

## How You Downsize Is Who You Downsize: Biased Formalization, Accountability, and Managerial Diversity

Alexandra Kalev

*American Sociological Review* 2014 79: 109

DOI: 10.1177/0003122413518553

The online version of this article can be found at:

<http://asr.sagepub.com/content/79/1/109>

---

Published by:



<http://www.sagepublications.com>

On behalf of:



American Sociological Association

Additional services and information for *American Sociological Review* can be found at:

**Email Alerts:** <http://asr.sagepub.com/cgi/alerts>

**Subscriptions:** <http://asr.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

>> [Version of Record](#) - Jan 29, 2014

[What is This?](#)

# How You Downsize Is Who You Downsize: Biased Formalization, Accountability, and Managerial Diversity

Alexandra Kalev<sup>a</sup>

## Abstract

Scholars and pundits argue that women and minorities are more likely to lose their jobs in downsizing because of segregation or outright discrimination. In contrast, this article explores how the formalization and legalization of downsizing affect inequalities. According to bureaucracy theory and management practitioners, formalization constrains decision-makers' bias, but neo-structural and feminist theories of inequality argue that formalization can itself be gendered and racially biased. Accountability theory advances this debate, pointing to organizational and institutional processes that motivate executives to minimize inequality. Building on these theories, and drawing on unique data from a national sample of 327 downsized establishments between 1971 and 2002, I analyze how layoff formalization and actors' antidiscrimination accountability affect women's and minorities' representation in management after downsizing. Results demonstrate that, first, downsizing significantly reduces managerial diversity. Second, formalization exacerbates these negative effects when layoff rules rely on positions or tenure, but not when layoff rules require an individualized evaluation. Finally, antidiscrimination accountability generated by internal legal counsels or compliance awareness prods executives to override formal rules and reduce inequalities. I conclude that although downsizing has been increasingly managed by formal rules and monitored by legal experts, this has often meant the institutionalization of unequal, rather than equal, opportunity.

## Keywords

downsizing, organizations, inequality, formalization, accountability, diversity

The growth of managerial cadres in U.S. organizations since the 1950s, and the antidiscrimination legislation of the 1960s, expanded opportunities for women and minorities to achieve managerial positions and social mobility. In the 1980s, that progress began to slow (Stainback and Tomaskovic-Devey 2012) just as corporate restructuring began to rise. Whether referred to as downsizing, rightsizing, fat-trimming, de-layering, or a fitness program, noncyclical layoffs have become a common business strategy among U.S. corporations,

with a rising share of managers among displaced workers (Cappelli 1992; Helwig 2004; Osterman 2000). Data on individuals from the Bureau of Labor Statistics show that women

---

<sup>a</sup>Tel Aviv University

### Corresponding Author:

Alexandra Kalev, Department of Sociology and Anthropology, Tel Aviv University, Tel Aviv, Ramat Aviv, 69978, Israel  
E-mail: [akalev@post.tau.ac.il](mailto:akalev@post.tau.ac.il)

and minorities have experienced higher displacement rates (Fairlie and Kletzer 1996; Farber 1997; Gardner 1995; Helwig 2004).

Two main reasons are offered for women's and minorities' higher layoff rates. Some point to their weaker labor market attributes, such as marginal jobs (Cornfield 1983; Haveman, Broschak, and Cohen 2009) and lower tenure (Cornfield 1987; Hagstrom 1999; Milkman 1997). Others find gender and racial gaps in layoffs regardless of position or tenure, suggesting outright discrimination as the mechanism (Couch and Fairlie 2010; Wilson and McBrier 2005; Zwerling and Silver 1992). We know little, however, about whether such inequalities exist for women and minorities in *management* (Dencker 2008; Haveman et al. 2009). We know even less about how organizational structures, actors, and environments affect who gets downsized (Dencker 2008; Hamlin, Erkut, and Fields 1994).

Without attending to organizations, our theories of contemporary stratification tend to echo popular race- and gender-blind logics, wherein agent-less factors, such as business necessities or remnants of past discrimination, are seen as responsible for gender and racial disparities (DiTomaso 2013; Wilson 2012). Such explanations leave us with a thin sociological theory of job loss and little if any remedial policy. Taking an organizational approach, this article makes a novel contribution to a theory of job loss by exploring, first, whether the share of women and minorities in management declines following downsizing, and second, how organizational structures, actors' accountability, and the institutional environment shape these outcomes (Kalleberg 2011; Stainback, Tomaskovic-Devey, and Skaggs 2010). More broadly, this article uses the case of downsizing layoffs to explore how organizations shape patterns of gender and racial inequality in the new economy, wherein continuous corporate restructuring coexists with highly formalized and legalized employment relations.

As an organizational process, downsizing layoffs have been part of the more general

trend of the formalization and legalization of employment in the post-civil rights United States (Sutton et al. 1994). When deciding whom to let go, companies are increasingly relying on standardized rules and legal experts to oversee the process. Three theoretical approaches offer predictions regarding how such institutionalization of downsizing may affect managerial diversity. Endorsing personnel experts' rhetoric, bureaucracy theory views formal rules as taming decision-makers' nepotism and biases (Bielby 2000; Reskin 2000; Weber [1924] 1968). Accordingly, formalization should reduce gender and racial inequalities in downsizing outcomes. In contrast, two structural bias theories, neo-structural and feminist theories of organizations (Acker 1990; Baron 1984; Nkomo 1992), see work structures as constituted on unequal gender and racial relations. If formal rules feed into biased structures, they will exacerbate inequalities in downsizing outcomes. Finally, accountability theory argues that organizational and institutional pressures to avoid discrimination and attend to diversity can motivate decision makers to reduce inequality (Castilla 2008; Dencker 2008; DiMaggio and Powell 1983; Kalev, Dobbin, and Kelly 2006; Tetlock 1985). Scholars often view accountability as supplementing formalization by ensuring implementation (Bielby 2000; Weber [1924] 1968). But we know very little about whether and how accountability works when rules themselves exacerbate inequality.

I explore these predictions using rich longitudinal data on downsizing processes in a national sample of 327 work establishments. These unique data make organizational downsizing features central to the analysis while allowing for research beyond a single organization or industry. My quantitative analyses are supplemented with data from in-depth interviews with downsizing executives. Joining growing interest in organizational restructuring, precarious employment, and inequality (Dencker 2008; Haveman et al. 2009; Kalev 2009; Kalleberg 2011; Williams, Muller, and Kilanski 2012), this study is the first to provide empirical evidence on the effects of

different organizational approaches to downsizing on managerial diversity and a foundation for a theory of job loss.

The study's theoretical contributions extend beyond downsizing. For neo-structural, feminist, and institutional theories of organizations, inequality, and the law, I offer a new understanding of how the key organizational legacies of civil rights legislation, formalization, and antidiscrimination accountability shape contemporary inequalities. In contrast to the view of formalization as inherently neutral, I point to *biased formalization* as a mechanism for translating gendered and racialized organizational structures into unequal outcomes or, in Reskin's (2003:1) terms, for getting the chloroform into Edwin Bartlett's stomach. And in contrast to the view of accountability as simply enforcing formalization (Bielby 2000; Castilla 2008; Kalev et al. 2006), I explore it as a mechanism that encourages actors to *override formal rules*. As formalization and accountability have become symbols of civil rights compliance and fairness (Dobbin 2009; Edelman et al. 2011), as well as means for social engineering more broadly (Bromley and Powell 2012; Power 1997), it is crucial that we understand whether and how they operate to promote social goals or reproduce structures of power.

## DOWNSIZING AS AN ORGANIZATIONAL PROCESS

The formalization and legalization of corporate employment relations are two formative legacies of the civil rights movement and anti-discrimination legislation (Sutton et al. 1994). Facing ever-expanding employment regulations, human resources professionals have developed elaborate systems of standardized personnel rules, borrowed from personnel and union tool kits, and expanded the use of legal experts (Dobbin 2009; Nelson and Nielsen 2000).

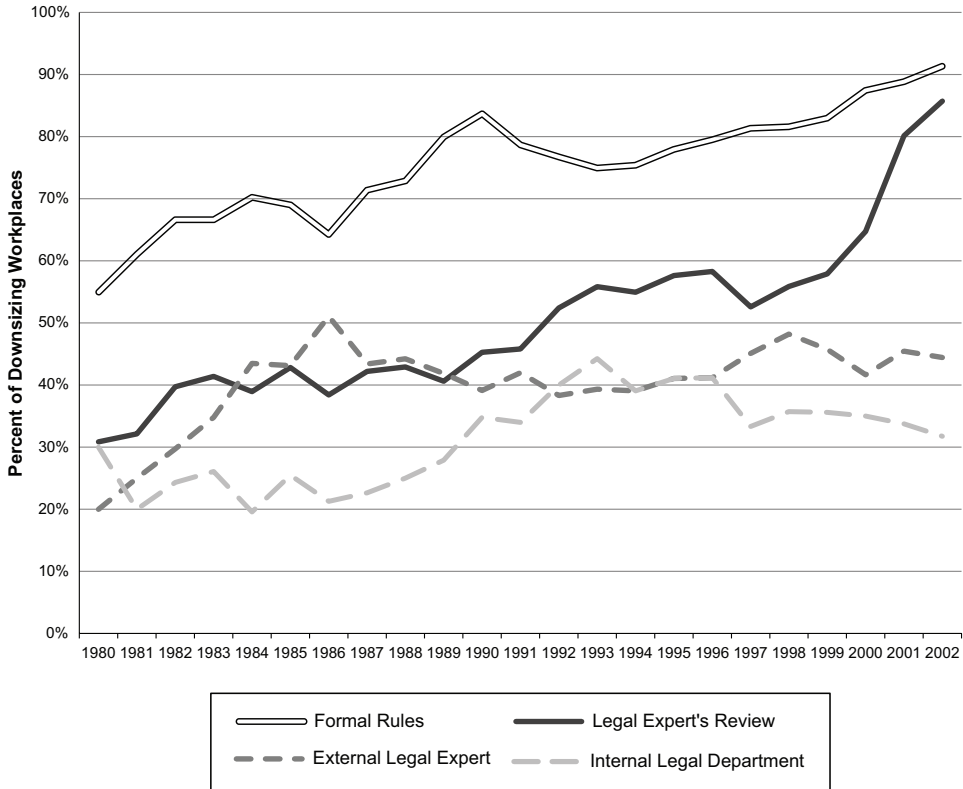
Corporate downsizing has been no exception to this trend. Figure 1 depicts downsizing features over time, based on data from a 2002 retrospective survey of the national sample of

327 downsizing organizations upon which my analyses are based. Proportions reflect the number of surveyed workplaces that existed in each year. The sample represents relatively older, larger, and more stable workplaces; trends might be less pronounced among younger and smaller establishments. As Figure 1 shows, downsizing transformed between 1980 and 2002, from almost half of layoffs conducted with no formal rules, and most without legal counsel, to a highly formalized process accompanied by lawyers. No law requires companies to manage downsizing this way; yet these features have become commonplace among employers with and without heightened legal awareness or oversight (see Figure S1 in the online supplement [<http://asr.sagepub.com/supplemental>]). Formality and accountability have come to symbolize fairness and compliance in downsizing (Cascio 2010; Edelman et al. 2011; Fryer 2009). Yet, in layoffs, as in other employment realms, we have little knowledge of their effects on equality.

## FORMALIZATION AND ITS DISCONTENTS

Bureaucracy theory, organizational researchers, and management practitioners have long depicted standardized rules as means for taming bias in personnel decisions (Bielby 2000; Cascio 2010; Edelman et al. 2011; Fryer 2009; Reskin 2000; Weber [1924] 1968). Good data are rare, but studies such as Reskin and McBrier's (2000) and Elvira and Zatzick's (2002) show that formal personnel procedures mitigate gender and racial inequalities in hiring and promotion processes. Compared to informal decision-making, formal layoff rules should reduce the negative effects of downsizing (Elvira and Zatzick 2002).

When studies find that formalization does not reduce inequality, explanations revolve around lack of or partial implementation (Nelson and Bridges 1999; Reskin and McBrier 2000; Roscigno 2007) or imperfect rules that allow decision-makers' bias to



**Figure 1.** Formal Layoff Rules and Legal Expert Oversight in Downsizing, 1980 to 2002;  $N(\text{max}) = 327$

creep in (Kmec 2005). The view that bureaucratic structures are impartial and that bias is rooted in actors remains unchallenged in such accounts. This view is typical in scholarship on bureaucracy more broadly (Arendt 1963; Bauman 1989; Shenhav 2013).

My study departs from a theory of formalization as inherently equalizing and of bias as rooted solely in actors. Instead, I argue that whether formal rules are equitable varies significantly depending on their articulation with organizational structures, actors, and the environment. Seemingly neutral rules that disregard deeply institutionalized biases, such as structural disadvantages, will deepen inequality rather than reduce it. I call this *biased formalization*. Although few studies have systematically explored this idea, institutionalists (Nonet and Selznick 1978), neo-structuralists (Baron 1984), and feminist scholars (Acker 1990),

along with the Supreme Court (*Griggs v. Duke Power Co.*, 401 U.S. 424[1971]), made this point decades ago.

In “Organizational Perspectives on Stratification” (1984), Baron presented a neo-structural theory of stratification, echoing Kanter’s (1977) argument that one’s position in organizational structures shapes career outcomes, regardless of human capital characteristics. Feminist scholars further developed a theory of gendered organizations, warning that formal rules that do not challenge the gendered and racial biases inherent to the organization of work will reproduce inequality (Acker 1990, 2006; Ely and Meyerson 2000; Nkomo 1992).

Concurring with the possibility of biased formalization, DiPrete (1989) found that women’s concentration in jobs with short ladders deepens sex segregation (see also Huffman 1995), and Cornfield (1987) shows that

union-induced bureaucratization affects ethnic inequalities in layoffs. Kmec (2005:327) argues that formal staffing rules that include gendered considerations, such as the “ideal worker norm,” are biased, and Bielby’s (2012:30) research on racial pay gaps among financial advisers concludes that “human resources systems that fail to assess the structural sources of . . . bias, are race-neutral in name only, allowing the vulnerabilities faced by African-Americans to persist and grow.” Despite such insights, we have little theoretical development and research on how biased formalization works and articulates with actors’ accountability, let alone within the context of restructuring. If work structures are laden with gender and race, as neo-structural and feminist theories argue, changes to structures should have disparate, even if unintended, effects for women and minorities (Kalev 2009; Vallas 2003).

### *Structural Disadvantage and Layoff Rules*

A pertinent source of structural disadvantage for women and minorities is their late entrance into managerial ranks and their ongoing segregation to marginalized managerial jobs (Stainback and Tomaskovic-Devey 2012). Female and minority managers hold the least valued, least stable positions, with little or no authority, and in support functions, such as human resources, benefits, community outreach, and government relations (Elliott and Smith 2004). Concentration in these positions, as well as women’s family responsibilities, also widens the racial, and especially gender, tenure gap (Farber 2008; Glass and Riley 1998; Neumark 2000; Petersen, Spilerman, and Dahl 1989; Spilerman and Petersen 1998). In stable organizations, segregation and tenure gaps may decline as bias in hiring and promotion declines (Reskin and McBrier 2000). During restructuring, however, layoff rules that rest on these structural disadvantages may roll back the clock on management diversity gains, as jobs and tenure lengths predominantly characterizing

women and minorities are more likely to be axed (Wilson and McBrier 2005).

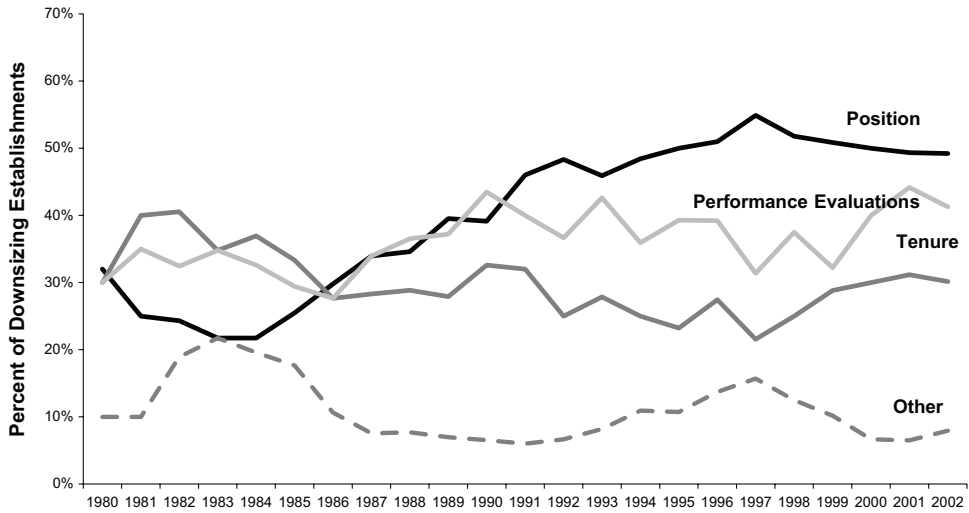
As Figure 2 shows, position and tenure criteria together guide most downsizing decisions. By 2002, they were used in 80 percent of downsizing cases. Extant research aligns with the expectation about their negative effects. Haveman and colleagues (2009) show that female managers’ concentration in lower rungs in the California savings and loan industry increased their displacement risk during organizational decline. Similarly, Callender (1987) found that women were disproportionately laid off because they were concentrated in jobs chosen to be cut first (see also Cornfield 1983; Hagstrom 1999). Studies have also found that although seniority-based layoffs have been historically regarded as fair and efficient (Cornfield 1987; Couch and Fairlie 2010; Fryer 2009), they have unequal gendered and racial layoff outcomes (Callender 1987; Cornfield 1987; Hamlin et al. 1994; Milkman 1997).

Together, theory and research have established that position- and tenure-based rules are associated with gender and race. Thus, although formal rules are generally expected to reduce inequality, I hypothesize the following:

*Hypothesis 1:* Layoff rules that keep key positions or the most tenured managers will have a negative effect on managerial diversity.

## **CIVIL RIGHTS ACCOUNTABILITY AND INEQUALITY IN DOWNSIZING**

Neo-structural and feminist theories of inequality help contextualize bureaucratic rules within unequal organizational structures. But these theories have either ignored actors’ accountability (Acker 1990; Ely and Meyerson 2000) or treated it as a mechanism for ensuring the implementation of formal rules (Bielby 2000; Castilla 2008; Kalev et al. 2006; Kmec 2005; Reskin 2000). Yet, if formal rules feed on biased structures, full implementation will deepen inequality rather than reduce it. We



**Figure 2.** Formal Layoff Rules Used in Downsizing, 1980 to 2002;  $N(\max) = 327$

*Note:* Because organizations may use more than one layoff rule, the cumulative proportion exceeds one.

thus need to expand our theory of accountability to understand its articulation with biased formalization.

Social psychologists and organizational sociologists agree that executives' accountability—the notion that they may need to explain their actions to a constituency whose approval they seek—affects their decision making (Tetlock 1999). Antidiscrimination accountability should therefore reduce gender and racial bias in personnel decisions. The social psychological variant of this argument focuses on cognitive effort and self-monitoring that reduce bias when decision makers expect to be asked about their choices or become aware of the discriminatory implications of their decisions (Brooks and Purdie-Vaughns 2007; Castilla 2008; Salancik and Pfeffer 1978; Tetlock 1985). The more sociological variant argues that expectations imposed by the institutional environment or powerful constituencies encourage organizational actors to focus on equality (DiMaggio and Powell 1983; Pfeffer and Salancik 1978). Dencker (2008), for example, shows that under equity pressures, executives make efforts to reduce gender gaps in promotions during restructuring (see also Hamlin et al. 1994). Both theoretical variants suggest that decision makers will care more about gender and racial dis-

parities under conditions that trigger antidiscrimination accountability.

### *Actors' Accountability and Biased Formalization*

To understand how formalization works, we therefore need to examine its articulation not only with unequal structures but also with actors' antidiscrimination accountability. Rules will have varying effects depending on accountability contexts.

*Rules that trigger accountability.* Formal performance evaluations, a centerpiece of modern personnel systems, are supposed to prevent managers from using arbitrary considerations in personnel decisions (Dobbin 2009). Scholars and management practitioners mostly agree, however, that these evaluations often reflect personal likes and dislikes (Culbert and Rout 2010; Fryer 2009). Studies show that women, and especially minorities, tend to receive lower scores than equally performing white men when raters are white men, which is often the case due to segregation (Castilla 2012; Elvira and Town 2001; Tsui and O'Reilly 1989). Others show that decision makers use performance scores to justify discriminatory decisions (Bisom-Rapp

1999; Roscigno 2007). It is therefore reasonable to expect that, as with position and tenure, evaluation-based layoff rules will reflect biased structures and reduce managerial diversity.

Importantly, however, evaluation-based decision making may trigger actors' antidiscrimination accountability. When downsizing executives use performance evaluations, unlike layoffs by position or tenure, their decisions require consideration of rich, individualized information and can be tracked to specific decision-makers rather than to a centralized, impersonal rule (Castilla 2008; Petersen and Saporta 2004; Salancik and Pfeffer 1978). According to accountability theory, if evaluation-based layoff decisions trigger actors' antidiscrimination accountability, executives will make efforts to avoid negative effects on managerial diversity regardless of possible biases in performance evaluations (Salancik and Pfeffer 1978; Tetlock 1985, 1999). Dencker's (2008) finding that moving from a seniority-based to a performance-based reward system improves women's promotion rates during restructuring is consistent with this point.

*Hypothesis 2:* Compared to informal layoffs, layoff rules based on performance evaluations will have a positive effect on managerial diversity post-downsizing.

*Legal counsel and accountability.* The legalization of employment relations has led to the growing involvement of legal counsels hired by employers (Bisom-Rapp 1999; Dobbin and Kelly 2007; Nelson and Nielsen 2000). By 2002, 78 percent of workplaces in my sample used legal experts in downsizing. These experts oversee downsizing to safeguard against liabilities under Title VII of the Civil Rights Act, the Age Discrimination in Employment Act, and additional laws regulating layoff procedures.

Executives may, however, hire legal experts merely to symbolize compliance without changing actual practices (Edelman et al. 2011; Meyer and Rowan 1977), and lawyers concerned with appeasing their clients may

cooperate with such an agenda (Nelson and Nielsen 2000). In such cases, an attorney's involvement might be narrow or focused on bulletproofing, rather than changing the process (Bisom-Rapp 1999).

Unless the review is purely symbolic, attorneys will offer advice and review layoff plans; this should directly reduce disparities and thus the negative effects of downsizing on managerial diversity. Attorneys' reviews may also increase executives' awareness of diversity and sense of accountability. Social psychologists argue that decision makers are often unaware of the demographic outcomes of their decisions because they are only exposed to partial bits of data. When information is presented in large batches, as is the case with legal reviews, awareness of gender and race issues is heightened (Brooks and Purdie-Vaughns 2007; Crosby et al. 1986). This awareness can trigger accountability, motivating decision makers to take steps to reduce unequal outcomes even when those outcomes originate in legitimate formal rules.

Although it is difficult to assess employers' intent in consulting a legal expert, institutional theory suggests that when employers have an internal legal department, legal reviews are more likely to be effective (Edelman and Petterson 1999; Kalev et al. 2006; Weber [1924] 1968).

*Hypothesis 3:* Attorneys' review of downsizing plans will have a positive effect on managerial diversity when an organization has a legal department.

Because of the low numbers of black managers, decision makers may be more concerned with maintaining levels of racial diversity than with gender diversity (Fryer 2009). If this is the case, the effect of a legal review will be larger for blacks than for women.

### *Institutional Environment and General Nondiscrimination Awareness*

Regardless of the layoff rules and legal experts' reviews, an organization's legal



environment may institutionalize general awareness of civil rights compliance among executives, which can lead to more equitable layoff processes. In this vein, Wilson, Roscigno, and Huffman (2013) show that in the public sector, where legal awareness is higher compared to the private sector, blacks have been historically less likely to lose their white-collar jobs. Among private sector organizations, higher legal awareness is likely found in organizations routinely under heightened regulatory oversight, those that collect affirmative action data, and those that have experienced discrimination charges or compliance reviews. Extant research shows that these features increase managerial diversity. I examine whether heightened legal awareness also has such an effect in bad economic times.

*Regulatory oversight.* Organizations with a government contract of at least \$50,000 come under the regulatory oversight of the Department of Labor's Office of Federal Contractor Compliance Program (OFCCP). Research shows that government contractors improve their gender, and especially racial, diversity (Leonard 1989, 1990; McTague, Stainback, and Tomaskovic-Devey 2009) and their diversity programs have more equitable outcomes (Kalev et al. 2006).

*Affirmative action data collection.* In addition to generic oversight, government contractors are also required to keep annual affirmative action plans that document diversity trends in management and other occupations. Employers do not submit these plans to Washington, but executives' knowledge that demographic numbers are collected and might be reviewed can trigger ongoing self-critical cognitive processes (Tetlock 1999) or otherwise prompt them to ensure their numbers are right. Empirical evidence supports this possibility, revealing positive effects of affirmative action plans in hiring and promotion (Holzer and Neumark 2000; Kalev et al. 2006; Leonard 1989). Downsizing may be no different, as suggested by Hamlin and colleagues' (1994) analysis of eight downsizing

events, wherein firms with affirmative action plans did not disproportionately lose women.

*Discrimination charges and OFCCP compliance reviews.* Experience with discrimination charges or affirmative action compliance reviews will arguably make executives more aware of discrimination and its costs, and prod them in a nondiscriminatory direction (Bielby 2012). Research shows that years after such events, employers continue to improve managerial diversity (Kalev and Dobbin 2006; Skaggs 2008, 2009).

*Hypothesis 4:* The presence of federal affirmative action oversight, affirmative action plans, or past discrimination charges or compliance reviews will have a positive effect on managerial diversity post-downsizing, regardless of downsizing features.

## DATA, MEASUREMENTS, AND METHODS

The main analyses draw on two merged data sources: government records for the years 1971 to 2002 on the demographic composition of 327 private downsizing establishments, and survey data on these establishments' downsizing events, organizational structures, and legal environments.

I obtained employment records on workforce demographics from EEO-1 forms, submitted annually to the government by private employers with more than 100 employees, or more than 50 employees if companies had at least \$50,000 worth of government contracts. I received these confidential data for research purposes from the Equal Employment Opportunity Commission through an Intergovernmental Personnel Agreement (IPA). These reports detail the sex, racial, and ethnic composition of an establishment's workforce in management and eight other occupations. EEO-1 reports were not available for 1974, 1976, and 1977 (9.6 percent of years). I interpolated these missing data using a weighted average, based on the distance to the closest

years available. Because there were no downsizings before 1980, this interpolation does not affect the outcome variable. I repeated the analysis reported here with data for the years 1978 and up; results remained robust.

I matched EEO-1 employment records to retrospective survey data on 327 downsizing establishments. These establishments are a subset of a national random sample—stratified by age, size, and industry—of 833 workplaces that filed EEO-1 reports in 1999 and were surveyed in 2002. All 833 interviewees, mostly human resources managers, were asked whether they ever had a downsizing event that included a reduction in force of over 10 percent. This cut point was based on pre-survey interviews with managers (see also Elvira and Zatzick 2002). The 39 percent of establishments that answered “yes” ( $n = 327$ ) comprise the sample used for this study.

This sample is quite similar to the national sample of 833 EEO-1 reporting establishments, in terms of age, industry, and size. There are more electronic and chemical manufacturers among downsizers (about 15 percent compared to 10 percent in the full sample) and fewer healthcare organizations (about 8 percent compared to 13 percent), reflecting differences in restructuring rates in these industries. Downsizers are slightly larger on average (875 versus 625 employees, respectively), and slightly less demographically diverse (detailed below). Downsizing establishments may also be different from non-downsizers in unobserved features, such as financial performance or risk-taking behavior that may affect managerial diversity. To avoid potential omitted variable bias, I limited the analysis to the 327 establishments that experienced downsizing. Because my research questions concern variations between different types of downsizing, focusing on downsizing establishments does not compromise the theoretical aims of this article. Moreover, the central findings reported here are consistent when analyses include the full sample of 833 firms.

That my sample of 327 downsizing establishments contains relatively large, stable EEO-1 reporting firms that survived until the

time of the survey might affect the results. For example, formalization might be less common, and institutional pressures less relevant, in smaller, non-EEO-1 reporting or non-surviving establishments. Although my sample is not representative of the entire U.S. population of downsizing organizations, these rich longitudinal national data on diverse establishments are the best available source for testing and developing theories on how downsizing methods and contexts shape gender and racial inequality.

All downsizing respondents were asked about the downsizing year, layoff decision rules, and whether an attorney was consulted. Interviewees had an average tenure of 14 years in the focal establishment. Pre-survey, in-person interviews revealed that human resources managers often regard downsizing experiences as “traumatic events” and have clear memories of associated processes and policies. Respondents were also asked about the presence and adoption year of a wide range of other organizational features and structures. Respondents who did not know an answer were given a chance to consult records or colleagues and were contacted again. This follow-up resulted in no missing data on downsizing-specific variables. Missing data on adoption years of other organizational features did not exceed 5 percent of the data of each variable and were imputed using OLS regressions with industry, establishment age, and establishment type as covariates. Results reported here remain robust when imputed missing values are excluded.

Because downsizing can span over two years (Baumel, Blinder, and Wolff 2003), my analyses center on effects two years after the event. I exclude later years to avoid capturing variance from subsequent events. The final dataset used in this analysis consists of 5,560 organization-years, with a median of 15 years of data for each establishment.

### *Dependent Variables*

The outcome of interest, managerial diversity, is measured by three variables: the proportion

of white men, white women, and black men/women among managers, as obtained from the EEO-1 reports. Managerial diversity increases when the proportion of either white women or blacks among managers increases, or when the proportion of white men declines. In 1971, 50 percent of establishments had 95 percent or more white men among managers; this declined to 68 percent in 2002. White women increased from 1.9 percent in the median establishment to 19 percent, and blacks increased from none to 1.8 percent of management. Trends for blacks are similar in the larger sample of 833 establishments, whereas trends for whites are slightly larger, with white men's median declining from 93 to 64 percent and white women's growing from .04 to 21 percent. Among downsizers, the share of establishments with over 50 percent female and minority managers grew from 10 to 15 percent between 1971 and 2002, compared to a growth from 15 to 35 percent in the larger sample.

Initial analyses distinguishing between black male and black female managers revealed parallel patterns for the most part; I thus use a single measure. Where minor gender differences do exist between black men and women, I report them in the Findings section. In an unreported analysis, I also combined variables for white women and black women. These results are similar to those reported here. I chose the current specification because it provides a clearer picture of the racial patterns in these data.

To construct the outcome variables, I transformed the proportions of each group among managers to log odds (Fox 1997)<sup>1</sup> to center the large differences in scale and change in each group's proportion and to keep the distribution closer to normal.

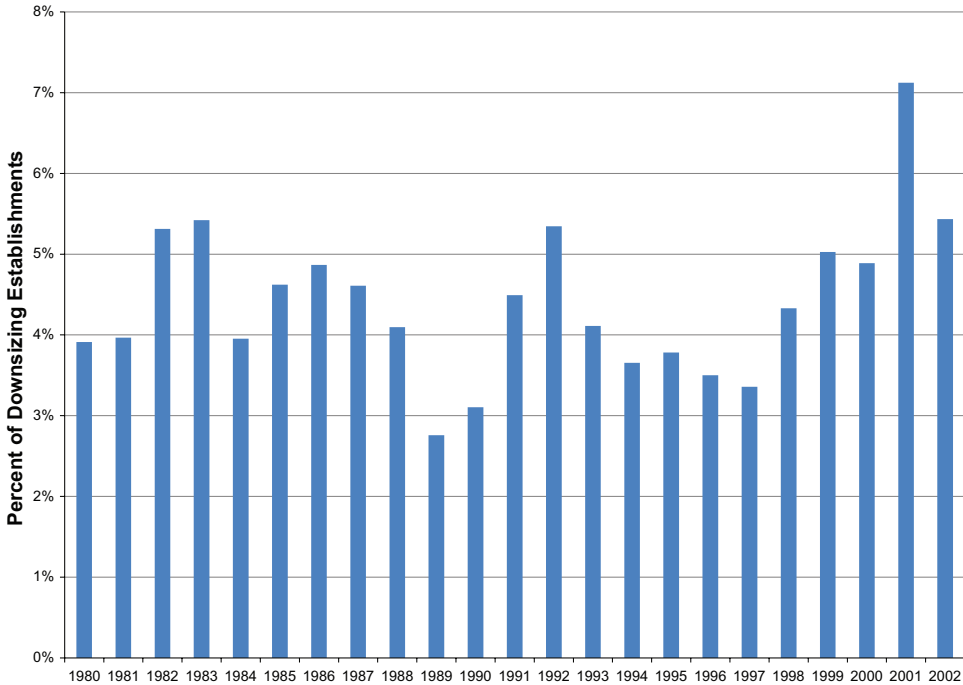
### *Core Explanatory Variables*

The variable indicating a downsizing event is based on the survey data. EEO-1 data on workforce size are not a reliable measure for downsizing because establishments often add functions and hire workers during restructuring, alongside layoffs (Baumel et al. 2003). The

variable denoting downsizing receives zero in all years observed for a specific workplace, and one in the year of the event and the following two years. Additional years are excluded from the analyses. Further layoffs in this short period are rare but are captured with controls. Figure 3 reports frequencies of downsizing in a given year; it shows that downsizing events were not limited to recession years.

I obtained information on layoff rules from the survey. Based on a literature review (Longmecker and Ariss 2004; McCune, Beatty, and Montagnano 1988; Shaw et al. 1998; Society for Human Resource Management [SHRM] 2001) and preliminary interviews, response options regarding layoff rules were position (43 percent of establishments), tenure (30 percent), performance evaluations (37 percent), decisions were left to each department, and other. I combined the latter two and they serve as the omitted category in the analysis (26 percent). Percentages sum to over 100 percent because respondents could mention multiple layoff rules. Results are highly robust to alternative choices of the omitted category. The omitted category chosen, however, helps focus attention and discussion on the core theoretical interest, types of formalization. When respondents mentioned a layoff rule, it received a coding of 1 in the year of downsizing and thereafter. Variables received zero before downsizing and if the rule was never used. The layoff rules variables essentially form interactions with the downsizing variable. These interactions have no baseline measures independent of downsizing because layoff rules are equal to 0 unless a downsizing occurred.

I measured the use of legal experts in downsizing using two survey variables. One indicates whether employers without a legal department consulted an external attorney. Like layoff rules, this variable captures an interaction with downsizing, which has no baseline measure because an attorney was consulted only when downsizing occurred. The second indicator denotes downsizing in establishments with a legal department, constructed as an interaction between "downsizing" and a "legal department." Virtually all



**Figure 3.** Percent of Establishments that Downsized in a Given Year, 1980 to 2002;  $N(\text{max}) = 327$

respondents with a legal department reported a legal review of downsizing. Measures of awareness of the legal environment—federal affirmative action oversight, affirmative action plans, and past charges/reviews—were constructed as interactions between each of these organizational features and downsizing. Table 1 presents definitions, data sources, means, and standard deviations for all variables in the analyses based on the full establishment-by-year dataset.

### *Other Factors Affecting Managerial Composition*

To isolate the effect of downsizing features, I include indicators of additional organizational changes known to affect management diversity. Stable organizational characteristics, such as industry or location, are not included in the models but are accounted for by establishment fixed effects.

*Other organizational changes.* Mergers create redundancies and may reduce the odds that women and minorities remain in a firm (Haveman et al. 2009). Restructuring work around *self-directed teams* and *cross-training* may improve managerial diversity (Kalev 2009). Because downsizing may be accompanied by hiring and additional termination, I include indicators of *establishment size*, *management size*, *subsequent layoffs*, and the *proportion of managers hired from external sources*.

*Personnel structures.* *Unionization* may affect both the type of downsizing and managerial diversity (Kelly 2003; Kmec and Skaggs 2009). *Formal hiring and promotions* are often associated with higher managerial diversity (Reskin and McBrier 2000), although formalization may create separate career trajectories for different groups (Baldi and McBrier 1997). *Work-family programs* may reduce caregivers' career obstacles and

**Table 1.** Descriptive Statistics of Variables in the Analysis of Downsizing and Managerial Composition, Based on Organization-Year Data on Downsizing Establishments ( $N = 5,560$ )

	Mean	SD	Min.	Max.	Type	Data Source
<i>Proportion of Managers Who Are</i>						
White men	.748	.221	0	1	Continuous	EEO-1
White women	.177	.187	0	1	Continuous	EEO-1
Black men and women	.036	.084	0	1	Continuous	EEO-1
<i>Downsizing</i>						
Downsizing event	.149	.356	0	1	Binary	Survey
Downsizing with layoffs by						
Position	.062	.242	0	1	Binary	Survey
Tenure	.044	.206	0	1	Binary	Survey
Performance evaluations	.055	.227	0	1	Binary	Survey
No formal rule/other (omitted category)	.052	.222	0	1	Binary	Survey
<i>Institutional Factors</i>						
External legal expert oversight of downsizing	.110	.313	0	1	Binary	Survey
Legal department	.304	.460	0	1	Binary	Survey
Federal affirmative action mandate	.566	.496	0	1	Binary	Survey
Affirmative action plan	.451	.498	0	1	Binary	Survey
Discrimination charges/compliance reviews	.395	.489	0	1	Binary	Survey
<i>Other Organizational Changes</i>						
Merger experience	.075	.263	0	1	Binary	Survey
Work teams	.129	.335	0	1	Binary	Survey
Job rotation	.400	.490	0	1	Binary	Survey
Establishment size (# of employees)	882	1179	10	13740	Continuous	EEO-1
Percent managers in establishment	.135	.096	.004	.788	Continuous	EEO-1
External recruitment of managers (% of hires) <sup>a</sup>	40.027	3.880	36	51	Continuous	Survey
Additional layoffs within two years	.017	.182	0	4	Continuous	Survey
<i>Organizational Structures</i>						
Union agreement	.288	.453	0	1	Binary	Survey
Formal human resources policies <sup>b</sup>	3.326	1.956	0	7	Count	Survey
Formal discharge policy	.499	.500	0	1	Binary	Survey
Diversity programs <sup>c</sup>	.197	.585	0	4	Count	Survey
Special recruitment for women and minorities	.131	.338	0	1	Binary	Survey
Work-family accommodations <sup>d</sup>	.642	.881	0	4	Count	Survey
<i>Organizational Demography</i>						
Percent of top managers who are minorities <sup>a</sup>	2.726	8.887	0	100	Continuous	Survey
Percent of top managers who are women <sup>a</sup>	11.998	20.236	0	100	Continuous	Survey
Proportion white men among nonmanagers	.430	.252	0	.9921	Continuous	EEO-1

(continued)

**Table 1.** (continued)

	Mean	SD	Min.	Max.	Type	Data Source
Proportion white women among nonmanagers	.371	.244	0	1	Continuous	EEO-1
Proportion black among nonmanagers	.108	.145	0	1	Continuous	EEO-1
Proportion white men in core job	.398	.323	0	1	Continuous	EEO-1
Proportion white women in core job	.384	.319	0	1	Continuous	EEO-1
Proportion blacks in core job	.116	.164	0	1	Continuous	EEO-1
No white men in management	.004	.064	0	1	Binary	EEO-1
No white women in management	.138	.345	0	1	Binary	EEO-1
No blacks in management	.456	.498	0	1	Binary	EEO-1
Proportion white male in industry	.484	.151	.145	.742	Continuous	CPS
Proportion white female in industry	.309	.141	.125	.624	Continuous	CPS
Proportion black female in industry	.037	.022	.045	.119	Continuous	CPS
Proportion black male in industry	.043	.022	.086	.106	Continuous	CPS
Proportion white male in state labor force	.393	.057	.237	.595	Continuous	CPS
Proportion white female in state labor force	.347	.058	.187	.494	Continuous	CPS
Proportion black female in state labor force	.047	.033	.037	.195	Continuous	CPS
Proportion black male in state labor force	.044	.030	.021	.186	Continuous	CPS
Proportion contractors in industry	.523	.223	0	.821	Continuous	EEO-1
Unemployment rate (state)	6.632	2.095	2	18	Continuous	CPS
Industry employment	3213	2359	996	11458	Continuous	CPS

<sup>a</sup>Percents were obtained in 10-year intervals (2002, 1992, 1982). Values for other years were interpolated using a linear function. Removing these variables from the analysis does not change the results.

<sup>b</sup>Includes adoption of a formal HR department, written hiring and promotion guidelines, written job description, written promotion ladder, written performance evaluations, pay grade system, and internal posting of jobs.

<sup>c</sup>Includes diversity committee, diversity evaluations, diversity training, and mentoring or networking programs.

<sup>d</sup>Paid maternity leave, paternity leave, policy on flexible work hours, and top management support for work-family balance.

improve women's access to management (Glass and Riley 1998). Programs *targeting women and minorities in managerial recruitment* can also improve managerial diversity (Kalev et al. 2006).

*Organizational demography.* Executives tend to hire and promote workers who

look like them (Cohen, Broschak, and Have-  
man 1998; Kanter 1977); management composition also often reflects workers' composition (Elliott and Smith 2004). I therefore include measures of the *percent of women and blacks among top-10 executives* and the *proportion of workers from the focal group among nonmanagers* and *among the core job*.

*Labor markets.* High *unemployment* may disadvantage women and minorities in labor queues for managerial jobs (Reskin and Roos 1990), whereas *industry growth* may open opportunities for diverse groups. The *proportion of workers from each demographic group among industry and state labor forces* provides diverse candidates. Finally, the *proportion of government contractors in industry* subject to affirmative action requirements affects the demand for diverse managers (McTague et al. 2009).

### Supplementary Data from In-Person Interviews

Along with quantitative data, I draw on representative quotes from in-depth interviews with human resources and line managers in downsizing firms to highlight possible mechanisms related to patterns observed in the quantitative analysis.

Interviews were conducted during 2010 in 92 workplaces from four industries (food manufacturing, electronics, healthcare, and business services) in four cities (Boston, Chicago, Atlanta, and San Francisco), chosen to represent skill and demographic diversity. Workplaces were sampled from EEO-1 records and are generally similar in characteristics to the 327 workplaces in the main analyses. All interviewed establishments were screened to have at least an affirmative action plan, a diversity manager, or a taskforce; they are likely more formalized and have higher diversity awareness than the average workplace in the 327 sample. Interviews were conducted in-person or over the phone and lasted 30 to 90 minutes, using a semi-structured protocol, including open-ended questions regarding downsizing experiences. Of these establishments, 60 experienced downsizing, and 42 of those were asked about the process (layoff criteria and legal advice) and diversity considerations. In 10 cases, respondents were unable to provide this information.

Interviews were recorded, transcribed, and analyzed using Atlas.ti. Analysis involved reviewing transcripts for downsizing discussions and exploring common themes.

Responses regarding the downsizing process largely reflect the pattern observed among the 327 establishments, with layoffs by position being the most prevalent and by tenure the least, and about three-quarters using legal experts. I make no claims for generalization; rather, the goal in drawing on these qualitative materials is to suggest plausible mechanisms in the empirical relationships highlighted by the quantitative analyses. The quotes I use are exemplary and representative of dominant patterns in interviewees' accounts.

### Analytic Strategy

The rich quantitative data described earlier provide an excellent baseline for gauging the effects of organizational downsizing on managerial diversity. To account for stable, establishment-specific, unobserved heterogeneity, I use a fixed-effects specification for each establishment (Hicks 1994; Skaggs 2009). For example, a sexist organizational culture may cause both high exclusion in management and position-based downsizing with the goal of shedding female managers. In such a case, the observed effect of the position rule on managerial diversity might be due to the long-standing organizational culture. The fixed-effects estimation accounts for such unobserved factors. To achieve this specification, I subtracted the value of each annual observation from the establishment's mean for each variable in the analysis (Hsiao 1986). This transformation is equivalent to including 327 establishment dummy variables in the model, but it allows one to exclude the unique variance of each establishment from the calculation of the *R*-squared (explained variance). By virtue of this definition, fixed-effects estimation models only within-establishment, before and after, variation. Variables that are stable over time are, by default, excluded from the analysis.

To capture unmeasured changes correlated with the passage of time that affect all establishments alike, such as economic, cultural, or legal dynamics, I include dummy variables for each year, omitting 1971. The establishment and year fixed effects also help deal

with the clustering of errors around years and establishments (heteroskedasticity) due to the cross-sectional and longitudinal nature of pooled data (Sayrs 1989). The results and the main arguments of this article are robust to using Huber-White robust standard errors and to an AR(1) correction for within-unit serial correlation, based on the Cochrane-Orcutt method (using Stata's *xtregar* procedure). Finally, I examined whether multicollinearity affects the results. The average Variance Inflation Factor for each model centers around 2.8, with scores for the independent variables of interest well below five. I also repeated all analyses reported, entering each of the main explanatory variables one by one, as well as with no control variables except for the fixed effects. Results remain robust. Table S1 in the online supplement presents a correlation matrix for all the independent variables.

I use a Generalized Least Squares (GLS) estimation technique, Seemingly Unrelated Regression, that takes into account the correlation between the errors of the three outcome variables, producing more consistent estimates than Ordinary Least Squares (Zellner 1962). Findings reported are robust to using GLS or OLS estimation.

## FINDINGS: MANAGERIAL DIVERSITY AFTER DOWNSIZING

Tables 2 and 3 report estimates for the effects of downsizing on the representation of white women and black men/women among managers. Table 2 includes three pairs of nested models for managers who are white men, white women, and blacks. Each model includes all controls discussed earlier, and their coefficients are reported in Tables S2 and S3 in the online supplement. Exponentiating the coefficients as follows,  $[\exp(\beta) - 1] \times 100$ , tells us the percent change in the odds that managers are from a certain demographic group following a unit change in an independent variable. Coefficients smaller than .10 approximate the percent change in odds. The

*R*-squared in these tables, although not well-defined in GLS estimation, represents the goodness-of-fit for each equation (Greene 2002).

The first model for each group (1A, 2A, and 3A in Table 2) includes estimates for the average effect of a downsizing event, with no indicators for the method and context of downsizing. Corporate downsizing between 1980 and 2002 significantly reduced managerial diversity: following downsizing, the odds that managers are white men increase by 6 percent, on average, and the odds for blacks decline by 4.5 percent. The odds for white women are also negative, but significant only at the 10 percent error level. These estimates average across downsizings. They may be smaller or larger depending on the layoff rules and accountability context.

### *Structural Layoff Rules*

Models 1B, 2B, and 3B in Table 2 introduce indicators of downsizing process and context. The coefficients for the variable *downsizing* now represent a baseline for a series of interactions with layoff rules (position, tenure, or performance evaluation), legal department, external attorney, and the institutional context (antidiscrimination charges/reviews, federal affirmative action oversight, and affirmative action plan). Recall that there are no baseline coefficients for each layoff rule and for external attorney review because these are absent before downsizing occurs. The non-interacted coefficients for legal department and institutional context are presented at the bottom panel of Table 2.<sup>2</sup>

The baseline coefficients for downsizing now estimate the effect of layoffs not governed by formal rules and legal review, in establishments with no discrimination charges, compliance reviews, affirmative action plan, or oversight. In such establishments, downsizing is followed by an average increase of about 20 percent in the odds that managers are white men and a decline of about 16 percent for white women. The coefficient for blacks is not significant, but an



**Table 2.** Estimated Changes in the Log Odds of White Men, White Women, and Blacks among Managers Following Downsizing

	White Men		White Women		Black Women and Men	
	1A	1B	2A	2B	3A	3B
Downsizing	.060*** (.022)	.202*** (.052)	-.038 (.023)	-.119* (.053)	-.044* (.022)	-.052 (.051)
Structural Effects						
Layoff by Position		.145*** (.036)		-.174*** (.037)		-.132*** (.036)
Layoff by Tenure		-.010 (.038)		-.126** (.039)		.005 (.038)
Antidiscrimination Accountability in Decision Making						
Layoff by Performance Evaluations		-.083* (.036)		.086* (.037)		.002 (.036)
Legal Department Oversight of Layoffs		-.101* (.049)		.147** (.051)		.107* (.049)
External Attorney Oversight of Layoffs		-.029 (.046)		.057 (.048)		-.039 (.046)
General Compliance Awareness						
Federal Oversight x Downsizing		-.049 (.038)		.001 (.041)		-.033 (.032)
Affirmative Action Plan x Downsizing		-.032 (.039)		-.017 (.041)		.083* (.037)
Discrimination Charges and Compliance Reviews x Downsizing		-.119** (.040)		.144*** (.041)		.009 (.040)
Baseline Estimates						
Legal Department	-.219*** (.040)	-.154** (.032)	.135** (.041)	.056 (.034)	.091* (.040)	.046 (.040)
Federal Affirmative Action Oversight	.057 (.031)	.032 (.031)	-.065* (.032)	-.008 (.033)	.074* (.031)	.073* (.030)
Affirmative Action Plan	-.094*** (.026)	-.096*** (.026)	.028 (.027)	.037 (.027)	.031 (.026)	.027 (.027)
Discrimination Charges and Compliance Reviews	-.106*** (.023)	-.079** (.025)	.099*** (.024)	.071** (.026)	.112*** (.023)	.110*** (.025)
R-sq	.3861	.3906	.3704	.3741	.2689	.2726
Chi-sq	3567	3637	3308	3362	1827	1864

Note: Coefficients from a seemingly unrelated regression. Standard errors are in parentheses. All independent variables are lagged by one year, excluding size and the proportion of managerial jobs. All control variables appear in Tables S2 and S3 in the online supplement. The analysis includes binary variables for each year between 1972 and 2002.  $N(\text{Orgs/Cells}) = 327/5,560$ . Number of parameters in Models 1A, 2A, and 3A = 64; in Models 1B, 2B, and 3B = 72. Log Likelihood Ratio test for Models 1B, 2B, and 3B: Chi-sq (24) = 89.88;  $p < .0001$ .

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed test).

analysis of black women and men separately indicates a decline of 9 percent for black women and no effect for black men. Such wholly un-institutionalized downsizings are empirically rare, however, appearing in only 6 of the 327 organizations in my sample.

Coefficients for position, tenure, and performance evaluation, reported in Table 2, estimate the additional effect of these layoff rules *net* of the baseline effect of downsizing. These coefficients show that how employers downsize matters. When the layoff rule is based on position, the odds for white men being in management post-downsizing increase by over 15 percent, but decline for white women and black managers by about 16 and 12 percent, respectively, in addition to the baseline effect of downsizing. In tenure-based layoffs, the odds of finding white women in management post-downsizing decline by an additional 12 percent. The odds for male and female black managers remain intact, suggesting a unique racial pattern.

Interviews with managers recounting downsizing experiences corroborate these findings. A manager explained the loss of female managers in a position-based layoff in his firm:

That was really sad but there wasn't much we could do about it. They were in the right places with what their skills were, unfortunately it wasn't the right place that we kept, it wasn't the group that we kept.

Another manager explained their loss of diversity in downsizing similarly: "Some of that can't be avoided because you are eliminating a whole tier of positions or whole line of positions."

Overall, these results are consistent with the prediction that layoff rules that align with existing structural inequalities will affect women and minorities disproportionately. Formalization, in this case, appears to be problematic, especially for white women. Negative effects of downsizing are larger when using formal position or tenure rules than in the absence of formalization.

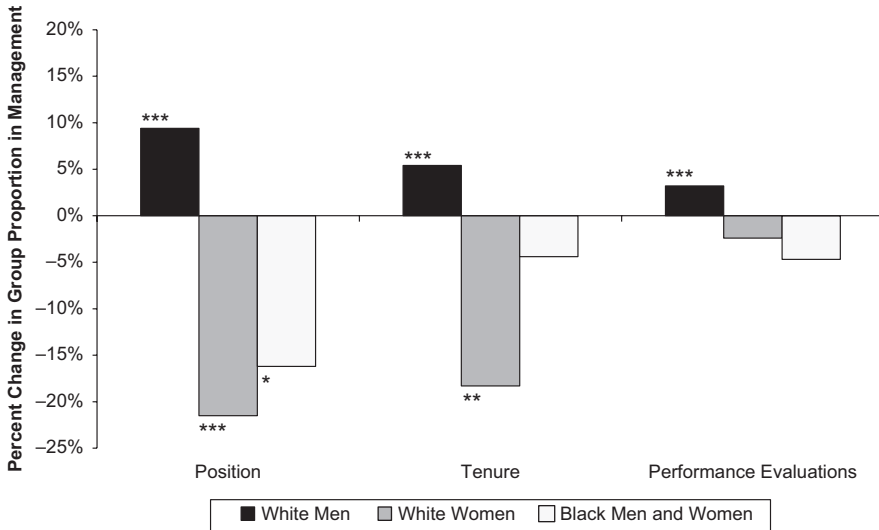
### *Antidiscrimination Accountability in Downsizing Decision Making*

When executives use performance evaluations, the positive effect of downsizing on white men declines significantly, and the negative effect on white women disappears. These results are consistent with the prediction that when the decision-making rule triggers executives' antidiscrimination accountability, it will generate more equitable outcomes.

Figure 4 illustrates the total effects of downsizing by each layoff rule on the proportion of each group in management in an establishment that had an average proportion of each group before downsizing (Petersen 1985). In position-based downsizing, white men increase by almost 10 percent, from 70.7 to 77 percent of managers; white women decline by 20 percent, from 20 to 15 percent; and black managers decline by 16 percent, from 4.4 to 3.7 percent of management. White women similarly decline following tenure-based layoffs. In contrast, when layoffs are based on performance evaluations, managerial diversity remains almost intact.

Executives may use multiple layoff rules. Table S5 in the online supplement presents the frequency of rule combinations. If employers combine structural rules with performance evaluations, the accountability triggered by using evaluations might motivate executives to revise their decisions. To test this possibility, I included in supplementary models, similar to 1B, 2B, and 3B, interactions of performance evaluations with one or both structural rules. No effects, however, were found.

Table 2 also shows that regardless of which layoff rule is used, legal experts' review of downsizing in organizations with a legal department has a positive interaction effect on white women and blacks in management, and a negative interaction effect on white men. Absent a legal department, an attorney's review has no effect. Executives either take legal reviews more seriously when a legal department oversees it, or external counsels



**Figure 4.** Percent Change in Group Proportion in Management Following Downsizing, by Layoff Rule

Note: \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed tests).

are more cautious about questioning executives' downsizing plans. In a supplemental analysis, I found no evidence that a legal review is more effective in organizations with a government contract, an affirmative action plan, or experience with discrimination charges or compliance reviews.

To ascertain whether legal reviews moderate effects of layoff rules, I added three-way interactions for "downsizing x layoff rule x legal department" in models similar to 1B, 2B, and 3B. Results for these interactions are shown in Table 3 (full models reported in Table S4 in the online supplement). Absent legal advice, position-based downsizing has negative effects on managerial diversity across the board, tenure rules have a negative effect on white women, and performance-based layoffs have no added effects. *When legal experts review the process, the same layoff rules lead to different outcomes.* Summing the relevant coefficients (a rule plus its interaction with a legal review) indicates that, in the presence of internal legal oversight, using a position rule does not reduce racial diversity ( $B = .03$ ;  $SE = .06$ ), and a tenure rule does not have a negative effect on white women ( $B = .01$ ;  $SE = .06$ ).

Interviews with downsizing executives shed light on the mechanism shaping these results. Legal reviews clearly increase executives' awareness of diversity issues in layoffs. Interview data show a significant difference in diversity awareness, depending on whether an attorney was involved. The eight executives involved in layoffs with *no* legal experts all described downsizing as a technical business process of shedding certain corporate units. Their answers to a question about diversity considerations in layoffs resemble these: "not that I am aware of"; "it was more around the job function"; "our criteria of layoff are strictly based on colorblind stuff . . . always based on what is your job title." In these narratives, restructuring is not about gender or race but about changing the organizational chart.

In contrast to this dissociation between diversity and downsizing, in 22 of 24 downsizings with an attorney, executives' descriptions pointed to a triggering of antidiscrimination accountability:

When there are reductions, of course it's usually on a budgetary basis. . . . We look at the business need relative to the business case. . . . And then after we run our list that

**Table 3.** Estimated Changes in the Log Odds of White Men, White Women, and Blacks among Managers Following Downsizing with and without Legal Department Oversight (a Three-Way Interaction Model)

	White Men	White Women	Black Women and Men
Layoff Based on Position	.146** (.046)	-.140** (.048)	-.260*** (.047)
x Legal Department Oversight	.012 (.071)	-.118 (.074)	.290*** (.072)
Layoff Based on Tenure	.001 (.049)	-.182*** (.051)	-.044 (.050)
x Legal Department Oversight	-.044 (.078)	.169* (.080)	.089 (.078)
Layoff Based on Performance Evaluations	.003 (.045)	.055 (.048)	-.080 (.047)
x Legal Department Oversight	-.202** (.066)	.077 (.070)	.190** (.072)
<i>R</i> -sq	.3909	.3752	.2760
Chi-sq	3650.37	3382.26	1902.38

*Note:* Coefficients from a seemingly unrelated regression. Standard errors are in parentheses. All control variables appear in Table S4 in the online supplement.  $N(\text{Orgs}/\text{Cells}) = 327/5,560$ . Number of parameters in models = 75. Log Likelihood Ratio test relative to Models 1B, 2B, and 3B: Chi-sq (9) = 53.73;  $p < .0001$ .

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed test).

would identify, you know our sort of our blind assessment piece here, we would then run EEO numbers to find out, you know what we've got from . . . the minority perspective, and make sure that that looks correct, and as long as that looks okay then we will go forward and do the formations.

Before executives “run the EEO numbers,” they are blind to possible demographic effects of their decisions: they run the numbers to make sure the numbers look “correct.” A manager described downsizing where a legal department reviewed “each step of the way”:

We were pretty careful to do adverse impact studies with every layoff. For example, when I was eliminating 26 engineering positions, okay, let me make sure that I am not just automatically wiping out every female we hired in the last five years.

Thanks to the review, this executive saw the conflict between their structural decision to

eliminate an engineering function and their antidiscrimination accountability. The executive then would make efforts to avoid “just automatically wiping out” diversity.

These representative quotes offer insight into the statistical pattern wherein experts' reviews moderate the negative effects of structural layoffs. They illustrate how legal reviews of downsizing enhance decision-makers' awareness of diversity outcomes and their active reaction, making sure the numbers look correct.

We nevertheless observe differences by race: the negative effect of a position rule remains significant for white women following legal reviews, but not for blacks. For blacks, the sum of coefficients for using performance reviews with a legal review shows a weak positive effect ( $B = .138$ ;  $SE = .079$ ) and the effect for white men disappears. This might suggest a positive performance-reward bias (Castilla and Benard 2010); when accountability is heightened, executives may favor black managers who have the same performance scores as white men.

### *General Awareness of Civil Rights Compliance and Downsizing Outcomes*

Regardless of the effect of layoff rules, executives' compliance awareness due to past discrimination charges/reviews or demographic data collection mitigates the baseline negative effects of downsizing on managerial diversity (see Table 2). Specifically, having had discrimination charges or compliance reviews eliminates the baseline positive effect of downsizing on white men (the sum of interaction and baseline coefficients is  $B = .082$ ;  $SE = .056$ ) and the baseline negative effect on white women ( $B = -.054$ ;  $SE = .055$ ). That no interaction is observed for black managers might be due to the fact that most discrimination charges are sex-based (EEOC 2012). In organizations with an affirmative action plan, there is a positive interaction effect on black managers, although the aggregate coefficients remain zero ( $B = .03$ ;  $SE = .056$ ). Being under federal affirmative action oversight does not affect demographic disparities in downsizing outcomes.

Baseline estimates for the accountability and awareness variables, which represent their effects in non-downsizing years, are presented at the bottom of Table 2. Legal departments and affirmative action plans show a negative effect on white men (Kalev et al. 2006), whereas discrimination charges and compliance reviews increase gender and racial managerial diversity (Kalev and Dobbin 2006; Skaggs 2008, 2009). Government contractors have higher racial, but not gender, diversity (see also Leonard 1989, 1990).

### *Other Factors Affecting Management Composition*

Coefficients for control variables are generally consistent with prior knowledge. Mergers hurt the odds of finding white women among managers. Adding cross-functional training programs increases gender managerial diversity, but reduces racial diversity. Top management diversity reduces overall managerial diversity, perhaps due to token appointments of diverse

managers to top positions. Formal personnel procedures show no significant effect on management composition. Diversity programs, targeted recruitment, and work-family programs show positive effects on managerial diversity. Finally, the share of contractors in an industry has a negative effect on white women, possibly indicating the institutionalization of sex segregation in contractor industries (McTague et al. 2009; but see Hirsh 2009).

### *Sensitivity Analyses*

One concern in assessing these analyses is that unobserved factors may vary with different downsizing methods and contexts and may be shaping the results. Three additional analyses, available upon request, help assuage such worry. First, an unobserved event that preceded downsizing might affect both the *type* of downsizing and changes in managerial diversity. For example, a sudden economic decline may lead to both quick tenure-based layoffs and intensified work demands that push women to leave management. To take this into account, I constructed dummy variables for events that occurred one, two, or three years before each type of downsizing; the content of these events is unknown (Heckman and Hotz 1989). I repeated the analyses in Tables 2 and 3 with these variables, limiting data to the years before the downsizing. If a variable for a pseudo-event is significant, and in the direction of the variable it precedes (e.g., tenure-based layoffs), this would indicate that an unobserved event explains the results. None of the coefficients were significant or in the same direction as the effect whose robustness was tested.

Second, it is possible that organizations with structural layoffs, for instance, are also slower to adopt legalization norms, and that this is reflected in simple discrimination in downsizing decisions. If this were the case, results for structural rules would, in fact, reflect the type of organization that adopts them. I therefore examined whether differences in organizations' pace of change affect the results. In models similar to those reported in Tables 2 and 3, I redefined the fixed

effects using a dummy variable for each organization and added a count variable for time (where 1971 = 1) and an interaction between the two. A variable that absorbs variance from unobserved organizational differences correlated with a linear time trend will lose significance with the inclusion of such interactions. Results of all my analyses are robust to this specification.

Finally, results may depend on period differences in regulatory enforcement. I thus examined whether downsizing effects varied between the 1980s and 1990s, testing different cutoff points between the Reagan, Bush, and Clinton regimes (Kalev and Dobbin 2006) and using either a split sample or interactions. I found no robust differences in the effects of downsizing methods across the periods. These sensitivity analyses significantly bolster confidence that results of the main analyses are not driven by unobserved heterogeneity.

## DISCUSSION

Managerial downsizing poses new challenges for women's and minorities' economic mobility (Spalter-Roth and Deitch 1999), for building a diverse corporate leadership (Lopez 1992), and for our understanding of how corporations and the law shape inequality and risk in the new economy (Kalleberg 2011). In analyses of detailed data on 327 downsizing establishments, I found that downsizing reduces managerial diversity. Extant explanations of downsizing and inequality focus on labor market characteristics or unchecked discrimination, leaving us with a *laissez-faire* explanation of layoff inequalities (Wilson 2012). An organizational analysis of downsizing offers a richer and more nuanced alternative, wherein organizational structures and institutional dynamics, coupled with executives' accountability and agency, play an important part in shaping inequality.

I show that although downsizing has been increasingly managed by formal rules and monitored by legal experts, this has often meant the institutionalization of unequal, rather than equal, opportunity. Results show that layoff rules that ignore gender and race

segregation and tenure differences reduce managerial diversity. In an average downsizing organization where layoffs are determined by position, the shares of white women and blacks in management decline by almost one-quarter and one-fifth, respectively. Downsizing by tenure reduces the share of white women in management by over 20 percent. Notably, two-thirds of establishments in my sample used position or tenure layoff rules.

These same formal rules, results show, lead to significantly more equitable outcomes when executives' antidiscrimination accountability is bolstered by an attorney's review of the process. In-person interviews with downsizing executives showed that legal reviews make executives aware of the demographic effects of their decisions, and executives then take steps to minimize potential inequalities. Yet, the positive effect of an attorney's review only occurs in workplaces with internal legal departments; an external counsel review has no measurable effects. Perhaps counsels are more cautious or ignored when not backed by a monitoring department (Kalev et al. 2006; Nelson and Nielsen 2000). Less than a third of the downsizing establishments had a legal department in place.

Effects of formalization and accountability also vary across racial groups. Black managers do not lose ground in tenure-based downsizing, and only they benefit from a legal review in position-based downsizing. It is possible that blacks' relative scarcity in management to begin with triggers executives' sense of accountability and efforts to retain them, more so than for white women (Fryer 2009).

In contrast to structural downsizing, when the layoff rule is based on performance evaluations, the negative effects of downsizing on managerial diversity are significantly reduced (see also Dencker 2008). My data do not include managers' performance evaluations. Yet, because existing research shows gender and racial bias in performance evaluations, a plausible explanation for these equalizing effects is that the individualized decision-making process triggers executives' antidiscrimination accountability.

Regardless of the specific downsizing's features, compliance awareness due to discrimination charges, compliance reviews, or affirmative action plans mitigates downsizing inequalities, although these effects are smaller than internally generated accountability. Being a federal contractor does not reduce inequality in downsizing outcomes, suggesting that federal contractors' historical role in protecting equal opportunity does not apply to bad economic times (Stainback and Tomaskovic-Devey 2012).

The civil rights legacy has done more to shape corporate downsizing through the institutionalization of internal formal processes than through external legal oversight. This has not, however, meant greater equality (Castilla 2008; Roscigno 2007). As Figures 1 and 2 show, position-based rules and external attorneys' reviews, which have negative effects on diversity, have grown the most, rather than performance-based layoffs and in-house legal departments, which protect diversity. If these trends continue, women's and minorities' risks of losing their jobs in downsizing will increase and their integration into good jobs will be less likely.

My findings highlight the importance of an organizational analysis of job loss for understanding social inequalities in contemporary employment relations. Most stratification research has developed with relatively stable bureaucracies in mind, and thus focuses on hiring and promotion processes. Managerial jobs, in particular, have been viewed as secure, and discrimination in layoffs as limited (Petersen and Saporta 2004). The spread of restructuring and downsizing has changed this equation. Managerial job loss is now common, and, as my research explores, layoffs exacerbate inequality, even if decision makers do not discriminate but simply follow certain formal, legally reviewed and increasingly institutionalized procedures. Decision-makers' antidiscrimination accountability and legal awareness can tame layoff inequalities, but these conditions have become rarer. Such findings advance a sociological theory of job loss and offer insights regarding organizations, stratification, and the law.

## CONCLUSIONS

My study advances recent scholarship linking work structures to gender and racial inequality (Dencker 2008; Haveman et al. 2009; Kalev 2009; Vallas 2003; Williams et al. 2012). Scholars have long acknowledged that organizational structures generate inequality (Acker 1990; Baron 1984). Yet neo-structuralists mostly focus on personnel structures, treating the structure of *work* as given; labor process researchers link work structures to inequality but tend to emphasize class over gender and race (Barker 1993); and while feminist theory views work structures and formalization as reproducing masculine dominance, scholars largely focus on work cultures and logics (Acker 1990; Ely and Meyerson 2000). These literatures have advanced stratification theory significantly, but the outcome of this scholarly division of labor is a lack of research at the critical juncture of the *organization of work, formalization and legalization, and inequality*—a juncture that becomes all the more relevant with the popularity of restructuring as a managerial strategy.

Taking an organizational approach to what is often perceived as a market phenomenon helps fill this gap and offers several theoretical advances. Guided by, and contributing to, neo-structural and feminist theories of organization and inequality, I move beyond a salutary view of formalization, wherein inequalities are explained as rooted in biased actors rather than in rules (Arendt 1963; Bauman 1989; Reskin and McBrier 2000; Roscigno 2007), and beyond the view of formalization as inevitably locking in masculinity (Ely and Meyerson 2000). Instead, I point to a more nuanced theory of formalization as context-dependent (Madden 2012; Shenhav 2013). I have shown that how formalization manifests is dependent on organizational structures, actors' accountability, and the institutional environment, and that biased formalization occurs when rules treat certain biases—in this case structural biases—as neutral.

Guided by accountability theory, I show that antidiscrimination accountability triggered by internal legal structures and

experiences can remedy biased formalization by motivating decision makers to override formal rules and disrupt the institutionalized reproduction of inequality (Dencker 2008). This insight advances institutional and law and society theories by departing from a view of accountability as simply supplementing formalization (Castilla and Bernard 2010; Hirsh and Kmec 2009; Kalev et al. 2006) and by presenting a more complex theory of executive agency (Castilla 2011). As one interviewee explained when describing efforts to maintain diversity after seniority-based decisions, “we kept it as subjective as we could.” These new findings regarding whether and how accountability works also contribute to the growing debate about the utility of auditing and accountability (Bromley and Powell 2012; Power 1997). At least in the realm of civil rights, it seems that the institutionalization of internal reviews, coupled with ongoing experience with the legal environment, can be effective in promoting social goals.

This article also makes new advances in economic sociology by exploring the organizational foundations of seemingly market phenomena (Haveman et al. 2009). Most labor economists argue that inequality reflects individuals’ human capital, occupation, and labor market participation, or employers’ rational responses to labor market conditions (Couch and Fairlie 2010; Freeman 1973; Nelson and Bridges 1999). In contrast, sociological analyses have argued that inequalities in layoffs are due to discrimination (Elvira and Zatzick 2002; Zwerling and Silver 1992). Taking an organizational approach to job loss, this article advances this debate beyond human capital or discrimination, by showing that, first, executives do not always consider human capital or job characteristics as relevant criteria for downsizing; and second, even when they do, executives can reverse inequitable outcomes when motivated to do so.

More work is needed on the impact of other organizational features on job loss inequalities. How, for instance, might financial pressures affect attention to diversity in layoffs? How might accountability work in

smaller firms, where concerns with nondiscrimination are often less pronounced? And what of non-managerial layoffs, where factors such as occupational segregation, skill, and unions may render structural disadvantage by race and gender more damaging and antidiscrimination accountability less effective?

Beyond its theoretical utility, an organizational analysis of layoffs provides clear implications for practice and policy: examine the demographic outcomes of standardized and universal organizational procedures, even if they do not intentionally target diversity. In an unequal world, formalization might favor the haves over the have-nots. Rules may curb discretion but not do away with structural bias. In the case of downsizing, enhancing accountability and awareness, with decisions based on performance reviews and a legal department’s reviews, will point managerial discretion in the right direction. This does not mean keeping positions that are deemed unnecessary. Rather, it entails making reasonable efforts to reposition women and minorities who may otherwise be disproportionately targeted in structural layoffs.

## Acknowledgments

I would like to thank Ronald Edwards and Bliss Cartwright of the Equal Employment Opportunity Commission for their indispensable help with the data and expertise. For comments I thank Frank Dobbin, Tristin Green, Joshua Guetzkow, Erin Kelly, Vincent Roscigno, Yehouda Shenhav, Bruce Western, Viviana Zelizer, and the *ASR* editors and anonymous reviewers.

## Funding

Funding for the project was provided by the National Science Foundation (grants SE-0336642 and SES-0620534) and the Robert Wood Johnson Foundation Post-Doctoral Research Program in Health Policy.

## Notes

1. Zero values were substituted with  $1/2N_j$ , and 1 with  $1 - 1/2N_j$ , where  $N_j$  is the number of managers in establishment  $j$  (Hanushek and Jackson 1977). Results are robust to different strategies for substituting zeros.
2. A separate analysis showed that establishments’ diversity programs do not moderate downsizing outcomes. I did not include this interaction in the final analysis for parsimony.



## References

- Acker, Joan. 1990. "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations." *Gender and Society* 4:139–58.
- Acker, Joan. 2006. "Inequality Regimes: Gender, Class and Race in Organizations." *Gender and Society* 20:441–64.
- Arendt, Hannah. 1963. *Eichmann in Jerusalem: A Report on the Banality of Evil*. New York: Viking.
- Baldi, Stephan and Debra B. McBrier. 1997. "Do the Determinants of Promotion Differ for Blacks and Whites? Evidence from the U.S. Labor Market." *Work and Occupations* 24:478–97.
- Barker, James R. 1993. "Tightening the Iron Cage: Concertive Control in Self-Managing Teams." *Administrative Science Quarterly* 38:408–437.
- Baron, James N. 1984. "Organizational Perspectives on Stratification." *Annual Review of Sociology* 10:37–69.
- Bauman, Zygmunt. 1989. *Modernity and the Holocaust*. Ithaca, NY: Cornell University Press.
- Baumel, William J., Alan S. Blinder, and Edward N. Wolff. 2003. *Downsizing in America: Reality, Causes, and Consequences*. New York: Russell Sage Foundation.
- Bielby, William T. 2000. "Minimizing Workplace Gender and Racial Bias." *Contemporary Sociology: A Journal of Reviews* 29:120–29.
- Bielby, William T. 2012. "Minority Vulnerability in Privileged Occupations." *ANNALS of the American Academy of Political and Social Science* 639:13–62.
- Bisom-Rapp, Susan. 1999. "Bulletproofing the Workplace: Symbol and Substance in Employment Discrimination Law Practice." *Florida State University Law Review* 26:959–1049.
- Bromley, Patricia and Walter W. Powell. 2012. "From Smoke and Mirrors to Walking the Talk: Decoupling in the Contemporary World." *Academy of Management Annals* 6:483–530.
- Brooks, Richard R. W. and Valerie Purdie-Vaughns. 2007. "The Supermodular Architecture of Inclusion." *Harvard Journal of Law & Gender* 30:379–88.
- Callender, Claire. 1987. "Women and the Redundancy Process: A Case Study." Pp. 141–80 in *Redundancy, Layoffs and Plant Closure*, edited by R. M. Lee. London: Croom Helm.
- Cappelli, Peter. 1992. "Examining Managerial Displacement." *Academy of Management Journal* 35:203–217.
- Cascio, Wayne F. 2010. "Employment Downsizing and its Alternatives." *SHRM Foundation's Effective Practical Guide Series*. Alexandria, VA: The Society for Human Resource Management.
- Castilla, Emilio J. 2008. "Gender, Race, and Meritocracy in Organizational Careers." *American Journal of Sociology* 113:1479–1526.
- Castilla, Emilio J. 2011. "Bringing Managers Back In: Managerial Influences on Workplace Inequality." *American Sociological Review* 76:667–94.
- Castilla, Emilio J. 2012. "Gender, Race, and the New (Merit-Based) Employment Relationship." *Industrial Relations* 51:528–62.
- Castilla, Emilio J. and Stephen Benard. 2010. "The Paradox of Meritocracy in Organizations." *Administrative Science Quarterly* 55:543–76.
- Cohen, Lisa E., Joseph P. Broschak, and Heather A. Haveman. 1998. "And Then There Were More? The Effect of Organizational Sex Composition on the Hiring and Promoting of Managers." *American Sociological Review* 63:711–27.
- Cornfield, Daniel B. 1983. "Chances of Layoff in a Corporation: A Case Study." *Administrative Science Quarterly* 28:503–520.
- Cornfield, Daniel B. 1987. "Ethnic Inequality in Layoff Chances: The Impact of Unionization on Layoff Procedures." Pp. 116–40 in *Redundancy, Layoffs and Plant Closure*, edited by R. M. Lee. London: Croom Helm.
- Couch, Kenneth A. and Robert Fairlie. 2010. "Last Hired, First Fired? Black-White Unemployment and the Business Cycle." *Demography* 47:227–47.
- Crosby, Faye, Susan Clayton, Olaf Alksnis, and Kathryn Hemker. 1986. "Cognitive Biases in the Perception of Discrimination: The Importance of Format." *Sex Roles* 14:637–46.
- Culbert, Samuel and Lawrence Rout. 2010. *Get Rid of the Performance Review: How Companies Can Stop Intimidating, Start Managing—and Focus on the Results That Really Matter*. New York: Business Plus.
- Dencker, John C. 2008. "Corporate Restructuring and Sex Differences in Managerial Promotion." *American Sociological Review* 73:455–76.
- DiMaggio, Paul J. and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48:147–60.
- DiPrete, Thomas. 1989. *The Bureaucratic Labor Market: The Case of the Federal Civil Service*. New York: Plenum.
- DiTomaso, Nancy. 2013. *The American Non-Dilemma: Racial Inequality without Racism*. New York: Russell Sage Foundation.
- Dobbin, Frank. 2009. *Inventing Equal Opportunity*. Princeton, NJ: Princeton University Press.
- Dobbin, Frank and Erin Kelly. 2007. "How to Stop Harassment: The Professional Construction of Legal Compliance in Organizations." *American Journal of Sociology* 112:1203–43.
- Edelman, Lauren B., Linda H. Krieger, Scott R. Eliason, Catherine R. Albiston, and Virginia Mellema. 2011. "When Organizations Rule: Judicial Deference to Institutionalized Employment Structures." *American Journal of Sociology* 117:888–954.
- Edelman, Lauren B. and Stephen M. Petterson. 1999. "Symbols and Substance in Organizational Response to Civil Rights Law." *Research in Social Stratification and Mobility* 17:107–135.

- Elliott, James R. and Ryan A. Smith. 2004. "Race, Gender and Workplace Power." *American Sociological Review* 69:365–86.
- Elvira, Marta M. and Robert Town. 2001. "The Effects of Race and Worker Productivity on Performance Evaluations." *Industrial Relations* 40:571–90.
- Elvira, Marta M. and Christopher D. Zatzick. 2002. "Who's Displaced First? The Role of Race in Layoff Decisions." *Industrial Relations* 41:329–61.
- Ely, Robin J. and Debra E. Meyerson. 2000. "Theories of Gender in Organizations: A New Approach to Organizational Analysis and Change." *Research in Organizational Behavior* 22:103–151.
- Equal Employment Opportunity Commission (EEOC). 2012. "Enforcement and Litigation Statistics." Washington, DC: EEOC. Retrieved September 20, 2012 (<http://www.eeoc.gov/eeoc/statistics/enforcement/index.cfm>).
- Fairlie, Robert W. and Lori G. Kletzer. 1996. "Race and the Affirmative Burden of Job Displacement: 1982–1993." *Monthly Labor Review* September:13–23.
- Farber, Henry. 1997. "The Changing Face of Job Loss in the United States, 1981–1995." *Brookings Papers on Economic Activity: Microeconomics*, pp. 55–142.
- Farber, Henry. 2008. "Employment Insecurity: The Decline in Worker-Firm Attachment in the United States." Working Paper # 530. Princeton University, Industrial Relations Section, Princeton, NJ.
- Fox, John. 1997. *Applied Regression Analysis, Linear Models, and Related Methods*. Thousand Oaks, CA: Sage.
- Freeman, Richard B. 1973. "Changes in the Labor Market for Black Americans, 1948–1972." *Brookings Papers on Economic Activity* 1:67–131.
- Fryer, Brownwyn. 2009. "The Layoff." *Harvard Business Review* March:33–40.
- Gardner, Jennifer M. 1995. "Worker Displacement: A Decade of Change." *Monthly Labor Review* 118:45–57.
- Glass, Jennifer L. and Lisa Riley. 1998. "Family Responsive Policies and Employee Retention Following Childbirth." *Social Forces* 76:1401–35.
- Greene, William H. 2002. *Econometric Analysis*. Upper Saddle River, NJ: Prentice Hall.
- Hagstrom, Jerry. 1999. "Goodbye Government Girl." *Government Executive* 31:18–26.
- Hamlin, Nancy R., Sumru Erkut, and Jacqueline P. Fields. 1994. "The Impact of Corporate Restructuring and Downsizing on the Managerial Careers of Minorities and Women: Lessons Learned from Nine Companies." Washington, DC: Department of Labor, Glass Ceiling Commission.
- Hanushek, Erin A. and John E. Jackson. 1977. *Statistical Methods for Social Scientists*. New York: Academic Press.
- Haveeman, Heather A., Joseph P. Broschak, and Lisa E. Cohen. 2009. "Good Times, Bad Times: The Effects of Organizational Dynamics on the Careers of Male and Female Managers." *Economic Sociology of Work* 18:119–48.
- Heckman, James J. and V. Joseph Hotz. 1989. "Choosing among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training." *Journal of the American Statistical Association* 84:862–74.
- Helwig, Ryan. 2004. "Worker Displacement in 1999–2000." *Monthly Labor Review* 127:54–68.
- Hicks, Alexander M. 1994. "Introduction to Pooling." Pp. 169–88 in *The Comparative Political Economy of the Welfare State*, edited by T. Janoski and A. M. Hicks. Cambridge: Cambridge University Press.
- Hirsh, Elizabeth. 2009. "The Strength of Weak Enforcement: The Impact of Discrimination Charges on Sex and Race Segregation in the Workplace." *American Sociological Review* 74:245–71.
- Hirsh, Elizabeth and Julie Kmec. 2009. "Human Resource Structures: Reducing Discrimination or Raising Rights Awareness?" *Industrial Relations* 48:512–32.
- Holzer, Harry J. and David Neumark. 2000. "Assessing Affirmative Action." *Industrial & Labor Relations Review* 53:240–71.
- Hsiao, Cheng. 1986. *Analysis of Panel Data*, Vol. 11. Cambridge: Cambridge University Press.
- Huffman, Matt L. 1995. "Organizations, Internal Labor Market Policies, and Gender Inequality in Workplace Supervisory Authority." *Sociological Perspectives* 38:381–97.
- Kalev, Alexandra. 2009. "Cracking the Glass Cages? Restructuring and Ascriptive Inequality at Work." *American Journal of Sociology* 114:1591–1643.
- Kalev, Alexandra and Frank Dobbin. 2006. "Enforcement of Civil Rights Law in Private Workplaces: The Effects of Compliance Reviews and Lawsuits over Time." *Law and Social Inquiry* 31:855–79.
- Kalev, Alexandra, Frank Dobbin, and Erin Kelly. 2006. "Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies." *American Sociological Review* 71:589–617.
- Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s–2000s*. New York: Russell Sage Foundation.
- Kanter, Rosabeth Moss. 1977. *Men and Women of the Corporation*. New York: Basic Books.
- Kelly, Erin L. 2003. "The Strange History of Employer-Sponsored Childcare: Interested Actors, Uncertainty, and the Transformation of Law in Organizational Fields." *American Journal of Sociology* 109:606–649.
- Kmec, Julie A. 2005. "Setting Occupational Sex Segregation in Motion." *Work and Occupations* 32:322–54.
- Kmec, Julie A. and Sheryl L. Skaggs. 2009. "Organizational Variation in Equal Employment Opportunity Structures." *Sociological Forum* 24:47–75.
- Leonard, Jonathan. 1989. "Women and Affirmative Action." *Journal of Economic Perspectives* 3:61–75.
- Leonard, Jonathan. 1990. "The Impact of Affirmative Action Regulation and Equal Employment Opportunity Law on Black Employment." *Journal of Economic Perspectives* 4:47–63.

- Longmecker, Clinton O. and Sonny S. Ariss. 2004. "Who Goes and Who Stays?" *Industrial Management* May/June:9–13.
- Lopez, Julie Amparano. 1992. "Companies Alter Layoff Policies to Keep Recently Hired Women and Minorities." *Wall Street Journal*, September 18, p. B1.
- Madden, Janice. 2012. "Performance-Support Bias and the Gender Pay Gap among Stockbrokers." *Gender & Society* 26:488–518.
- McCune, Joseph T., Richard W. Beatty, and Raymond V. Montagno. 1988. "Downsizing: Practices in Manufacturing Firms." *Human Resource Management* 27:145–61.
- McTague, Tricia, Kevin Stainback, and Donald Tomaskovic-Devey. 2009. "An Organizational Approach to Understanding Sex and Race Segregation in U.S. Workplaces." *Social Forces* 87:1499–1527.
- Milkman, Ruth. 1997. *Farewell to the Factory: Auto Workers in the Late Twentieth Century*. Los Angeles: University of California Press.
- Nelson, Robert L. and William P. Bridges. 1999. *Legalizing Gender Inequality: Courts, Markets and Unequal Pay for Women in America*. New York: Cambridge University Press.
- Nelson, Robert L. and Laura Beth Nielsen. 2000. "Cops, Counsel, and Entrepreneurs: Constructing the Role of Inside Counsel in Large Corporations." *Law and Society* 34:457–94.
- Neumark, David, ed. 2000. *On the Job: Is Long-Term Employment a Thing of the Past?* New York: Russell Sage Foundation.
- Nkomo, Stella M. 1992. "The Emperor Has No Clothes: Rewriting 'Race in Organizations.'" *Academy of Management Review* 17:487–513.
- Nonet, Philippe and Phillip Selznick. 1978. *Law and Society in Transition: Towards Responsive Law*. New York: Transaction Publishers.
- Osterman, Paul. 2000. "Work Reorganization in an Era of Restructuring: Trends in Diffusion and Effects on Employee Welfare." *Industrial & Labor Relations Review* 53:179–96.
- Petersen, Trond. 1985. "A Comment on Presenting Results from Logit and Probit Models." *American Sociological Review* 50:130–31.
- Petersen, Trond and Ishak Saporta. 2004. "The Opportunity Structure for Discrimination." *American Journal of Sociology* 109:852–901.
- Petersen, Trond, Seymour Spilerman, and Sverre Dahl. 1989. "The Structure of Employment Terminations among Clerical Employees in a Large Bureaucracy." *Acta Sociologica* 32:319–38.
- Pfeffer, Jeffrey and Gerald R. Salancik. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper and Row.
- Power, Michael. 1997. *The Audit Society*. Oxford, UK: Oxford University Press.
- Reskin, Barbara. 2000. "The Proximate Causes of Employment Discrimination." *Contemporary Sociology: A Journal of Reviews* 29:319–28.
- Reskin, Barbara. 2003. "Including Mechanisms in Our Models of Ascriptive Inequality." *American Sociological Review* 68:1–21.
- Reskin, Barbara and Debra B. McBrier. 2000. "Why Not Ascription? Organizations' Employment of Male and Female Managers." *American Sociological Review* 65:210–33.
- Reskin, Barbara and Patricia Roos. 1990. *Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations*. Philadelphia: Temple University Press.
- Roscigno, Vincent J. 2007. *The Face of Discrimination: How Race and Gender Impact Work and Home Lives*. Lanham, MD: Rowman and Littlefield Publishers.
- Salancik, Gerald R. and Jeffrey Pfeffer. 1978. "Uncertainty, Secrecy, and the Choice of Similar Others." *Social Psychology* 41:246–55.
- Says, Lois W. 1989. *Pooled Time Series Analysis*. Thousand Oaks, CA: Sage Publications.
- Shaw, Jason D., John E. Delery, G. Douglas Jenkins Jr., and Nina Gupta. 1998. "An Organization-Level Analysis of Voluntary and Involuntary Turnover." *Academy of Management Journal* 41:511–25.
- Shenhav, Yehouda. 2013. "Beyond 'Instrumental Rationality': Lord Cromer and the Imperial Roots of Eichmann's Bureaucracy." *Journal of Genocide Research* 15:379–99.
- Society for Human Resource Management (SHRM). 2001. "Layoffs and Job Security Survey." Alexandria, VA: The Society for Human Resource Management.
- Skaggs, Sheryl. 2008. "Producing Change or Bagging Opportunity? The Effects of Discrimination Litigation on Women in Supermarket Management." *American Journal of Sociology* 113:1148–82.
- Skaggs, Sheryl. 2009. "Legal-Political Pressures and African American Access to Managerial Jobs." *American Sociological Review* 74:225–44.
- Spalter-Roth, Roberta and Cynthia Deitch. 1999. "'I Don't Feel Right Sized; I Feel Out-of-Work Sized': Gender, Race, Ethnicity, and the Unequal Costs of Displacement." *Work and Occupations* 26:446–82.
- Spilerman, Seymour and Trond Petersen. 1998. "Organizational Structure, Determinants of Promotion, and Gender Differences in Attainment." *Social Science Research* 28:203–227.
- Stainback, Kevin and Donald Tomaskovic-Devey. 2012. *Documenting Desegregation*. New York: Russell Sage Foundation.
- Stainback, Kevin, Donald Tomaskovic-Devey, and Sheryl Skaggs. 2010. "Organizational Approaches to Inequality: Inertia, Relative Power, and Environments." *Annual Review of Sociology* 36:225–47.
- Sutton, John R., Frank Dobbin, John W. Meyer, and W. Richard Scott. 1994. "The Legalization of the Workplace." *American Journal of Sociology* 99:944–71.
- Tetlock, E. Philip. 1985. "Accountability: A Social Check on the Fundamental Attribution Error." *Social Psychology Quarterly* 48:227–36.
- Tetlock, E. Philip. 1999. "Accountability Theory: Mixing Properties of Human Agents with Properties of Social

- Systems." Pp. 117–37 in *Shared Cognition in Organizations: The Management of Knowledge*, edited by J. M. Levine, L. L. Thompson, and D. M. Messick. Hillsdale, NJ: Erlbaum.
- Tsui, Anne S. and Charles A. O'Reilly. 1989. "Beyond Simple Demographic Effects: The Importance of Relational Demography in Superior-Subordinate Dyads." *Academy of Management Journal* 32:402–423.
- Vallas, Steven P. 2003. "Rediscovering the Color Line within Work Organizations: The 'Knitting of Racial Groups' Revisited." *Work and Occupations* 30:379–400.
- Weber, Max. [1924] 1968. *Economy and Society: An Outline of Interpretive Sociology*. Translated and edited by G. Roth and C. Wittich. New York: Bedminster Press.
- Williams, Christine L., Chandra Muller, and Kristine Kilanski. 2012. "Gendered Organizations in the New Economy." *Gender & Society* 26:549–73.
- Wilson, George. 2012. "Women's Mobility into Upper-Tier Occupations: Do Determinants and Timing Differ by Race?" *ANNALS of the American Academy of Political and Social Science* 639:131–48.
- Wilson, George and Debra Branch McBrier. 2005. "Race and Loss of Privilege: African American/White Differences in the Determinants of Job Layoffs from Upper-Tier Occupations." *Sociological Forum* 20:301–321.
- Wilson, George, Vincent J. Roscigno, and Matt Huffman. 2013. "Public Sector Transformation, Racial Inequality and Downward Occupational Mobility." *Social Forces* 91:975–1006.
- Zellner, Alfred. 1962. "An Efficient Method of Estimating Seemingly Unrelated Regressions and Tests for Aggregation Bias." *Journal of the American Statistical Association* 57:348–68.
- Zwerling, Craig and Hilary Silver. 1992. "Race and Job Dismissals in a Federal Bureaucracy." *American Sociological Review* 57:651–60.

**Alexandra Kalev** is Associate Professor of Sociology and Anthropology at Tel Aviv University. Her research interests include organizations and inequality, economic sociology, and law and social change. Current projects examine the effect of workforce diversity on firms' financial performance; faculty diversity in higher education (both with Frank Dobbin); the integration of Israeli-Palestinians into the Israeli service sector (with Noah Lewin-Epstein and Erez Marantz); and the relationship between networks, gender, age, and merit evaluations (with Uri Shwed). Her work has appeared in the *American Journal of Sociology*, *Administrative Science Quarterly*, and *Law and Social Inquiry*, among others.