question, «Everyone else is doing this: how come you aren't?» *(Wall Street Journal,* 1996, p. 1). To some extent, corporate executives believe they need to downsize in order to gain legitimacy in the eyes of their investors and other stakeholders. Managers of publicly held firms (e.g., investor-owned utilities) must be sensitive to stockholder interests (e.g., profits) and as result, they are especially pressed to reduce costs through downsizing (Greenhalgh, Lawrence, and Sutton, 1988; Budros, 1997). The stronger the belief in the ideology that shareholder interest is of utmost importance, the greater the chance that firm will downsize in order to accommodate shareholder pressure. I propose the following hypothesis:

H5: The greater the strength of revealed belief in an ideology of shareholder interest, the greater the likelihood of later downsizing.

THE IDEOLOGY OF EMPLOYEE WORTH

Early human resource models, such as the one developed by Miles (1965) that built on even earlier works by Drucker (1954), McGregor (1960) and Likert (1961), suggest that workers are of great value to the organization (Marciano, 1995). It is in these same writings that the terms "human resources" and "human assets" first appeared (Marciano, 1995) as an expression of the unique qualities employees bring to the workplace. In an article that traces the development of human resource development, Marciano (1995, p. 226) states, «[This view] implies a management philosophy consistent with the view that employees, all employees, are valuable organizational resources, rather than expenses which the personnel department should assist in minimizing».

Employees are important to an organization's well-being because they provide several forms of contributions (Robinson, 1997). These contributions include performing roles as defined by the job, engaging in

other activities not specified by the job but that facilitate organizational effectiveness, and remaining employed with the organization (Katz, 1964). The belief that employees contribute value to the firm indicates a belief in the value of the workforce itself, since the contribution made to the organization cannot be separated from the workers themselves. In addition, employees acquire what economist Oliver Williamson (1975; 1981) calls firm-specific skills that are acquired on the job or through training (Tomasko, 1987). Williamson (1975; 1981) argues that long-term relationships develop between the workers and the firms to ensure that both parties continue to benefit from the investment in skills, experience and training (Pfeffer and Baron, 1988). These skills developed on the job are perceived to be less valuable in other settings where their specific skills and knowledge may not be beneficial. In firms where skills learned on the job are critical to productivity, continually hiring and training new workers can be costly (Pfeffer and Baron, 1988). This accentuates the value of the retaining employees. The ideology of employee worth is defined as the belief that employees are a valuable corporate resource.

Today, however, corporate loyalty and long-term employment is becoming a trend of the past (O'Reilly, 1994). Some report that U.S. firms view themselves primarily as an investment mechanism–entities that emphasize maximizing shareholder return (Leana, 1996) while minimizing employee "return". There is a subtle shift in the degree to which managerial decision-makers view the value of employees. Some top managers are forgoing their traditional responsibility for job preservation, arguing that the traditional guarantee of long-term employment can not be maintained in a competitive environment (McKinley et al., 1998).

In addition to the discontinuance of job security, there is an increasing number of organizational cultures that advocate the use of "contingent workers" (see Doeringer, 1991; Pfeffer and Baron, 1988) which suggests that the job skills accumulated through employment can be perceived to "devalue" over time. If workers are viewed as removable parts as opposed to "human assets" their perceived value to the firm changes too. Job cuts undertaken to place a firm in a better competitive position «undercut[s] the value of labor and trivialize[s] the contributions of members» (Rousseau, 1995, p. 214).

Environmental pressures placed on organizations affect the perceived value of employees. Firms are increasingly required to operate in a world of fast-paced technological changes and global competition and some firms feel the need to develop and maintain a lean, flexible structure so they can quickly innovative and respond to changing customer needs (Leana, 1996). In order to generate organizational skills and knowledge necessary to meet these new demands, some firms replace employees whose skills are no longer deemed necessary with technology and workers who possess newly required skills (Pfeffer, 1994). Managers believe that highly skilled workers are required to operate the more sophisticated and advanced equipment, making workers operators of this equipment critical to organizational success (Pfeffer,

1994). In addition, training programs are slow processes that may not generate a skilled workforce as rapidly as the need for the new skills is required (Cascio, 1993; Rousseau, 1995). Under pressure for fast decision making and fast adaptive abilities, (Eisenhardt and Tabrizi, 1995) removing devalued employees appears to be considered as a rational, efficient, and necessary activity by a number of decision makers. This situation suggests that the lower the belief in the resource value of employees, the greater the likelihood the firm will downsize its staff in the future. On the other hand, firms that invest in employee training and development programs, and have CEOs whom publicly exclaim their dedication to the view that employees add value, are expected to be less likely to downsizing their staff. This evolving belief about the resource value of employees is reflected in the following hypothesis.

H6: The lesser the strength of the revealed belief in an ideology of employee worth, the greater the likelihood of later downsizing.

METHODS

POPULATION

The population under study is the U. S. investor-owned electric utility industry as reported in the *Electrical World Directory of Electric Power Producers,* 105th edition (McGraw-Hill, 1997). This publication was chosen because it offers an abundance of the most current information on the investor-owned electric utility industry. This directory contains information on the number of employees, amount of total revenues, the number of kilowatt hours generated annually, and the names and titles of key personnel for the year 1995. The unit of analysis is a domestic firm in this industry. An investor-owned electric utility (IOU) is defined as «a class of utility that is investor owned and organized as a tax paying business, usually financed by the sales of securities in the capital market» (U.S. Energy Information Administration, 1993, p. 616). The *Electrical World Directory of Electric Power Producers* provides organizational data on several categories of electric power producers, investor-owned being one of those categories. According to this handbook, there were 218 U.S. investor-owned utilities at the end of 1995, though there were only 193 at the end of year 1994. In the year 1994, several large firms with several subsidiaries asked to be reported in the directory as one company, as opposed listing each subsidiary as a separate entity. In the following year, these subsidiaries were listed under one company, the parent company, though financial and personnel data was reported individually for each subsidiary. In other words, there was little change in the actual number of IOUs; the numerical differences are due to changes in reporting practices.
The investor-owned electric utility industry was chosen for several reasons. First, extensive data on this industry is easily accessible. The

majority of firms in this industry were regulated to some degree over the period of interest by state and federal government and publicly held; therefore the financial status of these firms is closely monitored and recorded. Secondly, there are several reports that downsizings have occurred and will continue to occur in this industry (e.g., Fiedler, 1996; *PRNewswire,* 1996; U.S. Energy Information Administration, 1996; *Electric Utility Week,* 1997). From 1986 to 1995, employment at major IOUs decreased by about 20%, a reduction of more than 100,000 employees (U.S. Energy Information Administration, 1996).

In what is described as an «increasingly competitive industry», downsizings are likely to continue, according to the U.S. Energy Information Administration (1996, p. 86). Some report that merger activity will drive the workforce reduction process. Mergers typically result in duplicate efforts (e.g., two accounting departments, two human resource departments), and it is believed that cost savings can be realized through work force reductions (U.S. Energy Information Administration, 1996). For example, Union Electric and Central Illinois Public Service plan on saving $570 million in 10 years by trimming duplicate corporate and administrative costs and cutting about 300 jobs through attrition *(Chicago Tribune,* 1995). Some companies cite other reasons for work force reductions, such as the accelerated pace of change in the electric industry (Electric Utility Week, 1997).

In recent years, there has been what is called the “radical restructuring” of the U.S. electric utilities industry. This restructuring is partially a product of the proposed deregulation of electricity generation and the ability of consumers to buy power from any broker or supplier (U.S. Energy Information Administration, 1996). Public utility commissions in over 20 states, as well as the Federal Energy Regulatory Commission are considering restructuring legislation. As of early 1997, California, New Hampshire, Rhode Island, and Pennsylvania passed legislation giving consumers the right to choose their electricity provider. This trend is expected to accelerate (U.S. Energy Information Administration, 1996).

Some researchers suggest that organization disruptions, such as mergers and restructuring, make organization cultural beliefs more accessible (Trice and Beyer, 1993). These beliefs become accessible because their relevance in the new organizational environment is questioned. Issues that challenge current ideologies raise everyone’s consciousness and awareness of them (Trice and Beyer, 1993). And this heightened awareness of organizational beliefs should aid the employees’ ability to vocalize those beliefs. If this view is correct, it suggests that the current upheaval in the electric utilities industry may “bring to surface” ideologies that have been largely taken for granted. The ability to access evidence of ideologies that reside in managerial belief structures is a critical aspect of the data collection portion of this study.

Thirty-seven firms had missing data that could not be found in other reliable sources (e.g., Moody’s *Public Utility Manuals),* resulting in a sampling frame of 155 utilities that have usable data. The missing data

were from a wide range of variables: the number of employees, annual sales of megawatt hours, megawatt hours generated, the strength of the belief in ideologies etc., so there should not be a problem of systematic bias that could threaten the representativeness of the sample.

ANNUAL REPORTS

Annual reports were used as the data source for the measures of the three ideologies: the ideology of market competition, the ideology of shareholder interest, and the ideology of employee worth. Annual reports have been argued to be a reliable source of data to examine management perceptions, intent and actions (Dougherty and Bowman, 1995). These publications can also be a rich source of industry-wide shared beliefs. A number of studies have examined executives' statements in annual reports to better their understanding of the ways in which external events and executives' own actions affect company performance (e.g., Clapham and Schwenk, 1991; Bettman and Weitz, 1983). Though these studies did not directly address ideologies, Clapham and Schwenk (1991, p. 219) state, «statements by management, in annual reports and elsewhere, provide some of the best data on the cognitive aspects of strategic management.» Bettman and Weitz (1983) preference for corporate reports, in particular letters to shareholders, rested on the documents' inherent comparability. Other sources of data, such as articles or interviews with industry leaders tend to be less comparable. In addition, Pfeffer (1981) has advocated the use of annual report data and data from annual reports has been used successfully in several early studies (e.g., Bowman, 1976, 1978). Though few studies have used the letters to shareholder portion of annual reports to capture industry-level ideologies, one study analyzed photographs from corporate annual reports in an attempt to uncover corporate belief systems (Dougherty and Kunda, 1990). These researchers uncovered strong consistencies in the beliefs that the photographs conveyed about the nature of the customers of the firms and firms' relationships with them.

In this study, the ideologies elicited from interviews with IOU executives, the ideology of market competition, the ideology of shareholder interest, and the ideology of employee worth, are measured in a content analysis of a sample of letters to shareholders found in IOU annual reports from the year 1993. This sample is used to assess how the strength of each belief is associated with the later use of downsizing.

Data from annual reports was collected to test the ideological forces influencing downsizing. Specifically, annual report data were collected to measure these ideological forces: 1/ the ideology of market competition (hypothesis 4), 2/ the ideology of shareholder interest (hypothesis 5), and 3/ the ideology of employee worth (hypothesis 6).

CODING ANNUAL REPORT DATA

MANAGERIAL IDEOLOGIES

The measures for the ideology variables are derived from a content analysis of the letter to shareholder portion of the 1993 annual reports. Coders were asked to read the letter to shareholders portion of annual reports to determine the strength of belief in an ideology as it is revealed in the text of the letter to shareholders (Kerlinger, 1992). Two independent coders were used for each ideology. The measures were operationalized using a Likert-type scale to capture variance in the revealed belief in each ideology. The measurement scale used is:
1 = no revealed belief in ideology
2 = weak revealed belief in ideology
3 = moderate revealed belief in ideology
4 = strong revealed belief in ideology
5 = very strong revealed belief in ideology
where “ideology” is replaced with “the ideology of market competition”, “the ideology of shareholder interest”, and “the ideology of employee worth”, respectively. Annual reports for 130 of the 155 utilities were provided by the electric utilities. Unfortunately, all 155 letters to shareholders were not accessible for a variety of reasons. Some firms had a policy of providing annual reports only to shareholders, others charged a substantial fee for this service, while a few claimed they didn’t have any copies left to mail. The missing annual reports are for both small and large firms, suggesting that no systematic bias was introduced by the missing information. I was able to find 4 of the missing annual reports through other sources, such as university libraries, for a total of 134 useable annual reports.

Several researchers advocate training judges and pretesting categories and definition to check the reliability of the coding process (Holsti, 1968; Kolbe and Burnett, 1991; Babbie, 1992). I conducted an inter-rater reliability pretest on the categories and definition of the categories. Two judges code a subset (N=12) of the sample of investor-owned utilities letters to shareholders for the ideology of shareholder interest in a year not used in this study (1994), which is still within the relevant time frame of analysis. I used Perreault and Leigh’s (1989) reliability index to determine the reliability of the ideology measures. This index was designed for use in judgment based research and accounts for differences in reliabilities due to the number of categories, focuses on the whole coding process, and is sensitive to coding weaknesses (Kolbe and Burnett, 1991).

The results of the analysis, using Perreault and Leigh’s (1989) reliability index, was 0.61, suggesting a moderate level of reliability. Given this moderate degree of reliability, I made some adjustments to the coding instructions and to the passages stated to exemplify each category. A second pretest was conducted using the year 1991 letters to shareholders (N=12) using the coder instruction sheet with the revised examples for each category. This analysis yielded a reliability coefficient of 0.82; an improved level of reliability.

I conducted two other pretests under the same conditions (e.g., using two independent coders and a sub-sample of 12 letters to shareholders) for the ideologies of market competition and employee worth. These pretests, using the Perrault and Leigh's reliability index, resulted in a reliability index of 0.69 for the ideology of market competition, and a reliability index of 0.88 for the ideology of employee worth. The algorithm used is displayed below.

$$Ir = \sqrt{\left(\frac{F_o}{N} - \frac{1}{k}\right) \times \left(\frac{k}{k-1}\right)}, \text{ for } \frac{F_o}{N} > \frac{1}{k}$$

where: F_o is the observed frequency of agreement between judges,
N is the total number of observations, and
k is the number of revealed belief categories.

Since these reliability scores of 0.69 and 0.88 are substantial, I did not alter the categories or the examples given for each. I held a coding training session with the coders a few days prior to the four-week period in which coding the text took place. In this training session, I explained to the coders exactly what process they should go through to undertake the coding task. The volunteer coders were given the opportunity to code several practice letters to shareholders to get a feel for the material and its content. The session also included a questions and answer period where I addressed the concerns of the coders and clarified the requirements of the coding task.

Individual reliability reflects the extent of agreement between one coder and any other coder. As I did in the pretest stage, I used Perreault and Leigh's (1989) reliability index to determine the interrater reliability of the ideology measures. Once the average score for each utility was calculated, the inter-rater reliability for each ideology was determined using the reliability index proposed by Perreault and Leigh (1989). The reliability indexes for all three ideologies are substantial. Following are the inter-rater reliability scores calculated for each ideology (see **Table 2**).

Table 2. Inter-Rater Reliability Scores for the Ideology Measures (n = 134)

Ideology	Reliability Index
Market Competition	0.68
Shareholder Interest	0.75
Employee Worth	0.61

RELIABILITY OF THE IDEOLOGY MEASURES

The two independent coders coding for the same ideology showed relatively strong inter-rater reliabilities. In addition, scores from coders coding for the same ideology showed relatively high correlations, therefore these two scores were averaged resulting in a single "strength of revealed belief" score. The term "revealed" belief is used because the strength of the belief can only be determined by information provi-

ded in the letters to shareholders. This averaged score is used in subsequent statistical tests. Following are the zero-order correlations for each ideology (see **Table 3**). Please note that coder A and coder B are different coders for each ideology.

Table 3. Zero-Order Correlations of the Strength of the Revealed Beliefs Based on the Naïve Coder Scores† (n = 134)

	IMCa	IMCb	ISIa	ISIb	IEWa	IEWb
IMCa	1.000 (0.0)					
IMCb	0.670 (0.0001)	1.000 (0.0)				
ISIa	-0.079 (0.3607)	-0.070 (0.4201)	1.000 (0.0)			
ISIb	-0.067 (0.4431)	0.020 (0.8198)	0.748 (0.0001)	1.000 (0.0)		
IEWa	0.0690 (0.4290)	-0.0233 (0.7895)	0.003 (0.9751)	0.0732 (0.4009)	1.000 (0.0)	
IEWb	0.001 (0.9889)	-0.112 (0.1943)	-0.091 (0.2937)	-0.128 (0.1398)	0.517 (0.0001)	1.000 (0.0)

† "a" is the first naïve coder; "b" is the second naïve coder.

These correlations indicate that the scores of coders coding the same ideology consistently have higher correlations than the scores of coders coding different ideologies. In addition, the correlations of the scores of the same ideology are all statistically significant ($p < 0.0001$), while none of the other correlations are statistically significant. These findings support the independence of the three ideological measures and indicate a strong association between the scores of the coders coding the same ideological measure and a weak association between the scores of coders coding different ideologies.

VALIDITY OF THE IDEOLOGY MEASURES

Researchers advocate the use of iterative or triangulating strategies when attempting to study beliefs (Sproull, 1981). This aids the analyst's ability to determine if important belief relationships have been ignored or taken for granted by the respondent (Sproull, 1981) and allows the researcher to make meaningful conclusions about the correlated data.

The validity of the measure of each ideological construct involved the use of an industry panel of experts. In this process, six experts (two per ideology) were asked to read the letters to shareholders of thirty randomly selected firms to assess the strength of the three ideologies as they are revealed in the material. The coding process was identical to that followed by the first set of naïve coders. That is, the experts were sent on disk the letters to shareholders of the thirty firms. They were each instructed to code for one ideology. The experts indicated on the recording sheet the strength of the belief as it is revealed in the data.

This variable data was correlated with data derived from the original naïve coders to measure for statistically significant correlation. **Table 4** displays pertinent statistical information related to this procedure.

Table 4. Pearson Correlation Coefficients of the Strength of the Ideologies Measures from Naïve and Expert Coders† (n = 30)

	IMCn	IMCe	ISIn	ISIe	IEWn	IEWe
IMCn	1.000 (0.0)					
IMCe	0.692 (0.0001)	1.000 (0.0)				
ISIn	0.309 (0.0963)	0.160 (0.3975)	1.000 (0.0)			
ISIe	-0.283 (0.1283)	0.218 (0.2468)	0.778 (0.0001)	1.000 (0.0)		
IEWn	-0.225 (0.2308)	0.319 (0.0848)	-0.165 (0.3827)	-0.305 (0.1008)	1.000 (0.0)	
IEWe	-0.187 (0.3220)	0.145 (0.4428)	-0.154 (0.4136)	-0.281 (0.1316)	0.729 (0.0001)	1.000 (0.0)

† “n” is the naïve coder response; “e” is the expert coder response.

The results of the Pearson correlation show that correlations of the measures of the ideologies from the naïve coders and the expert coders are strong and statistically significant. The correlation for the measure of the ideology of market competition between the naïve coders and the expert coders is 0.69 ($p<.0001$), while the correlation of the measure between the naïve coders and expert coders for the ideology of shareholder interest is 0.78 ($p<.0001$) and the correlation between the naïve coder score and the experts score for the ideology of employee worth measure is 0.73 ($p<.0001$). These correlations are significantly different from zero, and are large enough to serve as evidence of convergent validity (Campbell and Fiske, 1959).

STATISTICAL ANALYSIS

DOWNSIZING AS THE DEPENDENT VARIABLE

Multiple regression analysis was used to test the hypotheses that financial and ideological variables affect downsizing. Multiple regression analysis is suitable for analyzing the collective and separate effects of two or more independent variables on a dependent variable. (Pedhazur, 1982). A list-wise deletion method was used resulting in the deletion of observations with any missing value. This procedure reduced the usable sample by 25, leaving a sample of 109 for the regression analysis. All six hypotheses are tested using a common form of regression analyses: ordinary least squares regression. Following is an overview of the full model that corresponds with each hypothesis.

$$D = b_0 + b_1 \times ROS + b_2 \times PROD + b_3 \times OHC + b_4 \times IMC + b_5 \times ISI + b_6 \times IEW + b_7 \times M\&A + b_8 \times CE + b_9 \times ESOP + b_{10} \times PYD + \Sigma$$

where: D = downsizing
ROS = return on sales
PROD = productivity
OHC = overhead costs
IMC = ideology of market competition
ISI = ideology of shareholder interest
IEW = ideology of employee worth
M&A = mergers and acquisitions
CE = catastrophic event
ESOP = employee stock ownership program
PYD = prior year downsizing, and
b_i = coefficients.

CONTROL VARIABLES

Four dummy coded variables were incorporated into the model to control for variance explained by mergers and acquisitions, catastrophic events, employee stock option programs, and evidence of prior year downsizing. **Table 5** describes these control variables as well as the dependent and independent variables in the model.

RESULTS

DESCRIPTIVE STATISTICS AND BIVARIATE COEFFICIENT MEASURES

Table 5 describes the variables and how they are measured. The descriptive statistics of the variables are shown in **Table 6**. The correlation coefficients among the fourteen variables are presented in **Table 7**. **Table 7** shows that there are positive correlations between the ideology of market competition and downsizing levels (0.21), and between the occurrence of a merger or acquisition and the ideology of market competition (0.16) There were negative correlations between employee stock option programs and downsizing levels (-0.153) and between prior year downsizing and changes in overhead costs (-0.16).

RESULTS OF THE MULTIPLE REGRESSION ANALYSES

The results of the ordinary least squares regression analysis are displayed in **Table 8**. Variables are listed by number and by name. The hypotheses were stated in directional terms, which indicates the use of one-tailed tests of significance (Daniel and Terrell, 1989).
Hypotheses 1 through 3 argue that financial variables are predictors of downsizing.

Table 5. Variable Names and Description

Name	Description	Data Source
D: Downsizing	Annual Change in employment levels: (number of employees year end 1995) - (number of employees year end 1994) divided by (number of employees year end 1994) Reverse coded: positive change scores indicate 1994-1995 downsizing.	McGraw-Hill Directory of Electric Power Producers (McGraw-Hill, 1996, 1997)
ROS: Return on Sales	Annual Change in ROS: (Net income divided by electric revenues 1994) - (Net income divided by electric revenues 1993) all divided by (Net income divided by electric revenues 1993)	McGraw-Hill Directory of Electric Power Producers (McGraw-Hill, 1995,1996)
PROD: Productivity	Annual Change in PROD: (Number of megawatt hours produced divided by total assets year end 1994) - (Number of megawatt hours produced divided by total assets year end 1993) all divided by (Number of megawatt hours produced divided by the total assets year end 1993)	McGraw-Hill Directory of Electric Power Producers (McGraw-Hill, 1995, 1996) Moody's Public Utility Manual (Moody's Investment Service, 1994, 1995)
OHC: Overhead Costs	Annual Change Administrative and General expenses: (A&G expenses for year end 1993 divided by electric revenues year end 1993) - (A&G expenses for year end 1992 divided by electric revenues year end 1992) all divided by (A&G expenses for year end 1992 divided by electric revenues year end 1992)	Financial Statistics of Major U.S. Investor-Owned Electric Utilities (U.S. Energy Information Administration, 1994, 1995)
IMC: Ideology of Market Competition	The strength of the revealed belief that market competition offers benefits to the industry, customers, and other constituents Likert type scale: 1= no or weak belief… 5= a very strong belief	The Letter to Shareholders portion of the 1993 Company Annual Reports
ISI: Ideology of Shareholder Interest	The strength of the revealed belief in shareholder interests Likert type scale: 1= no or weak belief… 5= a very strong belief	The Letter to Shareholders portion of the 1993 Company Annual Reports
IEW: Ideology of Employee Worth	The strength of the revealed belief that employees are a valued resource Likert type scale: 1= no or weak belief… 5= a very strong belief	The Letter to Shareholders portion of the 1993 Company Annual Reports
M&A: Mergers and Acquisitions	Merger and acquisition activity per IOU over 1992-1994; coded "1" if M or A occurred, "0" otherwise	U.S. Energy Information Administration (1996) report on the Changing Structure of the Electric Utilities Power Industry
CE: Catastrophic Event	Report of an uncontrollable environmental event over 1992-1994; coded "1" if yes, "0" otherwise	Company Annual Reports (1992, 1993, 1994)
ESOP: Employee Stock Ownership Plan	Existence of a plan in 1994; coded "1" for yes, "0" otherwise	Company Annual Reports (1994)
PYD: Prior Year Downsizing	Evidence of a negative change in the number of employees (downsizing) from year end 1993 to year end 1994, coded "1" if a firm downsized, "0" otherwise	McGraw-Hill Directory of Electric Power Producers (McGraw-Hill, 1995, 1996)

Table 6. Descriptive Statistics of the Study Variables

Variable	N	Mean	S.D.	Minimum	Maximum
D: Downsizing	155	0.0565	0.1086	-0.05	0.99
ROS: Return On Sales	141	-0.0590	0.7060	-3.00	2.68
PROD: Productivity	133	-0.0145	0.1130	-0.63	0.24
OHC: Overhead Costs	144	0.1572	0.3013	-0.40	2.01
IMC: Ideology of Market Competition	134	2.4478	1.0783	1.00	5.00
ISI: Ideology of Shareholder Interest	134	2.9507	1.1547	1.00	5.00
IEW: Ideology of Employee Worth	134	2.6269	1.0236	1.00	5.00
M&A: Mergers and Acquisitions	155	0.1548	0.3629	0.00	1.00
CE: Catastrophic Event	155	0.0452	0.2083	0.00	1.00
ESOP: Employee Stock Ownership Program	155	0.3419	0.4759	0.00	1.00
PYD: Prior Year Downsizing	155	0.6645	0.4737	0.00	1.00

Table 7. Matrix of Correlation Coefficients (n = 134)

	D	ROS	PROD	OHC	IMC	ISI	IEW	M&A	CE	ESOP	PYD
D	1.000										
ROS	-0.014	1.000									
PROD	0.075	-0.070	1.000								
OHC	-0.116	-0.063	0.009	1.000							
IMC	0.21**	0.033	0.170*	-0.14	1.000						
ISI	0.055	-0.060	0.024	0.132	0.140	1.000					
IEW	0.058	-0.063	-0.133	-0.050	-0.014	0.030	1.000				
M&A	0.083	0.091	-0.058	-0.099	0.16	0.131*	-0.095	1.000			
CE	-0.03	0.034	-0.023	0.088	-0.004	-0.11	0.004	-0.007	1.000		
ESOP	-0.153**	-0.029	-0.027	-0.059	-0.026	-0.48	-0.13	-0.008	0.040	1.000	
PYD	0.057	0.000	0.044	-0.16**	0.11	0.080	0.230	-0.11	-0.11	0.11	1.000

* p< 0.10; ** p<0.05

Table 8. Regression Analysis Results for Financial and Ideological Causal Factors of Downsizing (n = 109)

Variable	Full Model Equation
1. Return on Sales	0.1245*†
2. Productivity	0.0712†
3. Overhead Costs	0.1678*†
4. Ideology of Market Competition	0.1952**†
5. Ideology of Shareholder Interest	0.0102†
6. Ideology of Employee Worth	0.0164†
7. Mergers and Acquisitions	0.1626*‡
8. Catastrophic Event	0.0091‡
9. Employee Stock Ownership Program	0.2074**‡
10. Prior Year Downsizing	0.1612‡
F	1.788**
R^2	0.1856
Adjusted R^2	0.0839

* p < .10; ** p < .05; df = 9. Coefficients are the standardized regression coefficients (Beta weights). † = one-tailed test of significance. ‡ = two-tailed test of significance.

HYPOTHESIS 1: THE PREDICTIVE EFFECTS OF REDUCED CORPORATE PROFITS

Table 8 shows that the standardized regression coefficients for Return on Sales, used as a proxy for change in corporate profits, is negative and significant ($b = -0.1245$, $p < .10$) using a one-tailed test of significance. The direction of the relationship between a reduction in corporate profits and later downsizing is the same as that predicted by Hypothesis 1. This result suggests that decreases in corporate profits are related to later higher levels of downsizing.

HYPOTHESIS 2: THE PREDICTIVE EFFECTS OF LOWERED PRODUCTIVITY LEVELS

Table 8 shows that the standardized regression coefficient for Productivity is not significant ($b = 0.0712$, n.s.) using a one-tailed test of significance. The direction of the relationship between productivity and later downsizing is opposite that predicted by Hypothesis 2. However, since the results are not significant, it would be inappropriate to infer that increases in corporate productivity are related to later higher levels of downsizing.

HYPOTHESIS 3: THE PREDICTIVE EFFECTS OF INCREASES IN OVERHEAD COSTS

Table 8 shows that the standardized regression coefficients for Overhead Costs is negative and significant ($b = -0.1678$, $p < .05$) using a one-tailed test of significance. These results show that increased changes in overhead costs are negatively related to later higher levels of downsizing, which is opposite the relation predicted by Hypothesis 3.

HYPOTHESIS 4: THE STRENGTH OF THE BELIEF IN MARKET COMPETITION AND ITS EFFECT ON LEVELS OF DOWNSIZING

Table 8 shows that the standardized regression coefficient for the Ideology of Market Competition is both positive and significant ($b = .1952$, $p < .05$) using a one-tailed test of significance. These results show that the stronger a top manager's belief in the ideology of market competition, the greater the likelihood of later high levels of downsizing. Overall, these results provide support for Hypothesis 4 by indicating that variation in the strength of the belief in the ideology of market competition can explain some of the variation in later downsizing.

HYPOTHESIS 5: THE STRENGTH OF THE BELIEF IN SHAREHOLDER INTEREST AND ITS EFFECT ON DOWNSIZING

Table 8 shows that the standardized regression coefficient for the ideology of shareholder interest is positive, but not significant ($b = 0.0102$, n.s.) using a one-tailed test of significance. The direction of the relationship between the strength of belief in the ideology of shareholder interest and later downsizing supports the prediction of Hypothesis 5. However, since the results are not significant and very weak, one cannot infer that the strength of the belief in shareholder value is predictive of the likelihood of later downsizing.

HYPOTHESIS 6: THE STRENGTH OF THE BELIEF IN EMPLOYEE WORTH AND ITS EFFECT ON DOWNSIZING

Table 8 shows that the standardized regression coefficient for the ideology of employee worth is positive, but not significant (b = 0.0164, n.s.) using a one-tailed test of significance. The direction of the relationship between the strength of belief in the ideology of employee worth and later downsizing does not support the prediction of Hypothesis 6. However, the results are not significant, so one cannot infer that the strength of the belief in employee worth is predictive of the likelihood of later downsizing. The following sections describe additional results of the regression analysis.

MERGERS AND ACQUISITIONS

The standardized regression coefficient of the variable mergers and acquisitions was positive and not significant (b = 0.1626, p < .10) using a two-tailed test of significance. This finding shows that mergers and acquisitions that occurred over the period of interest (1992-1995) have a positive relationship and, since the relationship is significant, one can infer that a merger or acquisition is predictive of the likelihood of later downsizing.

EMPLOYEE STOCK OPTION PROGRAMS

The standardized regression coefficient of the variable ESOP was negative and significant (b = -0.2074, p < .05) using a two-tailed test of significance. This finding suggests that the existence of an Employee Stock Ownership Program tends to dampen the likelihood of later downsizing.

DISCUSSION AND CONCLUSION

The purpose of this study was to test a model that examined the predictive effects of three financial variables and three ideological variables on the propensity to downsize. The study hypothesized that variance in the three ideological variables–the strength of the belief in the ideology of market competition, the strength of the belief in shareholder interest, and the strength of the belief in employee worth–can explain variance in downsizing above and beyond the variance explained by the three financial variables–change in annual return on sales, the annual change in productivity and the annual change in overhead costs.

SIGNIFICANT FINDINGS OF THE STUDY

The findings of this study support the general proposition that variance in the level of downsizing cannot be fully explained by variance in firm-level financial measures. Significant findings show that top managers who display a strong belief in the benefits of market competition are more likely to later downsize. When management believes market

competition is beneficial, they are more inclined to undertake actions they perceive will place their organization in a position to reap the perceived benefits. There are signs that utilities are beginning to initiate proactive strategic thinking based on ideologies about competitive market conditions, instead of reacting to state regulatory and monopolistic conditions. One way to reap the perceived benefits of competition is to take actions that appear to enhance the firm's flexibility and competitiveness. By adopting a cost reduction strategy, such as downsizing, firms appear to quickly and efficiently reduce costs and improve productivity.

The findings do support Hypothesis 1 since there is a significant relationship between reduction in ROS, a proxy for profitability, and the likelihood of future downsizing. This relationship is supportive of hypotheses developed by other downsizing researchers (e.g., Greenburg, 1991; Worrell et al., 1991; Cascio 1993; Mentzer, 1996; Budros, 1997; Cascio et al., 1997) that proposed poor firm profitability and economic performance is associated with later downsizing. For example, Worrell et al. (1991) found that nearly 75 percent of the firms in their study laid off workers in reaction to poor financial performance. The results of a 1990 downsizing survey conducted by the American Management Association reported that slightly more than half of the firms made workforce reductions because of business downturns, and Cascio (1993) contends that firms in financial trouble are the most likely to downsize.

OTHER FINDINGS

The findings did not support hypothesis two–downsizing is preceded by a decreased percent change in productivity levels. This relationship, the increased propensity to downsize ex post a productivity decline, has been found to exist in another downsizing study (see Budros, 1997). However, the measure of productivity used by Budros (1997) was different than the measure used in this study. Budros (1997) measured productivity as the annual change in the ratio of profits to the number of employees'. In this study, productivity is measured as the ratio of the annual change in megawatt hours of electric power generated to the dollar amount of year end total assets. This measure removes the chance of artificially inflated correlations with the dependent variable by removing their common measures (employees). It is possible that Budros' (1997) findings on the relationship between productivity and downsizing could be an artifact of the measure, though much more extensive research needs to be done in order to determine the set of factors that can consistently explain downsizing.

An alternative explanation is that productivity increases are correlated with higher levels of later downsizing not because the former caused the latter, but perhaps because both variables are changing in response to a more general strategic thrust. For example, the following statement can be found in the U. S. Energy Information Administration (1996, p. 86) report on the changing structure of the Electric Power

Industry, «In an increasingly competitive environment, staff reductions and downsizing are likely to continue.» This statement suggests that competitive environments, in and of themselves, cause downsizings; that downsizing is inevitable. If this is a correct interpretation of the role of downsizing in competitive industries, firms may take action in anticipation of future lulls in productivity and potential economic downturns (Budros, 1997). For example, Centerior Energy, a holding company of Cleveland Electric Illuminating and Toledo Edison planned (as of May 1996) to retire three coal plants and eliminate 500 jobs, or 9 percent of its electricity employees (U. S. Energy Information Administration, 1996). Centerior officials have said that these actions are part of a company program to reduce costs and to improve its competitive position *(Electric Utility Week,* 1996). It is possible that other utility companies have embarked on a multi-year strategy of productivity improvement and cost reduction, part of which involves downsizing. Downsizing may be used by investor-owned electric utilities as a proactive strategy to ensure future levels of strong productivity, believing this will improve their chance of survival in the newly competitive environment.

Hypothesis 3 stated that increases in overhead costs would be positively related to later downsizing. I argued that overhead costs, such as administrative and general expenses, are highly associated with employees, therefore to reduce these costs, firms would reduce their workforce. However, the findings suggest the opposite relationship exits, high overhead costs over the 1992-1993 period are correlated with less downsizing over the 1994-1995 period.

This phenomena may be explained as follows. According to the U. S. Energy Information Administration (1996, p. 88), «higher-than-normal employee pensions and benefit expenses, caused by larger staff reductions with expenditures for early retirement, employee buyouts, and employee severance pay, are responsible for most of the fluctuations in [administration and general] expenses». The fluctuations in overhead costs may be explained by multi-year cost reduction efforts embarked upon by some firms in the industry. The co-variance between the variables is symptomatic of a more general strategy being implemented by some of the utilities that are engaging in both overhead costs reductions and downsizing, although these activities are occurring at different times.

The findings did not support the hypotheses concerning the ideology of shareholder interest or the ideology of employee worth. That is, the relationship between the strength of these beliefs, as they are revealed in the letters to shareholders, and later downsizing was not significant. The ideology of market competition, however, does hold a statistically significant relationship with later downsizing. This suggests that the ideology of market competition is the dominant ideological influence on downsizing in IOUs, while the other two ideologies are subordinate to it.

It is possible that variance is neutral with respect to IOU downsizing because downsizing is no longer viewed to be detrimental to

employees (Noer, 1993). In addition, managers may be following the principle of utility on which the utilitarian ethic is based. The utilitarian view advocates choosing alternatives which lead to the greatest sum of happiness, or «the greatest good for the greatest number» (Steiner and Steiner, 1994, p. 227). Downsizing a minority of employees may be justified as a necessary action to save the jobs of the remaining employees, and perhaps ultimately the survival of the firm itself. If downsizing is taken for granted to be a necessary activity, then there is no reason why managers with strong beliefs in employee worth should avoid downsizing, or try to moderate it in any way.

The lack of support for the ideology of shareholder value could be due to the changing make-up of IOU shareholders. Traditionally, IOU stockholders were individual investors who sought a safe investment that would generate a steady dividend stream and a stable stock price. According to the several top managers I spoke to, institutional investors who purchase large blocks of stocks are now purchasing more and more of IOU stocks. Institutional investors have recently emerged as an influential group of shareholders (David, Kochhar, and Levitas, 1998) who have increased their ownership in U.S. equity markets from 16 percent in 1965 to 57 percent by 1994 (Useem, 1993; David et al., 1998). These investors are increasingly concerned with rising stock prices, since their investment centers on the buying and selling of stock as opposed to creating a long-term stream of dividend earnings. If downsizing is viewed as a stimulus to stock price increases (Downs, 1995; Leana, 1996) more than divided streams, then downsizing may be undertaken to satisfy the needs of the “new” institutional investors. However, individual investors have historically been loyal investors who still control a large portion of IOU stock. Though there is no established relationship between variance in downsizing and variance in dividend growth, it is conceivable that IOUs that value the traditional individual stockholder would not undertake activities perceived to increase stock prices, such as downsizing. Under the above assumptions that IOUs are appealing to the conflicting needs of two types of investors, it is conceivable that there would be no consistent relationship between downsizing and the ideology of shareholder value.

MERGERS AND ACQUISITIONS

Mergers and acquisitions were found to have a significant relationship with later downsizing. This supports other studies that found that reductions in the workforce and mergers and acquisitions often go hand-in-hand (Shleifer and Summers, 1987; Bethel and Liebeskind, 1993; Bowman and Singh, 1993; Singh, 1993). However, one study looking at the causes of the adoption of downsizing programs among *Fortune* 100 firms did not find a significant relationship between the occurrence of a merger or acquisition and later downsizing (Budros, 1997).

And lastly, it is worth noting that firms with ESOPs are less likely to downsize in the future. This finding is consistent with Bethel and Liebeskind’s (1993) study on the relationship between the ownership

structure of the firm and restructuring. They found that block-holder ownership of the firm is significantly correlated with corporate restructuring, specifically downsizing of the firm, while insider ownership is not related to restructuring. It is also consistent with another researcher's finding that publicly-traded firms, as opposed to privately-held firms, were more likely to adopt downsizing programs (Budros, 1997).

One explanation for low levels of downsizing in firms at least partially owned by employees, is that pressures from stockholders and financial analysts for a strong financial performance is lessened (Budros, 1997). Since semi-privately-held firms face less shareholder pressures, these firms should be able to emphasize long-term strategies over short-term strategies such as downsizing (Greenhalgh et al., 1988).

In addition, though this idea was not directly tested, this study's findings also support the proposition that firms with ESOPs experience less external pressure to downsize. This is possibly due to their lowered dependence on external stakeholders who believe that downsizing is "good" (McKinley et al., 1995).

IMPLICATION OF THE STUDY FOR THEORY

First and foremost, these results suggests that downsizing decisions are no longer as closely tied to the financial conditions of the firm as they once were. This study found that although downsizing is partially a response to deteriorating financial conditions, the beliefs shared by managers regarding market competition have a large effect on decisions to downsize. This finding is congruent with other research focusing on managerial ideologies (e.g., Meyer, 1982XX; Trice and Beyer, 1993; McKinley et al., 1998) that suggest beliefs help mold managerial action.

In order to be useful, a managerial ideology must prescribe what managers will accept as the right way to achieve some expected goal (Trice and Beyer, 1993). The ideology of market competition encompasses a wide set of beliefs prevalent in U.S. corporations that suggest fostering competition will help achieve desired organizational goals. Market competition centers on the belief that unrestricted commerce will result in efficient, low-cost production, and benefits to consumers, such as low prices. Competitive pressures force inefficient and high cost firms out of business; an act that is perceived to have utilitarian benefits. Fostering competition is based on the rational, collective belief that managers are supposed to concern themselves with the productivity and efficiency in the organization they manage (Trice and Beyer, 1993). Therefore, undertaking action one believes will enhance a firm's competitive position, such as downsizing, is viewed as a necessary managerial activity.

RECOMMENDATIONS FOR FURTHER RESEARCH

One important direction for future research is to examine the interactive effects of the ideology variables with other independent variables. It

is possible that even though the independent effects of the ideology of shareholder interest and the ideology of employee worth were not significant, that an interaction of variables may enhance the effects of one another (Pedhazur, 1982), and together explain a significant portion of variance in downsizing. For example, the combined effects of the change in productivity and the ideology of shareholder interest or market competition may explain a significant amount of variance in downsizing. The model examined in this study could be expanded to include the moderating effects of the various levels of belief in the ideologies and how those levels interact with the financial predictor variables.

Second, research could be done to determine if characteristics unique to the investor-owned electric utility industry could account for some of the variance in downsizing. For example, some reports indicate that the restructuring of the industry has been sustained by technological improvements in gas turbines (U. S. Energy Information Administration, 1996). Gas turbines are small low-cost efficient generators of new electricity capacity (Linden, 1995). In addition, combined cycle gas turbines can be built and operated more cheaply than some existing utility steam electric generation (U. S. Energy Information Administration, 1996) and utilities are finding that it is no longer necessary to build large generating plants to exploit economies of scale (Balzhiser, 1996; U. S. Energy Information Administration, 1996) These factors help facilitate the trend in the industry to provide smaller and smaller packaged units of electricity closer to the customers. The switch to this smaller and relatively more efficient method of electricity generation could preempt downsizing decisions.

Third, future research should address how the type of shareholder moderates the effects of the ideology of shareholder value on later downsizing. As argued earlier, IOU stock is being purchased more and more by institutional investors who have different expectations of stock performance than the traditional individual investor (David et al., 1998). Traditional investors are more concerned with maintaining high dividend flows, while institutional investors are more concerned with rising stock prices. It would be interesting to determine if IOUs with traditional investors as majority stockholders engage in lower levels of downsizing than IOUs with institutional investors as majority stockholders, since downsizings have been found to occur before short-term spikes in stock prices (Worrell et al., 1991; Cascio, 1993; Bruton, Keels and Shook, 1996).

And fourth, future research should address particular characteristics unique to the investor-owned electric utility industry that may moderate the effects of productivity changes on downsizing. The characteristics of the products and services offered by the electric utilities industry may partially explain the appeal of reduction strategies. Electricity at wholesale value is a commodity sold at market centers at market rates (U. S. Energy Information Administration, 1996). In addition, electricity futures contracts have been introduced, which can help electricity buyers and sellers manage business risks (U. S. Energy Infor-

mation Administration, 1996). Since electricity by nature is undifferentiated in terms of its usefulness to the end user, the price of electricity is a major driver of purchasing decisions. Many consumers of electricity, especially industrial users, express desires to choose electricity suppliers that meet their needs economically, reliably, and efficiently (U. S. Energy Information Administration, 1996). Lowering costs in order to reduce prices without negatively affecting profits can be a successful low-cost strategy undertaken by firms with undifferentiated products and services (Porter, 1980). Further research addressing the competitive strategies implemented by utility executives may shed light on the targeted use of downsizing.

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REFERENCES

■ Babbie, Earl. 1992
The Practice of Social Research, 6th Edition, Belmont: Wadsworth.

■ Balzhiser, Richard E. 1996
Technology: It's only Begun to Make a Difference, *The Electricity Journal,* 9:4, 32-45.

■ Bethel, Jennifer E., and Julia Liebeskind 1993
The Effects of Ownership Structure on Corporate Restructuring, *Strategic Management Journal,* 14, 15-31.

■ Bettis, Richard A., Steven P. Bradley, and Gary Hamel 1992
Outsourcing and Industrial Decline, *Academy of Management Executive,* 6:1, 7-22.

■ Bettman, James, and Barton Weitz 1983
Attributions in the Boardroom: Causal Reasoning in Corporate Annual Reports, *Administrative Science Quarterly,* 28, 165-183.

■ Beyer, Janice. M. 1981
Ideologies, Values, and Decision Making in Organizations, *in* Paul C. Nystrom and William H. Starbuck (Eds.), *Handbook of Organizational Design,* Vol 2, New York: Oxford University Press, 166-202.

■ Bourgeois, L. J., and Kathleen M. Eisenhardt 1988
Strategic Decision Making in High Velocity Environments: Four Cases in the Microcomputer Industry, *Management Science,* 34:7, 816-835.

■ Bowman, Edward H. 1976
Strategy and the Weather, *Sloan Management Review,* 17, 49-62.

■ Bowman, Edward H. 1978
Strategy, Annual Reports, and Alchemy, *California Management Review,* 20, 64-71.

■ Bowman, Edward H., and Harbir Singh 1993
Corporate Restructuring: Reconfiguring the Firm, *Strategic Management Journal,* 14, 5-14.

■ Bridges, William 1994
The End of the Job, *Fortune,* 130, 62-74.

■ Brockner, Joel 1988
The Effects of Work Layoffs on Survivors: Research, Theory, and Practice, *in* Barry M. Staw, and Larry L. Cummings (Eds), *Research in Organizational Behavior,* Vol. 10, Greenwich: JAI Press, 213-255.

■ Brockner, Joel, Jeanette Davy, and Carolyn Carter 1985
Layoffs, Self-Esteems, and Survivor Guilt: Motivational, Affective and Attitudinal Consequences, *Organizational Behavior and Human Decision Processes,* 36, 229-244.

■ Brockner, Joel, Steven Grover, Thomas D. Reed, Rocki-Lee DeWitt, and Michael O'Malley 1987
Survivors' Reactions to Layoffs: We Get by with a Little Help for our Friends, *Administrative Science Quarterly,* 32, 526-542.

■ Bruton, Garry D., J. Kay Keels, and Christopher L. Shook 1996
Downsizing the Firm: Answering the Strategic Questions, *Academy of Management Executive,* 10:2, 38-45.

■ Budros, Art 1997
The New Capitalism and Organizational Rationality: The Adoption of Downsizing Programs, 1979-1994, *Social Forces,* 76:1, 229-250.

■ Cameron, Kim S. 1994
Strategies for Successful Organizational Downsizing, *Human Resource Management,* 33, 189-211.

■ Cameron, Kim S., Sarah J. Freeman, and Aneil K. Mishra 1991
Best Practices in White-Collar Downsizing: Managing Contradictions, *Academy of Management Executive,* 5, 57-73.

■ Campbell, Donald T., and Donald W. Fiske 1959
Convergent and Discriminant Validation by the Multitrait - Multimethod Matrix, *Psychology Bulletin,* 56, 81-105.

■ Cascio, Wayne F. 1993
Downsizing: What Do We Know? What Have We Learned?, *Academy of Management Executive,* 7, 95-104.

■ Cascio, Wayne F., Clifford E. Young, and James R. Morris 1997
Financial Consequences of Employment-Change Decisions in Major U.S. Corporations, *Academy of Management Journal,* 40:5, 1175-1189.

■ *Chicago Tribune,* 1995
Utilities' Merger Creates Another Power House, August 15th.

■ Clapham, Stephen. E., and Charles R. Schwenk 1991
Self-Serving Attributions, Managerial Cognition, and Company Performance, *Strategic Management Journal,* 12, 219-229.

■ Daniel, Wayne W., and James C. Terrell 1989
Business Statistics, Boston: Houghton Mifflin.

■ David, Parthiban, Rahul Kochhar, and Edward Levitas 1998
The Effects of Institutional Investors on the Level and Mix of CEO Compensation, *Academy of Management Journal,* 41:2, 200-208.

■ De Meuse, Kenneth, Paul Vanderheiden, and Thomas Bergmann 1994
Announced Layoffs: Their Effect on Corporate Performance, *Human Resource Management,* 33, 509-530.

■ DeWitt, Rocki-Lee 1993
The Structural Consequences of Downsizing, *Organization Science,* 4:2, 30-40.

■ Doeringer, Peter B. 1991
Turbulence in the American Workplace, New York: Oxford Press.

■ Dougherty, Deborah, and Edward Bowman 1995
The Effect of Organizational Downsizing on Product Innovation, *California Management Review,* 37, 28-44.

■ Dougherty, Deborah, and Gareth Kunda 1990
Photograph Analysis: A Method to Capture Organizational Belief Systems, *in* Pasquale Gagliardi (Ed.), *Symbols and Artifacts: Views of Corporate Landscape,* New York: Walter de Gruyter,185-206.

■ Downs, Alan 1995
Corporate Executions: The Ugly Truth about Layoffs–How Corporate Greed Is Shattering Lives, Companies, and Communities, New York: AMACOM.

■ Drucker, Peter F. 1954
The Practice of Management, New York: Harper.

■ Edelman, Lauren 1990
Legal Environments and Organizational governance, *American Journal of Sociology,* 95, 1401-1440.

■ Eisenhardt, Kathleen M., and Behnam N. Tabrizi 1995
Accelerating Adaptive Processes: Product innovation in the Global Computer Industry, *Administrative Science Quarterly,* 40, 84-110.

■ *Electric Utility Week,* 1996
Centerior Retiring Three Coal Plants, Eliminating 500 Jobs To Cut Costs, May 20th.

■ *Electric Utility Week,* 1997
SPS, PS Colorado May Boost Workforce Cutbacks After Merger from 8% to 19%, February 10th.

■ Feldman, Daniel C., and Carrie R. Leana 1994
Better Practices in Managing Layoffs, *Human Resource Management,* 33, 239-260.

■ Fiedler, M. 1996
Electric Downsizing Likely to Continue amid Restructuring and Consolidation, *SourceBook,* June 1st.

■ Freeman, Sarah J., and Kim S. Cameron 1993
Organizational Downsizing: A Convergence and Reorientation Framework, *Organization Science,* 4, 10-29.

■ Gerlin, Ann 1995
Seminars Teach Managers Finer Points of Firing, *Wall Street Journal,* April 26th, C1.

■ Gordon, George G. 1991
Industry Determinants of Organizational Culture, *Academy of Management Review,* 16:2, 396-415.

■ Greenburg, Eric R. 1991
Downsizing: AMA Survey Results, *Compensation and Benefits Review,* 23:4, 33-38.

■ Greenhalgh, Leonard, Anne Lawrence, and Robert Sutton 1988
Determinants of Work Force Reduction Strategies in Declining Organizations, *Academy of Management Review,* 13, 241-254.

■ Hamel, Gary, and C. K. Prahalad 1994
Competing for the Future, Boston: Harvard Business School Press.

■ Heenan, David O. 1991
The Right Way to Downsize, *The Journal of Business Strategy,* 12:5, 4-6.

■ Hirsch, Paul M. 1986
From Ambushes to Golden Parachutes: Corporate Takeovers as an Instance of Cultural Framing and Institutional Integration, *American Journal of Sociology,* 91, 800-837.

■ Hodgkinson, Gerard P. 1994
The Cognitive Analysis of Competitive Structures: A Review of Recent Research, *Discussion Paper Series,* Sheffield: Sheffield Management School, April.

■ Holsti, Ole R. 1968
Content Analysis, *in* Gardner Lindzey and Elliot Aronson (Eds.), *The Handbook of Social Psychology,* Reading: Addison-Westley, 596-692.

■ Horwitz, Robert 1986
Understanding Deregulation, *Theory and Society,* 15, 139-174.

■ Huff, Anne S. 1982
Industry Influence on Strategic Formulation, *Strategic Management Journal,* 3, 119-131.

■ Katz, Daniel 1964
The Motivational Basis of Organizational Behavior, *Behavioral Science,* 9, 131-146.

■ Kerlinger, Fred N. 1992
Foundations of Behavioral Research, 3rd edition, Orlando: Harcourt Brace.

■ Kiesler, Sara, and Lee Sproull 1982
Managerial Responses to Changing Environments: Perspectives on Problem Sensing from Social Cognition, *Administrative Science Quarterly,* 27, 548-570.

■ Kolbe, Richard H., and Melissa S. Burnett 1991
Content-Analysis Research: An Examination of Applications with Directives for Improving Research Reliability and Objectivity, *Journal of Consumer Research,* 18, 243-250.

■ Leana, Carrie R. 1996
Why Downsizing Won't Work, *Chicago Tribune Magazine,* April 14th, 15-16, 18.

■ Likert, Rensis 1961
New Patterns of Management, New York: McGraw-Hill.

■ Linden, H. R. 1995
The Revolution Continues, *The Electricity Journal,* December, 54.

■ Lublin, Joann S. 1994
Don't Stop Cutting Staff, Study Suggests, *Wall Street Journal,* September 27th.

■ Marciano, Vitor M. 1995
The Origins and Development of Human Resource Management, *in* Dorothy Perrin Moore (Ed.), *Academy of Management Best Papers Proceedings,* Briarcliff Manor: Academy of Management, 223-227.

■ McGraw-Hill 1995
Electrical World Directory of Electric Utilities, 103rd edition. New York: McGraw-Hill.

■ McGraw-Hill 1996
Electrical World Directory of Electric Power Producers, 104th edition. New York: McGraw-Hill.

■ McGraw-Hill 1997
Electrical World Directory of Electric Power Producers, 105th edition. New York: McGraw-Hill.

■ McGregor, Douglas 1960
The Human Side of Enterprise, New York: McGraw-Hill.

■ McKinley, William 1992
Decreasing Organizational Size: To Untangle or not to Untangle?, *Academy of Management Review,* 17, 112-123.

■ McKinley, William, Mark A. Mone, and Vincent L. Barker III 1998
Some Ideological Foundations of Organizational Downsizing, *Journal of Management Inquiry,* 7:3, 198-212.

■ McKinley, William, Carol Sanchez, and Alan Schick 1995
Organizational Downsizing: Constraining, Cloning, Learning, *Academy of Management Executive,* 9:3, 32-42.

■ Mentzer, Marc S. 1996
Corporate Downsizing and Profitability in Canada, *Canadian Journal of Administrative Sciences,* 13:3, 237-250.

■ Meyer, Alan D. 1982a
Adapting to Environmental Jolts, *Administrative Science Quarterly,* 27, 515-537.

■ Meyer, Alan D. 1982b
How Ideologies Supplant Formal Structure and Shape Responses to Environments, *Journal of Management Studies,* 19, 45-61.

■ Miles, Richard 1965
Human Relations or Human Resources? *Harvard Business Review,* 43, 148-163.

■ Mishra, Aneil K., and Karen E. Mishra 1994
The Role of Mutual Trust in Effective Downsizing Strategies, *Human Resource Management,* 33, 261-279.

■ Mone, Mark A. 1997
How We Got along after Downsizing: Post-Downsizing Trust as a Double-Edged Sword, *Public Administration Quarterly,* 21:3, 309-336.

■ Moody's Investment Service 1994
Moody's Public Utilities Manual, Vol. 1 and 2: New York: Moody's Investment Service.

■ Moody's Investment Service 1995
Moody's Public Utilities Manual, Vol. 1 and 2: New York: Moody's Investment Service.

■ Narayanan, V. K., and Liam Fahey 1990
Evolution of Revealed Causal Maps during Decline: A Case Study of Admiral, *in* Anne S. Huff (Ed.), *Mapping Strategic Thought,* New York: Wiley, 109-133.

■ Noer, David M. 1993
Healing the Wounds: Overcoming the Trauma of Layoffs and Revitalizing Downsized Organizations, San Francisco: Jossey-Bass.

■ O'Reilly, Brian 1994
The New Deal: What Companies and Employees Owe One Another, *Fortune,* 129, 44-52.

■ Pedhazur, Elazar J. 1982
Multiple Regression in Behavioral Research: Explanation and Prediction, Fort Worth: Harcourt, Brace, & Jovanivich.

■ Perreault, William D. Jr., and Laurence E. Leigh 1989
Reliability of Nominal Data Based on Qualitative Judgments, *Journal of Marketing Research,* 26, 135-148.

■ Perry, Lee T. 1985
Cutbacks, Layoffs, and other Obscenities: Making Human Resource Decisions, *Business Horizons,* 28:4, 68-75.

■ Pfeffer, Jeffrey 1981
Management as Symbolic Action: The Creation and Maintenance of Organizational Paradigms, *in* Larry L. Cummings and Barry M. Staw (Eds.), *Research in Organizational Behavior,* Vol. 3, Greenwich: JAI Press, 1-52.

■ Pfeffer, Jeffrey 1994
Competitive Advantage through People, *California Management Review,* 36, 9-28.

■ Pfeffer, Jeffrey, and James N. Baron 1988
Taking the Workers Back Out: Recent Trends in that Restructuring of Employment, *in* Larry L. Cummings and Barry M. Staw (Eds.), *Research in Organizational Behavior,* Vol. 10, Greenwich: JAI Press, 257-303.

■ Porac, Joseph F., Howard Thomas, and Charles Baden-Fuller 1989
Competitive Groups as Cognitive Communities: The Case of Scottish Knitwear Manufactures, *Journal of Management Studies,* 26, 397-416.

■ Porac, Joseph F., Howard Thomas, Fiona Wilson, Douglas Paton, and Alaina Kanfer 1995
Rivalry and the Industry Model of Scottish Knitwear Producers, *Administrative Science Quarterly,* 40, 203-227.

■ Porter, Michael E. 1980
Competitive Strategy, New York: The Free Press.

■ *PRNewswire* 1996
CILCORP Inc. Will Take a Fourth Quarter 1996 Charge Against Earnings to Reflect the Cost of a Voluntary Early Retirement Incentive Plan, November 25th.

■ Pullinger, Deborah 1992
Slimming Down and Wasting Away: Case for the Process Doctor, *Management Education and Development,* 23, 328 - 332.

■ Rice, Daniel, and Craig Dreilinger 1991
After the Downsizing, *Training and Development,* 44:5, 41-44.

■ Richman, Linda 1993
When Will the Layoffs End?, *Fortune,* 128:6, 54-56.

■ Robinson, Sandra L. 1997
Trust and Breach of the Psychological Contract, *Administrative Science Quarterly,* 41, 574-599.

■ Ropp, Kirkland 1987
Downsizing Strategies: Reducing the Trauma of Reducing Employees, *Personnel Administrator,* 32:2, 61 - 64.

■ Rousseau, Denise M. 1995
Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements, Thousand Oaks: Sage.

■ Schick, Allen G., Lawrence A. Gordon, and Susan Haka 1990
Information Overload: A Temporal Approach, *Accounting, Business, and Society,* 15, 199-220.

■ Shleifer, Andrei, and Lawrence H. Summers 1987
Breach of Trust in Hostile Takeovers, *in* Alan J. Auerbach (Ed.), *Corporate Takeovers: Causes and Consequences,* Chicago: University of Chicago Press, 33-67.

■ Singh, Harbir 1993
Challenges in Researching Corporate Restructuring, *Journal of Management Studies,* 30, 1-16.

■ Sproull, Lee S. 1981
Beliefs in Organizations, *in* Paul C. Nystrom and William H. Starbuck (Eds.), *Handbook of Organizational Design,* Vol. 2, New York: Oxford University Press, 203-224.

■ Steiner, George A., and John F. Steiner 1994
Business, Government, and Society: A Managerial Perspective, New York: McGraw-Hill.

■ Stewart, Thomas A. 1997
When Change Is Total, Exciting—and Scary, *Fortune,* 135:4, 169-170.

■ Sutton, Robert I., and Thomas D'Aunno 1989
Decreasing Organizational Size: Untangling the Effects of Money and People, *Academy of Management Review,* 14, 194-212.

■ The New York Times 1996
The Downsizing of America, New York: Random House.

■ Tomasko, Robert M. 1987
Downsizing: Reshaping the Corporation for the Future, New York: AMACOM.

■ Touby, Lauren 1993
The Business of America Is Jobs, *Journal of Business Strategy,* 14:6, 21-31.

■ Trice, Harrison M., and Janice M. Beyer 1993
The Cultures of Work Organizations, Englewood Cliffs: Prentice Hall.

■ U.S. Energy Information Administration 1993
Financial Statistics of Major U.S. Investor-Owned Electric Utilities, Washington, D.C.: U.S. Department of Energy.

■ U.S. Energy Information Administration 1996
The Changing Structure of the Electric Power Industry: An Update, Washington, D.C.: U.S. Department of Energy.

■ Useem, Michael 1993
Executive Defense: Shareholder Power and Corporate Reorganization, Cambridge: Harvard University Press.

■ Whipp, Richard, Robert Rosenfeld, and Andrew Pettigrew, 1989
Culture and Competitiveness: Evidence from Two Mature UK Industries, *Journal of Management Studies,* 26, 561-585.

■ Williamson, Oliver E. 1975
Markets and Hierarchies, New York: Free Press.

■ Williamson, Oliver E. 1981
The Economics of Organizations: The Transaction Cost Approach, *American Journal of Sociology,* 87:3, 548-577.

■ Worrell, Dan L., Wallace N. Davidson, and Varinder M. Sharma 1991
Layoff Announcements and Stockholder Wealth, *Academy of Management Journal,* 34, 662-678.