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Abstract

Although millions of workers every year experience ownership change as their firms get acquired, it remains unclear how such an event shapes inequality in the workplace. This study addresses this question using a difference-in-differences design on a nationally representative sample covering 37,343 acquisition events from 1971 to 2015. Contrary to the common assumption, while acquisitions increase skill-based inequality, they reduce both racial and gender inequality. On the one hand, they widen the skill-based gap, leading to fewer jobs for middle managers, back-office workers, and blue-collar workers while adding more jobs for educated professionals. But on the other hand, they shake up existing arrangements and open up opportunities for racial minorities and women to move into managerial ranks and new occupations, especially in those establishments where white men have previously occupied the most central positions. This study shows that major organizational events could have diverging effects on inequality: although mergers and acquisitions favor the more skilled workers, they also produce an unintended consequence of making room for more racial and gender equality in the workplace.

Keywords: Diversity, Inequality, Mergers and Acquisitions

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INTRODUCTION

Labor market inequality remains high in the United States. First, the gap between high-skilled and low-skilled workers has been rising since the 1980s. While highly educated workers have seen a substantial increase in compensation and career opportunities, earnings for those without a college degree have mostly stagnated in the last four decades (Fligstein and Shin 2004; Kalleberg 2011). Second, racial and gender inequality declined significantly in the 1970s, but this progress has stalled in more recent decades. Today racial and gender gaps remain significant: whites and men still earn at least 20 percent more than racial minorities and women.

To understand drivers of this persistent inequality, many have turned to organizational explanations. After all, a firms structures, routines, and culture can either strengthen or reduce opportunities for various groups (Stainback, Tomaskovic-Devey, and Skaggs 2010). For instance, adopting new technologies generally benefits high-skilled workers at the expense of low-skilled ones. Unionization does the opposite: by protecting low-skilled workers, it helps reduce skill-based inequality. Similarly, certain workplace arrangements, such as cross-functional teams, can reduce stereotyping and benefit racial minorities and women, while practices like flexible human resource management can increase racial and gender gaps (Bielby 2000; Castilla 2008; Kalev 2009; Kalev, Dobbin, and Kelly 2006; Reskin 2000).

But organizations are not static. They often go through dynamic changes such as immense growth, bankruptcy, and new ownership, all of which could have profound effects on their structure and routine. Perhaps the most common change is mergers and acquisitions. Last year alone the United States saw over 10,000 mergers and acquisitions (M&A) deals with a total value equivalent to nine percent of the Gross Domestic Product. Firm acquisitions are a major event for employees. Their announcement is usually followed by a high level of anxiety among workers in the acquired establishments, as the post-acquisition restructuring may lead to job loss and position changes for many of them. It is estimated that more
than five million workers every year experience an acquisition, and more than ten percent of all workers in the United States have experienced this transformative event in their recent career (Andrade, Mitchell, and Stafford 2001; Haveman and Cohen 1994).

Despite the frequency of M&A transactions and their apparent impact on workers, only a handful of studies have examined their impact on inequality. The voluminous M&A literature in corporate finance generally focuses on firm performance as the outcome (Andrade, Mitchell, and Stafford 2001; Blonigen and Pierce 2016; Maksimovic and Phillips 2001; Li 2013). The few studies that look at employment find that M&A deals lead to downsizing and overall wage reduction, suggesting that such events lower a firms labor spending (Fligstein and Shin 2006; Siegel and Simons 2010). But it remains unclear how acquisition events influence different groups of workers. Do they benefit some groups at the expense of others? Do they increase or decrease workplace inequality?

Intuition suggests that ownership changes may adversely affect the less-skilled employees, as they are often let go to reduce cost after an acquisition. In fact, a recent study has shown that firms shed the more routine-based jobs after being acquired, supporting the view that M&As lead to more skill-based inequality (Ma, Ouimet, and Simintzi 2016). The story becomes less clear when it comes to demographic groups, although many assume that M&A events hurt women and racial minorities more (Haveman, Broschak, and Cohen 2009; Woodall, Edwards, and Welchman 1997; S. Kim 2011). As disadvantaged groups, racial minorities and women tend to hold more peripheral positions in an organization, which make them more likely to be layoff targets in internal downsizing events (Couch and Fairlie 2010; Cunningham, Lord, and Delaney 1999; Kalev 2014; Wilson and McBrier 2005; see Dencker 2008 for an exception). Given that acquisitions generally lead to downsizing, it is natural to assume that M&A events lead to particularly harmful effects on racial minority and women workers (Haveman, Broschak, and Cohen 2009).

This study suggests a different framework. Drawing from various qualitative data and existing theories, I propose that the restructuring process following an acquisition event
simultaneously increases skill gap and decreases racial and gender gap. On the one hand, consistent with common intuition, acquisition leads to natural layoffs and allows senior managers to streamline the workforce, resulting in fewer positions for middle managers, back-office workers, and blue-collars labors. But on the other hand, an extensive restructuring by the new leadership can shake up existing hierarchies and routines and open up opportunities for racial minorities, women, and other peripheral groups that were impeded under the old arrangement. It also gives senior managers an opportunity to advance diversity-related initiatives and adopt new practices that are more friendly to racial minorities and women. Therefore, contrary to the common wisdom, while M&A events may widen skill-based inequality, they may also reduce racial and gender inequality.

I examine this proposition using EEO-1 data, gathered by the Equal Employment Opportunity Commission (EEOC), covering all private-sector establishments in the US with more than 100 employees. Using difference-in-differences models on 37,343 acquisition events from 1971 to 2015, I find evidence consistent with my theoretical propositions. After being acquired, an establishment experiences immediate downsizing, mostly affecting middle managers, back-office workers, and blue-collar workers. However, while M&A events hurt the prospect of the less-skilled workers, they significantly improve the positions of women and racial minorities. Establishments that were acquired saw a notable drop in the proportion of white men in management, a considerable rise in the proportion of racial minority and women managers, and significantly lower levels of racial and gender segregation across occupational categories. Further analysis shows that these post-M&A improvements in diversity appear almost entirely in establishments that were doing poorly on diversity measures before being acquired. To reinforce the findings, I conducted a number of robustness checks, including using withdrawn M&A deals as a placebo test, and entertained various alternative explanations. In the end, results strongly suggest that racial and gender gaps decline after an establishment gets acquired.

This study makes several contributions. First, it speaks to the sociological literature
on organizational inequality. Major organizations events, such as mergers and acquisitions, offers an opportunity for organizations to restructure and reset. This could be a chance for an organization to eliminate past inequalities and adopt ideal practices and policies. These major organizational events could sometimes play an important role in shaping employment and inequality in the workplace. By extension, this study also challenges the conventional view that corporate restructuring increases racial and gender inequality. Unlike internal downsizing, which has been the focus of existing work, post-acquisition restructuring in fact brings important benefits to racial minorities and women.

Second, this study addresses both the literature on class- or skill-based inequality and that on racial and gender inequality. By examining these outcomes simultaneously, this shows that the same organizational event can have the opposite impacts on these two types of inequality. Finally, findings of this work suggests that managerial actions often have unintended consequences on workplace inequality. Senior managers initially undertake acquisition deals in pursuit of strategic goals, such as organizational growth and cost reduction. But such actions also have unintended consequences, aggregating some types of inequality while alleviating others.

**MERGERS, ACQUISITIONS, AND INEQUALITY**

Sociologists have long been interested in understanding workplace inequality. Over time several related but distinct literatures have emerged. In this paper, I touch on two such literatures: the first focuses on the rising skill gap and the second examines persistent racial and gender inequality. Both literatures are quite rich and I give only a brief synopsis of each, referring interested readers to review articles for more exhaustive overviews (see Autor, Katz, and Kearney 2006; Fligstein and Shin 2004; Neckerman and Torche 2007 for a review of the rising skill gap and DiTomaso, Post, and Parks-Yancy 2007; Stainback, Tomaskovic-Devey, and Skaggs 2010 for a review racial and gender inequality in organizations).
Rising Skill-Based Inequality

Income inequality in the United States has been rising since the 1980s (Autor, Dorn, and Hanson 2016; Fligstein and Shin 2004; Kalleberg 2011; Levy and Murnane 1992; Neckerman and Torche 2007). It is generally agreed that workers who fare the worst are those who did not finish high school, as they have their wages relative to college graduates slip by more than 30 percent over the past four decades. In contrast, highly educated workers have seen a considerable rise in income, though this has been accompanied by longer working hours and greater job insecurity (Fligstein and Shin 2004; Kalleberg 2011).

This rising skill-based gap is often attributed to reconfigured work and employment relationships. But the exact driver is still a matter of debate. One view suggests that most of the shift was caused by the increase in demand for high-skill workers caused by technological change (Bresnahan and Greenstein 1999; Katz and Murphy 1992). However, although this view helps explain the divergence in the 80s between high-skilled and low-skilled, it does not fully explain the increasing deterioration of middle-wage jobs in recent decades (DiPrete 2007). Recent work suggests that computerization may have played a role, as it enhances the productivity of highly educated professionals, undermines the demand for routine cognitive workers usually located in back-office positions, and has relatively less impact on the lowest-skilled blue-collar and service occupations (Autor, Katz, and Kearney 2006, 2008).

But technology may not be the sole driver of the rising skill-based inequality. Institutional changes, in particular the decline of unions and the stagnation of the minimum wage, have likely played a role in diminishing the welfare of less-skilled workers. There are a number of additional culprits, such as the continuing shift from manufacturing to service industries, increased global competition, a rise in the use of contingent labor, and even recent waves of immigration. All of these changes have pushed in one direction: to the benefits of those with high skills who tend to occupy professional occupations, and against less-skilled workers (Fligstein and Shin 2004; Kalleberg 2011; Neckerman and Torche 2007).

Accompanying these changes is the rise of a shareholder-value logic. In the 1980s,
some thought that management was focused too much on growth and size and not enough on profits and shareholder value (Fligstein and Shin 2007). To improve profit and please investors, firms began to streamline their operations, seeking to make them “lean and mean.” Instead of seeing employees as partners, senior managers under the shareholder conception tend to view them as costs to be minimized. Under this thinking, establishments were closed, less-efficient workers were let go, some operations were moved offshore and others outsourced to lower-cost providers, and technologies were adopted to reduce labor cost. The increasing acceptance of the shareholder value further depressed prospects for less-skilled workers, contributing to the rising class inequality in the United States.

One way that shareholder value manifests is through mergers and acquisitions. In fact, recent scholarship speculates that the acquisition waves that peaked in the 80s and 90s could be another driver of the growing skill-based inequality (He and Maire 2018; Ma, Ouimet, and Simintzi 2016). Later on, I will explore how mergers and acquisitions have contributed to the rising skill gap from 1970 to 2015.

**Persistent Racial and Gender Inequality**

In contrast to the rising skill-based inequality, racial and gender gaps have been slowly declining in the United States, although this progress has stalled somewhat in recent decades (Leicht 2008; McCall 2005). But despite the overall progress, racial minorities and women still face strong impediments in organizations: they have a lower chance of getting hired and promoted and a higher chance of getting laid off (Bertrand and Mullainathan 2004; Pager and Shepherd 2008). Research has explored both individual- and organizational-level processes to understand racial and gender inequality in the workplace. At the individual level, stereotyping and in-group preference can favor white men in hiring and promotion decisions (Bielby 2000; Reskin 2005; Ridgeway and Correll 2004). Moreover, social networks and friendship ties tend to form along racial and gender lines (McPherson, Smith-Lovin, and Cook 2001). Since most managers, especially at the senior levels, are white men, this network homophily hurts racial minorities and women in the labor market: they tend to
reside on the periphery of the social networks and have less access to mentors, referrals, and career information (Ibarra 1992, 1995; Roth 2004; Turco 2010).

These individual level processes can be either amplified or suppressed by organizational structure, routine, and culture. For instance, some organizational practices, such as cross-functional teams, can reduce stereotyping and benefit racial minorities and women’s chances of promotion (Kalev 2009). But others, such as flexibility in HR systems, give managers room to exercise personal preferences and therefore aggregate existing racial and gender gaps (McDowell 1991). Still others, such as formalized evaluation systems, can suppress managerial bias in some contexts but in not others (Bielby 2000; Castilla 2008; Petersen and Saporta 2004). In general, a firm’s willingness to promote diversity is important in reducing racial and gender inequality. When a firm is committed to diversity causes and holds managers accountable, it is more likely to implement practices that benefit racial minorities and women and managers are more willing to hire, support, and promote members of disadvantaged groups (Kalev, Dobbin, and Kelly 2006).

An organization’s structure and culture are often correlated with its age, because organizational blueprints are often shaped by environmental conditions at their birth. Generally speaking, firms founded earlier tend to have less supportive structures and cultures for diversity, and this lack of support can persist over time (Stainback, Tomaskovic-Devey, and Skaggs 2010). For example, firms founded in the earlier decades tend to have lower levels of gender integration compared to later cohorts (Tomaskovic-Devey and Skaggs 1999). Similarly, pay systems in some firms designed in the 1950s and 60s with a gender bias continued to reflect these biases over half a century later (Kim 1989). In the following, I propose that post-acquisition restructuring could be an effective way for an organization to reset its structures and routines to reflect modern values. Hence, acquisitions events may play an important role in promoting racial and gender equality in an organization. Before venturing into this hypothesis, I give a brief overview of the post-acquisition process.
The Process of Post-Acquisition Integration

In the United States, anti-trust laws and active enforcement have made within-industry mergers extremely difficult since the 1940s. Prior to the 1980s, firms mostly undertook acquisitions to diversify company portfolio and expand their range of control. However, as anti-trust laws contracted in the 1980s, M&A became an instrument for enforcing market discipline: the threat of hostile takeovers has forced companies to become more attentive to profitability and efficiency. In this effort, within-industry acquisitions have become more prevalent; CEOs often take on acquisitions to benefit from economies of scale and to please shareholders (Andrade, Mitchell, and Stafford 2001).

My understanding of the post-acquisition process is based on primary and secondary qualitative data collected in a pre-study. I conducted 23 in-depth, semi-structured interviews with M&A consultants, HR managers, Diversity officers, and executives who have been involved in post-acquisition integrations. 8 of the respondents are senior executives in the M&A industry with over ten years of experience. I complemented the interviews with study of over 100 newspaper and trade press articles, a dozen practitioner-oriented books and business school cases, and several academic articles about the M&A process. These qualitative data provide a foundation for understanding of M&A events and allow me to theorize the processes.

In a typical post-integration process following an acquisition, the acquirer firm sets up a steering committee, typically composed of C-level executives and the head of the human resources department. The steering committee sets the broad direction for the deal and is in charge of higher-level integration strategies. Under the steering committee is the integration management office, which is composed of senior managers and supporting staff. They are the central governance structure in the post-acquisition integration, managing the core functions of the integration effort and converting the steering committee’s high-level strategy into detailed roadmaps. They in turn work with operational teams and task forces to ensure successful integrations and restructurings in all the departments.
In the post-acquisition period, the acquired establishment typically goes through extensive restructuring. This restructuring often involves major employment and structural changes and is an important part of the overall integration process. While each restructuring may be different depending on the nature of the acquisition, many share important similarities. In most cases, restructuring involves both (1) downsizing and re-evaluating the acquired workforce, and (2) a resetting of policies, practices, and culture in the acquired workplace. Below, I suggest that these processes could have important implications for different groups of workers.

**Restructuring: Downsizing and Reevaluation**

First, restructuring usually leads to major compositional changes in the acquired targets workforce, due to large-scale layoffs, hiring, and/or reassignment. Layoffs are particularly common. As an target establishment becomes part of the acquirer firm, a number of positions could overlap and become redundant. Most of these redundancies tend to be in back-office positions, such as accounting, human resources, and finance. For instance, it is often unnecessary to have a separate accounting group in the acquired establishment when the acquirer firm already has one. Many workers in these redundant positions would be quickly laid off. In fact, this is often considered a major synergy in an acquisition, as it reduces a firms overall headcount and labor cost. As one senior executives puts it, laying off these workers in restructuring is simply “the cost of doing good business” (interview). In general, post-acquisition downsizing generates additional cash-flows, and it is positively viewed by critics and the stock market (Dessaint, Golubov, and Volpin 2017; Gugler and Yurtoglu 2004; Siegel and Simons 2010).

In contrast to the less-skilled back-office workers, high-skilled professional workers are often protected in the post-acquisition restructuring phase. Firms generally perceive them as valuable human capital that would generate a competitive advantage. Not only are they less likely to be laid off, firms often go out of their ways to ensure that the high-skilled workers feel positive about the acquisition and would remain with the firm. One senior executives
suggests that keeping the talent base is “one of the most important goals” in restructuring (interview). Firms view of the high-skilled workers as a valuable asset is in stark contrast to their attitude toward the less-skilled workers, whom are seen as more dispensable (interview). The different treatments of high- and low-skilled workers in restructuring could contribute to the skill gap, as layoffs tend to target back-office and other less-skilled workers.

While the workforce restructuring appears to hurt middle managers and the less-skilled labors, my qualitative evidence suggests that it could help improve racial and gender equality. In deciding which workers to layoff or move after an acquisition, senior management would carry out extensive evaluations. These re-evaluations could be based on multiple rounds of interview with each employees in the acquired establishment, past performance records and evaluations, various skill assessments, and feedback from managers. As one M&A expert puts it: “we want to evaluate each person from every possible angle” (interview). Some also describe these re-evaluations as “re-recruitments,” as everyone starts off on a clean slate and are essentially treated as new hires (Saint-Onge and Chatzkel 2008; interview). Compared to routine employee evaluations, post-acquisition re-evaluation process tends to be much more thorough.

Moreover, these re-evaluations are mostly carried out under the guidance of the acquirer firm management, often with the help of external consultants, both of whom are outsiders to the acquired establishment. Evaluations by outsiders can offer more objectivity, as internal evaluations are often biased by past history, network, and interests between managers and employees. Additionally, post-acquisition restructuring often takes place under relatively high scrutiny, as it attracts attention from employees, critics, and other stakeholders. The scrutiny also pressures senior management teams to conduct layoffs, hiring, and reassignment in an objective and non-contentious way. Consistent with this mentality, many acquirer firms are highly concerned about objectivity and use a variety of objective metrics to evaluate each individual (Carey and Ogden 2004). Many also rely heavily on external consultants for their objective views and professional expertise. As one HR manager puts it:
“there is a lot of value in having the assessment done by people who do this for a living day in and day out and who must be professionally objective” (Saint-Onge and Chatzkel 2008).

Possibly due to a higher level of objectivity and thoroughness, post-acquisition re-evaluation often produces findings that contradict the established order in the acquired establishments. For example, after acquiring Union Carbide, Dow, a producer of chemicals and polymers, re-evaluated plant leaders of Union Carbide and came up with a different set of conclusions than previous internal evaluations (Saint-Onge and Chatzkel 2008):

“When we got the performance evaluations for the Union Carbide leaders from their CEO, we went through out one-on-one evaluations, and they did not match up. They had five large manufacturing sites. As they ranked their site leaders, they had one individual who was on the bottom of the list. Yet, through our interview process, etc., we felt that this individual was the best of the lot.”

Such re-evaluations could benefit women and racial minority workers. As discussed earlier, racial minorities and women face disadvantages in hiring and promotion because they tend to be located in the periphery of the network structure, which give them less access and fewer connections within the workplace. They may also be the victims of bias and discrimination. However, the post-acquisition process gives them an opportunity to be re-evaluated on a more objective scale. Because the evaluators are from outside of the establishment, previous connections and networks become much less relevant. The thoroughness of re-evaluation process, its focus on objectivity, and external scrutiny should also help reduce racial and gender biases. Additionally, since everyone is evaluated at the same time, it is easier to directly compare employees based on an objective set of metrics (Bohnet, Van Geen, and Bazerman 2015). The objectiveness and thoroughness of the re-evaluation process should improve minorities and women’s positions in the establishment, especially if they were previously disadvantaged.

Moreover, given the relatively higher levels of scrutiny during the post-acquisition process, senior managers may be more concerned about public perception and avoid laying off a disproportionate number of women and racial minorities. As an experienced executive
from the M/A industry described, “because you are in the middle of a transaction, you dont want to have negative impacts on the business, so you are being extra mindful of not having any sort of negativism around press or anybody suing on the basis of discrimination” (interview). Another senior executive mentioned that he would go through the layoff list to specifically make sure that racial minorities and women are not being disproportionately targeted (interview). In some cases, managers may even favor racial minorities and women in layoff decisions to protect the workplace diversity. An senior executive in a M&A consulting firm reflected: “all of companies that Ive worked with would loathe to lose minority managers [in this process]” (interview). This attitude, in combination with the objective and thorough re-evaluation process, suggest that the post-acquisition downsizing and the reshuffling may positively contribute to racial and gender equality in the workplace.

Restructuring: An Opportunity for Change

Besides downsizing and re-evaluating employees, post-acquisition restructuring is also an opportunity for firms to make major changes. Some of these changes are necessary to ensure compatibility with the acquirer firm, while others reflect senior managers desired directions. Since the acquisition event already disrupts the day-to-day operation in the acquired establishment, the cost of making additional changes is relatively low. Additionally, the economies of scale after acquisition give the acquired establishment more room to adopt new technologies and efficient operating procedures. Thus, post-acquisition restructuring often results in new practices, policies, routines in the acquired establishment (Haveman and Cohen 1994).

While these changes have varying impact on workers, many exacerbate skill-based inequality. For instance, it is common for newly acquired establishment to adopt new technologies or upgrade existing ones. The introduction of new technology typically escalates the skill gap, as it increases the need for high-skilled workers while depressing the number of less-skilled workers, especially those in more routine occupations. In addition, restructuring is also an opportunity for firms to streamline their workforce. As shareholder value
became taken-for-granted, senior managers are concerned about efficiency and profitability: they want to avoid having bloated management and overpaid workers. The extensive restructuring process following an acquisition provides a chance for firms to adopt more efficient practices and procedures, get rid of excessive layers of management and overstuffed workforce, and outsource labor intensive tasks. Additionally, many acquisition targets have been poorly ran and suffer from inefficient operations, giving acquirer firms more incentive to streamline the workforce in the restructuring phase. These streamlining effort generally leads to fewer positions for middle managers, back-office workers, and blue-collars. For example, a reduction in management layers and a widened span of control significantly reduce middle managerial positions, while outsourcing and other forms of cost reduction substantially decrease employment for back-office workers and blue-collar labors. But high-skilled professionals, as mentioned earlier, are usually protected as they are seen as valuable human capital. As a result, these streamlining effort could also contribute to skill-based inequality.

Unlike the negative impact on the less-skilled workers, changes in practice and routine may help improve the standings for women and racial minorities in the acquired establishment. In the past few decades, promoting diversity has become an increasingly important objective for firms (Dezso, Ross, and Uribe 2016; Dobbin, Kim, and Kalev 2011). The percentage of women on boards, a commonly used indicator for diversity acceptance, has been steadily rising among major US corporations, from less than 5 percent in the 1980s to over 20 percent in 2015 (Catalyst 2015; Farrell and Hersch 2005). Similarly, a growing number of firms have added Chief Diversity Officer positions and adopted policies and programs designed to promote diversity in management (Dobbin, Kim, and Kalev 2011; Shi et al. 2018). Over time, senior managers have become increasingly attentive to diversity issues and have a growing desire to improve diversity in their firms.

However, despite senior managers increasing awareness, implementation often lags. Many firms have found it easier to add women and racial minorities in board positions than it is to increase the percentage of women and minorities in management. Part of this difficulty
comes from an imprinting effect: when employees are used to certain routines, they are more reluctant to change. This is particularly likely to occur when the senior management’s commitment to diversity is weak. As a result, even though firms claim support for diversity and adopt practices to promote it, many have only made marginal progress toward diversity goals.

The restructuring process in the post-acquisition period may help reduce this imprinting effect. As an organization resets its structures and practices, managers and employees are forced to adopt new ways of recruiting, evaluating, and interacting. Firms that hope to increase diversity may use post-acquisition restructuring as an opportunity to fully integrate diversity practices into the new structure. Additionally, most newer routines and practices, even those not explicitly related to workplace diversity, produce less racial and gender inequality than older ones, as shown by the higher average levels of managerial diversity in newer establishments (Stainback, Tomaskovic-Devey, and Skaggs 2010). For example, firms in the past few decades have increasingly favored performance-based promotion criteria over seniority-based ones, a change that should benefit racial minorities and women.

Using post-acquisition restructuring as an opportunity to improve diversity has repeated come up in my interviews. Several of my respondents suggest that while seniors managers have been “highly concerned about diversity, they are reluctant to disrupt a firm’s day-to-day operation to advance diversity goals. Therefore, post-acquisition restructuring serves “as a vehicle to invent newer and more diverse management” (interview). A senior executive in the M&A industry summarized it well: “management and human resource teams often pursue policies to diversify their workforce and a M&A transaction creates an opportunity to ‘make headway’ by incorporating diversity as part of a selection process and/or insisting that slates of candidates reflect diversity targets the acquiring company has set as long-term ambitions” (email correspondence following an interview).

In sum, drawing from existing theories and various qualitative evidence, I hypothesize that M&A events simultaneously increase skill-based inequality and decrease racial and

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gender inequality. The restructuring process post acquisition should lead to fewer jobs for middle managers, back-office and blue-collar workers, but more opportunities for racial minorities and women to advance in the organization.

**DATA AND ANALYSIS**

To examine the hypotheses, I used establishment-level panel data from EEO-1 surveys. In 1966, to help monitor compliance with the Civil Rights Act of 1964, the Equal Employment Opportunity Commission (EEOC) began to collect demographic workforce data on private-sector firms. Before 1982, all private-sector firms with at least 50 employees, as well as firms under federal contract and with at least 25 employees, were required to submit EEO-1 forms annually. In 1982, the cutoff was raised to 100 employees for non-federal contractors and 50 for federal contractors. Firms meeting this requirement are required to file a separate form for each establishment that has at least 50 employees. Each EEO-1 survey form contains a matrix of occupational classifications and race/sex combinations, into which employers enter counts of employees. The form also collects identifying information for each establishment, such as its location, industry, and parent firm. Past studies that compared the EEO-1 reports to other datasets find their quality to be comparable to that of US Census or Current Population Survey-based sources (Tomaskovic-Devey et al. 2006; Robinson et al. 2005). Data from 1971 to 2015 were obtained for research purposes through an Intergovernmental Personnel Act agreement signed by Frank Dobbin. EEO-1 reports were not available for years 1974, 1976, and 1977. In total, the EEO-1 data from 1971 to 2015 include 202,101 firms and 11,966,225 establishments. On average a firm lasts ten years in the sample and an establishment lasts 6.2 years.

Although the EEO-1 data have become the gold standard in studying organizational diversity, there are several limitations (Ferguson and Koning 2017; Tomaskovic-Devey et al. 2006). First, the EEO-1 reports do not include government employees and so the analysis will only speak to patterns in private sector employment. Second, the reports are only required
of firms with at least 100 employees, which accounts for approximately 60 percent of all employment (Hollister and Wyper 2013). Thus, the sample is only representative of medium-to large-firms, and excludes small businesses. Third, the EEO-1 report does not provide information about individual workers, only annual employment totals for each category. This prevents us from capturing all personnel changes within a firm since it will not identify situations where one employee leaves and a similar employee is hired as a replacement. Finally, in 2007, the EEOC began collecting data from establishments whose size is below the mandatory reporting threshold. Consequently, there is a larger-than-usual cohort of establishments that entered the data in 2007 (Ferguson and Koning 2017). I conducted robustness checks to ensure that the additional establishments that were added in 2007 do not substantively influence the results.

**Identifying Acquisition Events**

Mergers and acquisitions can be identified based on changes in an establishment’s parent firm. Each establishment has a unique identifier that is consistent over time, even after changes in ownership. Similarly, there is also a unique identifier for each parent firm. I can therefore identify instances of ownership change by observing when the establishment changes its parent firm’s identifier. This identification method includes both partial and full acquisitions: one establishment of a firm can be acquired while another establishment remains under the old firm. Using this method, I identified a total of 37,343 unique acquisition events covering 168,293 establishments from 1972 to 2014. I compared this sample with the commonly used Securities Data Company (SDC) Platinum’s database on mergers and acquisitions, and found that about half of the acquisition events in this sample also appear in the SDC’s database. With the assistance of a colleague, we manually merged the SDC and EEO-1 databases. As a robustness check, I ran analyses on the subsample of acquisition events that appear in the SDC database, and the findings are substantively similar.

Some establishments have been acquired multiple times. This can confound the post-acquisition effect: it would be unclear if an observed pattern is due to the lingering impact
of an older acquisition or the immediate impact of a more recent acquisition. I therefore focus only on the first acquisition events for an establishment, and exclude its observations during and after the second acquisition event. In the sample, 16.7 percent of the acquired establishments are experiencing second-time acquisitions. After the exclusion, the resulting sample includes 140,125 establishments that have been acquired.

Figure 1 plots the number of unique acquisition events and proportion of workers affected over time. The volume of acquisitions has been relatively consistent over time, with a few spikes representing waves of acquisition events. On average about 1.5 percent of all workers in the EEO-1 sample, or 5.6 million workers, experience such an event in a given year. The plotted pattern is generally consistent with M&A data from Center for Research in Security Prices (CRSP), SDC, and other sources, showing major spikes in acquisition activities in the mid-80s and the mid-90s.

[insert Figure 1 about here]

**Dependent Variables: Occupational Change**

The first outcome of interest is skill-based inequality in an establishment. The EEO-1 data provide information on occupations, which I used as a proxy for an establishment’s skill compositions. There are nine broad occupational categories on the EEO-1 form: official and managers, professionals, technicians, sales workers, office and clerical workers, craft workers, operatives, laborers, and service workers. Although this occupational categorization is rather broad (Tomaskovic-Devey et al. 2006), it has remained constant over the years, in contrast to many other national surveys that have adopted different occupational coding schemes over time. The EEO-1’s consistency in occupational definition ensures that any changes observed are not driven by shifts in coding systems (Kalev 2014; Wilson and McBrier 2005).

In presenting the results, I grouped some categories for the ease of interpretation. In particular, I clustered technicians, sales workers, and office and clerical workers as back-office employees, and clustered craft workers, operatives, and laborers as blue-collar employees. This creates a classification scheme with four skill-based levels: official and managers,
professionals, back-office, and blue-collar.

**Dependent Variables: Racial and Gender Inequality**

The second set of outcomes are racial and gender inequalities in an establishment. I measured demographic inequalities using two types of variables: (1) proportion of racial minorities and women in management, and (2) racial and gender segregation across non-managerial occupations. I focus on these two types of outcomes, instead of total proportion of minorities and women, because they help capture the extent to which minorities and women have truly become integrated at all levels of an organization.

The EEO-1 report includes five racial groups: White, Black, Asian, Hispanic, and Native American. Because each employee can only be counted once on the survey, this classification scheme effectively makes Hispanic a separate racial category. Such classification differs from the U.S. Census, where respondents can declare a race and also identify as being of Hispanic origin. Treating Hispanics as a separate racial group is somewhat unusual, but no more fraught than any other socially constructed racial scheme (Ferguson and Koning 2017). Because most establishments do not have any Native American employees, I chose to focus on the other four groups in the analyses.

I used the index of dissimilarity (D) to measure segregation at the establishment level. The value of D represents the proportion of employees who need to change occupations for equal representation of two groups in an establishment. It tells us how far the establishment is from an equal occupational distribution by gender or race. The index of dissimilarity is computed within establishments as follows:

\[
Index \ of \ Dissimilarity \ (D) = \left( \frac{1}{2} \sum_{occ=1}^{n} |P_{occ,x} - P_{occ,y}| \right) \times 100
\]

(1)

where \(P_{occ,x}\) and \(P_{occ,y}\) are the proportions of group x and y, respectively, within an occupation in an establishment (Tomaskovic-Devey et al. 2006). In calculating D, I included only the eight non-managerial occupations. Therefore, the value of D is not directly influenced
by the proportion of racial minorities and women in management.

Figure 2 plots these variables over time. Consistent with past findings (Leicht 2008), the overall levels of racial and gender inequality have been declining, with a greater decline for women than for racial minorities. Figure 2a shows that both minorities and women made important advancements in managerial representation in the 1970s. In the following decades, while women have continued to make steady progress into managerial positions, blacks and Hispanics progresses have stalled. Figure 2b shows that gender segregation has been declining rapidly since the 1970s, but racial segregation has been decreasing at a much slower pace.

**Matched Sample**

To analyze the impact of acquisition events, I implemented a dynamic difference-in-difference design in which I compare the target (the acquired) establishments to similar establishments that did not take part in an acquisition event.

I implemented a matched sampling procedure: for every target establishment in the year right before the acquisition, I selected a control establishment from the same year. Specifically, for each target establishment acquired in year t, I selected a control establishment that satisfies the following criteria in year t-1: (1) it belongs to the same two-digit SIC industry as the target; (2) it is in the same quartile of establishment size (num of employees in the establishment) as the target; (3) it is in the same quartile of firm size (num of employees in the firm) as the target; and (4) it has never been acquired. For control establishments that satisfy these requirements, I calculated their propensity score using a linear logistic model and selected the establishment with the closest propensity score to the target establishment. Each target establishment is matched with one control establishment and vice versa. Table 1 shows a comparison between the target group and the control group in the year before the target establishments get acquired.

As a robustness check, I ran the analyses using a number of alternative matching
samples. First, I tested various alternative ways of assigning propensity score, including using a different set of predictors in calculating propensity score and picking nearest three neighbors as controls. I also tried not using propensity matching, but simply drawing a random set of establishments that share the same industry, year, size quartile, and geographic location as the target establishment. Second, some M&A deals were announced but subsequently withdrawn, and I used the target establishments of these withdrawn acquisition deals as a control group. Data on withdrawn M&A deals come from SDC Platinum database. Finally, I used the entire sample, including all establishments that did not experience an acquisition, as controls (see Appendix Table A.1 for results on racial and gender inequality). Using each of these alternative matching samples produces substantively similar results.

Once matched, the establishment in the control group is considered as if it had gone through an acquisition event in the same year as the target firm. I set the window of observation at ten years, starting from five years prior to the acquisition event until five years after the event. The five years of pre-acquisition observation allow us to observe any parallel trends between the target and the control groups, and the five years of post-acquisition observation should provide sufficient time to observe any post-acquisition change, even if it is not immediate. The other years of observation were excluded from the sample.

After matching, the sample initially includes 1,701,884 observations, representing 264,410 unique establishments. Some of these establishments were closed shortly after acquisition, and workers in these establishments were either transferred or let go. Although establishment closure is an important topic, it does not inform us on how acquisition affects different groups. I therefore excluded establishments that were shutdown within the first two years post acquisition, resulting in a final sample of 1,432,196 observations and 191,957 establishments. As a robustness check, I ran the same analyses using the initial sample (that includes closed establishments); doing so increases the overall downsizing effect post acquisition but does not substantively change the post-acquisition effect on within-establishment inequality.
Model Specification and Controls

I examine employment dynamics change at the establishment level by estimating the following difference-in-differences model:

\[ Y_{jt} = \sum_{p=-4}^{5} c_p T_{ip} + \sum_{p=-4}^{5} \beta_p T_{ip} \times Target_i + \gamma \cdot X_{it} + E_i + CY_t + \epsilon_{it} \]  

(2)

where \( Y_{jt} \) is outcome variable at establishment \( j \) in year \( t \). I denoted \( p \) as the number of years relative to the acquisition event. Specifically, I set year one to be the first year that an establishment changed its parent firm in the EEO-1 form. \( T_{ip} \) is a dummy variable indicating \( p \) years after the acquisition event. For example, \( T_{i3} = 1 \) when it is the third year after establishment \( i \) being acquired. The coefficient of interest is \( \beta_p \), which captures the average difference in the outcome variable between treated and control firms when \( T = p \). In other words, \( \beta_p \) denotes the acquisition effects on the outcome variable.

I included establishment-level fixed effects, \( E_i \), to control for time invariant establishment traits, such as industry and geographic location. The inclusion of fixed effects allows us to observe changes within each establishment, rather than differences between establishments. I also included calendar year fixed effects, \( CY_t \), to control for macro environment, as well as leads and lags around event time, \( T_{ip} \). Fixed effects help rule out omitted variables, but they also reduce the power of an estimation. As a robustness check, I included additional fixed effects on industry-year and state-year; results are substantively similar.

\( X \) is a set of control variables that capture time-variant establishment level characteristics. These include the total number of workers in each establishment, as occupational composition and demographic inequality may be a function of workplace size (Tomaskovic-Devey and Skaggs 1999). In estimating racial and gender inequality, I also included the proportion of total workers in each occupational group, as occupational composition could influence minorities and women segregation levels and promotion rates. For example, a workplace with a higher proportion of blue-collar workers may have a lower promotion rate.
for women, as women could be seen as token members in such a male-dominated setting. Excluding controls of occupational compositions does not substantively change the results. In these models, I also included each demographic group’s proportion among non-managerial workers and in the local labor market. Demographic data on local labor market comes from Decennial Census’s county-level data, which is extrapolated to obtain annual estimates. The inclusion of these controls ensures that the outcome variables capture racial and gender inequality within a workplace, as opposed to overall workforce diversity. Finally, in estimating segregation levels, I included a measure for occupational heterogeneity, which tends to be correlated with the index of dissimilarity (Tomaskovic-Devey et al. 2006).

Standard errors are clustered at the firm level. Results are qualitatively similar whether or not establishment size is included as weights, so for simplicity I presented models without weights. In some models, I used a simpler difference-in-differences model, grouping together $T_{ip}$ into pre-acquisition and post-acquisition periods.

\[
Y_{it} = c \cdot Post_i + \beta \cdot Post_i \times Target_i + \gamma \cdot X_{it} + E_i + CY_t + \epsilon_{it}
\]  

(3)

where $Post_i$ is equal to one if establishment $i$ has experienced an acquisition event within the last five years and zero if it would go through an acquisition event within the next three years.

In these models, the key identifying assumption is that employment in target and control establishments would have followed parallel trends if no acquisition had occurred in the target establishment. Admittedly mergers and acquisitions are not exogenous events, but endogeneity is less of a concern as long as acquisition events are not chosen based on factors highly correlated with dependent variables. Potential threats to identification would be unobserved shocks that affect both the outcomes and the timing of acquisition. In this case, identification would be a concern if acquirer firms target establishments on the verge of (1) losing the less-skilled labors and (2) increasing racial and gender diversity. Based on my qualitative understanding, I find some possibility for the first scenario but little reason to
believe the second scenario. For models on skill-based inequality, it is possible that acquirer firms would target poorly run firms and these firms happen to be the verge of streamlining their workforce. But for models on racial and gender inequality, the acquirer firms rarely consider a target firms diversity levels when making acquisitions, making the second scenario unlikely.

RESULTS

Results strongly support the hypothesis: although acquisition events contribute to skill-based gaps, they reduce racial and gender inequality. After being acquired, establishments tend to downsize middle managers, back-office workers, and blue-collar workers, while hiring more highly skilled professionals. At the same time, they promote a higher proportion of racial minorities and women into managerial positions and have significantly lower levels of racial and gender segregation. This post-acquisition effect on diversity is mostly concentrated in establishments that had poor levels of diversity prior to the acquisition, and is stronger when the acquirer firm values diversity.

Impact on Skill-Based Inequality

I first examined how acquisition impacts the acquired establishment’s occupational composition. As expected, an establishment experiences downsizing after being acquired, with a 2.5 percent reduction in workforce on average (see Table 2 Model 1; $e^{-0.025} = 0.975$). But downsizing does not affect all groups the same way. As both Table 2 and Figure 3 show, middle managers and back-office workers are disproportionately affected by post-acquisition downsizing. After being acquired, an establishment loses, on average, 4.1 percent of middle management positions, 4.3 percent of back-office positions, and 3.5 percent of blue-collar and service positions, but gains 1.8 percent of professional positions. Proportion-wise, as Table 2 shows, establishments have a smaller proportion of middle managers and back-office workers and a higher proportion of professionals post acquisition.

[insert Table 2 about here]
It is worth noting here that Figure 3 shows significant difference in pre-trends between the treated and the control, particularly for models predicting the numbers of managers, back-office workers, and service workers. It is possible that the acquired establishments, which could be lower-performing, have already started to streamline the workforce prior to the acquisition. The strong pre-trends suggest the need to be cautious in claiming any causal effect of acquisitions on skill-based inequality.

Before moving on to discuss contextual variables, I mention one implication of these results. Sociologists have been concerned about how restructuring affects managerialism. Although we generally expect that corporate restructuring leads to fewer management layers (Dencker and Fang 2016; Jung 2016), recent studies using Current Population Survey data have shown a positive correlation between M&A events and managerial representation at the industry level (Goldstein 2012). My finding suggests that this positive correlation is not due to a direct causation, as M&A events lead to significantly fewer middle managers in the acquired establishments, both in absolute numbers and in proportions. This opens up an interesting question for future studies: if acquisitions lead to fewer managerial positions, what are the drivers behind a positive correlation between acquisition activities and managerial jobs at the industry level?

**Skill-Based Gap: Variations in the Acquisition Effect**

Several contextual factors could shape the acquisition effect on skill-based inequality. First, the acquisition effect on occupational composition varies over time (see Appendix Figure A.1). In the 70s and 80s, acquisition lead to little downsizing and had limited impact on occupational composition. This is mostly expected, as most acquisitions during this period were diversifications. Downsizing started in the 1990s, and during this period it had a strong impact on middle managers, service workers, and in particular, blue-collar workers. In the 1990s, an acquisition would lead to a 2.8 percent reduction in middle management, a 2 percent reduction in back-office positions, and a 7 percent reduction in blue-collar and
service positions. In the 2000s, post-acquisition downsizing significantly increased for middle managers and back-office positions, but in fact decreased for blue-collar positions. After being acquired, an establishment loses 4.6 percent of blue-collar and service positions, but as much as 8.6 percent of middle management and 9.8 percent of back-office positions. This temporal shift may be explained by the different types of technologies adopted post acquisition in the 1990s and in the 2000s (Ma, Ouimet, and Simintzi 2016). Prior to the 2000s, technological adoptions largely involved automations to replace blue-collar laborers. But technological innovation in the 2000s, such as various software applications, rather made many mid- and low-skilled white collar-positions redundant.

Appendix Figure A.2 compares service-related and manufacturing-related industries. I defined these two categories broadly: service refers to any consumer-facing industries, including service, retail, and finance, while manufacturing refers to non-consumer-facing industries, including manufacturing, mining, and construction. The acquisition effect is similar in both sets of industries for middle managers and back-office workers, but differs for blue-collar and service workers: a significant post-acquisition reduction in blue-collar and service workers occurs when the acquired establishment is in service (a reduction of 8.5 percent), but no such effect when it is in manufacturing (an increase of 1 percent; statistically non-significant). As one possible explanation, in an effort to streamline operations, acquirers may be more likely to get rid of non-core functionalities, and blue-collar positions are more likely to cover core functionalities in manufacturing than service industries.

Finally, I compare the acquisition effect across acquired firms of different sizes. It is possible that when the acquired firm is large, the acquirer would make fewer changes and allow it to retain its existing structure, routine, and culture. Appendix Figure A.3 breaks down the sample into quartiles, based on the acquired firm’s total number of employees. I used the acquired firm’s size instead of establishment’s size because the acquirer should make strategic decisions based on the overall size of the acquisition. For most occupations, the post-acquisition effect is stronger when the acquired firm is smaller. For example, the
downsizing magnitude for middle managers and back-office workers is much larger when the acquired firm is in the bottom and second quartile (a reduction of 7.2 percent and 7.8 percent respectively for the bottom quartile, compared to 0.4 percent and 3.2 percent for the top quartile), and the increase in professional positions is also much stronger when the acquired firm is smaller. The lone exception is in blue-collar and service positions: post-acquisition downsizing is stronger when the acquired firm size is in the top quartile. Nonetheless, for the most part, results suggest that the acquisition effect is much weaker when the acquired firm is larger.

**Impact on Racial and Gender Inequality**

I next examined the impact of acquisition on racial and gender inequality in the acquired establishment. As Table 3 and Figure 4 show, establishments experience an increase in managerial diversity and a decrease in occupational segregation post acquisition. In Table 3, following an acquisition, the proportion of white managers dropped by 0.42 percentage points, while the proportion of black and Hispanic managers rise by 0.18 percentage points and 0.21 percentage points, respectively, and the proportion of women managers rise by 0.6 percentage points. These changes correspond to a 3 percent rise in the proportion of black managers, a 4 percent rise in the proportion of Hispanic managers, and 2 percent rise in the proportion of women managers. The magnitude of these effects is significant in the context of managerial diversity, which tends to have relatively small changes. In fact, the acquisition effect leads to more managerial diversity than many practices specifically designed to promote diversity, such as diversity training, diversity evaluations, and minority mentoring programs (Kalev, Dobbin, and Kelly 2006). Moreover, as I show below, the effect sizes are much more significant for certain sets of establishments.

[insert Table 3 about here]

[insert Figure 4 about here]

Table 3 also shows a significant reduction in non-managerial occupational segregation. Following an acquisition, an establishment reduces its black-white dissimilarity by 0.85,
Hispanic-white by 0.95, Asian-white by 0.67, and men-women by 1. Using the average dissimilarity level for each category as a benchmark, these numbers correspond to a 2.8 percent reduction in black-white segregation, a 3 percent reduction in Hispanic-white segregation, a 1.9 percent reduction in Asian-white segregation, and a 2.5 percent reduction in gender segregation. Workplace desegregation is a slow process. For example, despite various efforts, black-white and Hispanic-white segregation in the United States have been declining at a rate of only around 0.6 percent per year, while gender segregation has been declining at a slightly faster pace, around 1.5 percent per year (Tomaskovic-Devey et al. 2006). Therefore, relatively speaking, the magnitude of the desegregation following an acquisition is significant. Additionally, similar to managerial diversity, the impact of acquisition on desegregation is much higher for certain sets of establishments, as I will discuss in the next subsection.

Unlike models on the skill gap (see Figure 3), models predicting racial and gender inequality show little pre-trend between the treated and the control establishments. In a few cases the treatment effect occurs one year before the acquisition event, possibly because post-acquisition restructuring can start right after the acquisition announcement and before the official completion date. The limited pre-trend gives us more assurance in the validity of the results. I focused on managerial diversity and occupational segregation because they best reflect racial and gender inequality in an establishment (Kalev, Dobbin, and Kelly 2006; Ferguson and Koning 2017). An establishment’s overall workforce diversity, in contrast, tends to be highly correlated with demographics in its local labor market. After all, there is little equality in an establishment where most racial minorities and women are clustered in low-paying, non-supervisory positions, even if it has a high level of overall workforce diversity. As mentioned earlier, to distinguish inequality from overall workforce diversity, all models include the five demographic groups (whites, blacks, Hispanics, Asians, and women) respective proportions of non-managerial workers in the establishment, as well as their proportions in the local labor market. Therefore, the resulting outcomes effectively represents each group’s promotion rate and occupational differences.
Nonetheless, I conducted additional analyses predicting an establishment’s overall workforce demographics, finding that acquisition events have limited effect on them. The total proportion of white workers decreases, while that of black workers increases by 0.29 percentage points, equivalent to a 3.5 percent increase. There is not much change among Hispanic and Asian workers, and a slight decrease in women workers. But this effect is marginal: women workers lose 0.16 percentage points in total proportion, roughly equivalent to a 0.3 percent drop. In short, acquisition events increase the proportion of black workers, but have little impact on other demographic groups.

Figure \[1\] breaks down the acquisition effect into specific years before and after the event (see Equation 1). After being acquired, there is an immediate increase in managerial diversity and decrease in occupational segregation, and the effects extend at a more gradual pace in the following years. In some cases, the change starts even before the official acquisition date, possibly because most acquisition announcements take place sometime before the official acquisition.

Withdrawn M&As

As a robustness check, I conducted a placebo test using withdrawn acquisition events, focusing on establishments for which an acquisition was announced but ultimately withdrawn. These establishments likely share most of the same attributes observed and unobserved that lead them to be targeted for an M&A transaction. Any difference between them and the successfully acquired establishments is mostly related to acquirer firms, such as the type of financing used to fund the deal, the acquirers size, and its attitude toward the deal (Blonigen and Pierce 2016). Therefore, withdrawn M&A events serve as a suitable placebo test: if my results are driven by unobserved confounders, then we should observe the same effects among withdrawn acquisition events.

I obtained from SDC Platinum all acquisition announcements that were subsequently withdrawn within 90 days. I used a 90-day cutoff to ensure that no substantive post-acquisition changes had been made since the announcement. I then manually merged the
withdrawn M&A events from SDC Platinum with my sample from EEO-1 reports, finding a total of 90,313 matched establishments representing 2,580 unique firms. I then implemented the same matching procedure to identify a sample of matched establishments for this withdrawn sample and conducted the same set of analyses as if these establishments has been acquired.

As Figure 5 shows, the withdrawn establishments did not experience the same set of acquisition effects as the acquired establishments. In fact, none of the acquisition effects in this sample is statistically different from zero. This placebo test provides additional support that we were observing an acquisition effect in the main models, not a confounder.

Volunteer Departure for Whites and Men?

A key alternative explanation is that whites and men have better outside options and are therefore more likely to voluntarily leave after their establishment is acquired. To entertain it, I examined the moderating role of unemployment rate and economic recession on the post-acquisition effect. If whites and men’s reduced managerial representation is driven by volunteer departures, then we should see a weaker post-acquisition effect when the economy is in recession and/or when the unemployment rate is higher. In these times, fewer firms would be hiring, and there should be fewer voluntary departures and more forced turnover.

Unemployment data is available annually at the state level from the Current Population Survey (CPS) and decennially at the county level from the Census Bureau. I tried both measures using separate models, linearly extrapolating the decennial Census data to approximate annual county level rates. But as Table 4 shows, a higher unemployment rate does not reduce the post-acquisition effect at all. In models using CPS data, the unemployment rate has a small, statistically insignificant interacting effect with post-acquisition. In models using extrapolated Census data, the moderating effects are negative, which is the opposite of what the alternative explanation suggests. In a separate analysis, I used the
macro-level economic recession indicator from the National Bureau of Economic Research to moderate the post-acquisition effect, and found that economic recession similarly does not moderate the post-acquisition effect. These results suggest that the post-acquisition effect is likely not driven by volunteer departures.

[insert Table 4 about here]

Prior Racial and Gender Inequality

I next considered an establishment’s level of racial and gender inequality prior to the acquisition event. The restructuring process, which helps clear existing structural and cultural impediments for racial minorities and women, should have a more pronounced effect when the establishment previously had high levels of inequality.

I conducted split-sample analysis based on an establishment’s racial and gender inequality prior to an acquisition event. For each establishment, I examined its diversity and segregation levels in the years before being acquired and compared them to the average diversity and segregation levels of its peers in the same county, year, and 2-digit SIC industry. I then conducted separate analyses on establishments that had a higher level of inequality than their peers and those that had a lower level. I carried out this procedure separately for each of the eight dimensions of racial and gender inequality.

Figure 6 shows results from the split-sample analyses: for establishments whose inequality levels were previously lower than their peers, the acquisition event had almost no effect on subsequent inequality levels: establishments in both control and target groups exhibit similar trends post acquisition. But for establishments that had higher levels of inequality, there is a significant reduction in racial and gender inequality in the target establishments following acquisition. After being acquired, an establishment in this category increases its proportion of black managers by 0.41 percentage points, Hispanic managers by 0.38 percentage points, and women managers by 1.5 percentage points, which roughly correspond to a 17 percent increase in the representation of black managers and Hispanic managers and a 8.5 percent increase in the representation of women managers. In an ad-
ditional analysis, instead of analyzing split samples, I used an establishment’s inequality level prior to acquisition as a moderator and interacted it with Target x Post-Acquisition. Results are substantively similar to the split-sample analysis. These results show that the post-acquisition effects are almost entirely concentrated in establishments that previously had relatively higher levels of racial and gender inequality.

[insert Figure 6 about here]

**Acquirer Firm Diversity and Segregation**

The acquirer firm’s attitude and policies toward diversity should play an important role in the restructuring process. After all, it is typically senior managers from the acquirer firm who oversee the post-acquisition integration. Additionally, practices, policies, and culture from the acquirer firm could easily spill over into the acquired establishment. Therefore, when the acquirer firm values diversity and has adopted practices that support racial minority and women workers, acquisitions should be more likely to reduce racial and gender gap in the acquired establishment.

I recorded an acquirer firm’s managerial diversity and segregation levels in the year prior to making the acquisition and found them to significantly moderate the acquisition effects. When the acquirer firm had been doing well in an inequality dimension, it tends to improve the acquired establishment’s inequality in that dimension as well. Figure 7 shows the split-sample analyses on those establishments whose acquirer firm had higher-than-median levels of inequality and those whose acquirer firm had lower-than-median levels, separately for each of the eight dimensions of inequality. As the figure shows, when the acquirer firm had higher levels of racial and gender inequality, the post-acquisition effects still exist but are relatively small and, in some models, statistically insignificant. In contrast, when the acquirer firm had lower levels of inequality, the acquired establishment tends to show a significant jump in managerial diversity and a sharp drop in segregation levels following the acquisition event. These results suggest that acquisitions benefit racial minorities and women much more when the acquirer firm had been doing well on the diversity front.
Racial and Gender Gap: Variations in the Acquisition Effect

I also examined several additional factors that may shape the post-acquisition effects on racial and gender inequality. First, I found little significant temporal variation: the effects appear to be slightly stronger in the 1990s, but they are quite visible in all periods (see Appendix Figure A.4). Similarly, the acquisition effects also appear to be mostly similar between service and manufacturing: the desegregation effect is slightly stronger in manufacturing industries and the managerial-diversity effect is slightly stronger in service industries, but they are highly comparable to each other (Appendix Figure A.5).

I next explored the moderating role of acquired firm size. As discussed above, the acquirer is more likely to leave an acquired firm intact when the latter is relatively large, since it is difficult to extensively restructure a large firm. Consistent with this prediction, I found the acquisition effect to be much weaker when the acquired firm is larger: there is no significant post-acquisition change in managerial diversity and only a small reduction in occupational segregation when the acquired firm size is in the third or top quartile. In contrast, the change is the greatest when the acquired firm size is in the bottom quartile (see Appendix Figure A.6).

A few more analyses were conducted, but are not shown in this paper. One is the comparison between same-industry acquisitions and diversifications: the acquisition effect on demographic inequality is stronger for same-industry acquisitions than for diversifications, possibly because there is less restructuring in the latter scenario. I also examined whether the acquisition effect varies based on the political attitude in the county. Using presidential election data, I measured liberal attitude based on the percentage of each county's population supporting democratic candidate and found this measure to significantly moderate the acquisition effects in predicting racial inequality. In particular, an acquisition event leads to more minority managers when it is located in a more liberal county. This variable, however, has no significant moderating influence on gender inequality. Finally, I examined whether
an acquirer firm’s federal-contractor status moderates the acquisition effect. In the United States, federal contractors are required to follow affirmative action, which could encourage the acquirer to push for managerial diversity following acquisition. In additional analyses, I did not find much difference between federal contractor acquirers and those who are not, suggesting that the rising level of managerial diversity post acquisition is not a direct result of affirmative action requirements.

**Alternative Explanations and Potential Mechanisms**

Before concluding, I discuss possible mechanisms underlying the observed effects. To explain the acquisition effects on skill-based gap, my qualitative evidence suggest that eliminating role redundancy, technological adoption, and streamlining during the restructuring phase are the most likely culprit. Some of these mechanisms have been either mentioned or alluded to in previous studies (e.g. Ma, Ouimet, and Simintzi 2016). But the acquisition effects on racial and gender inequality are a relatively novel concept and mechanisms underlying these effects are less clear. I offer some discussions in this section.

First, I have already suggested that the above analysis is not consistent with the volunteer departure story. But there is a related possibility: it is possible that white men are generally paid more for their relative productivity, and to reduce costs, the acquirer firm would simply cut these overpaid workers, leading to a lower proportion of white male managers. This process should be more likely to occur when the firm is in dire financial situations, has low cash flow and high-debt-to-equity ratio, or face weak union pressures. Using a subset of the sample covering publicly traded firms, I interacted a firm’s revenue per asset, Tobin’s Q, cash flow, and debt-to-equity ratio with post acquisition and did not find any significant interaction effect. I then used industry-level labor union data from the Current Population Survey and did not find it to influence the post-acquisition effects either. While this mechanism is still possible, it is unlikely to be a key explanation.

The second set of possibilities is that the acquirer firm has more managerial diversity and less occupational segregation than the acquired firm, and the observed effect is a result
of the acquirer transferring their employees to the acquired establishment. I also found this explanation unlikely for a few reasons. One, while acquirer firms may occasionally send some middle managers to the acquired establishments, they rarely send non-managerial workers, so this process cannot explain the decreased desegregation levels among non-managers. Additionally, internal transfers within a large firm are more likely to occur when new changes have stabilized, usually sometime after the initial restructuring period. Two, on average acquirer firms are not any more managerially diverse or less segregated than the acquired establishments. Three, when the acquirer firms have low managerial diversity and high occupational segregation, acquisition does not lead to more inequality in the acquired firm, which is inconsistent with this explanation. Moreover, I did not find any significant interacting effect when adding the physical distance between the acquirer firm headquarters and the acquired establishment as a moderator, assuming that worker transfer would be more likely when distance is smaller.

After addressing these alternative explanations, I propose two likely mechanisms: (1) restructuring shakes up existing arrangements and hierarchies and opens up more opportunities for women and racial minorities, and (2) senior management uses restructuring as an opportunity to advance diversity goals and/or implement practices that are more friendly to racial minorities and women. In the theory section, I have discussed these two processes using a range of qualitative data and existing theories. Quantitative analyses mostly support these two mechanisms, as the effects are the strongest in establishments that had a higher level of racial and gender inequality and when acquirer firms showed a concern for diversity (had a higher level of diversity). It is possible that both mechanisms are at work, but perhaps during different time periods. For example, the second mechanism could be a more important driving force in recent years because senior managers are much more conscious of diversity in recent decades than in earlier decades. In contrast, the first mechanism is likely to have played a more important role in earlier decades, when racial and gender discrimination were much more prevalent and open. A brief summary of possible mechanisms and
DISCUSSION AND CONCLUSION

How does firm acquisition shape workplace inequality? Although acquisition events affect millions of workers every year, their impact on inequality remains unclear. Using a range of qualitative evidence and existing theory, I theorize that while acquisition may lead to more skill-based inequality, it may in fact reduce racial and gender inequalities in the acquired establishment. I found strong support for this hypothesis using a nationally representative sample of firms covering 37,343 acquisition events. On the one hand, acquisition events significantly reduce jobs for middle managers, back-office workers, and blue-collar workers, while raising the demand for highly skilled professionals. But on the other hand, they lead to more managerial diversity and less occupational segregation, especially for blacks and women. Therefore, acquisition events both increase skill-based inequality and decrease racial and gender inequality.

This study speaks to the literature on workplace inequality. In recent decades, organizational fields have undergone transformative changes, as mergers, acquisitions, internal downsizing, and other forms of corporate restructuring have become commonplace. These organizational dynamics create and destroy jobs on a large scale, so they can dramatically alter the job opportunities available to different groups of workers. Indeed, in this era of restructuring, we are seeing rising class inequality, unemployment, and persistent racial disparities. Redistributive wage-setting institutions such as unions and internal labor markets have weakened as power has shifted decisively in favor of employers. How many of these changes are credited to organizational restructuring and workplace reconfiguration?

As sociologists become increasingly interested in the consequences of corporate restructuring, a general view has emerged: widespread restructuring activities contribute to inequality by hurting the job prospect for disadvantaged groups (Dencker 2008; Dencker...
Restructuring typically leads to downsizing and wage depression for workers in more peripheral positions, which should particularly affect the lower-skilled workers and demographic minorities. In making downsizing decisions, managers' cognitive biases could further aggregate racial and gender inequalities (Acker 1992; Reskin and Padavic 1994). This study offers strong empirical support for part of this view. Using a nationally representative sample and robust diff-in-diff models, this study provides convincing evidence that one of the most common forms of restructuring events—mergers and acquisitions—have contributed substantially to the growing class inequality in the United States.

But my study paints a different picture for racial and gender inequality. A previously underexplored consequence of restructuring is the opportunity to break up existing hierarchies, structures, and norms. Restructuring can open up opportunities for those competent individuals who nevertheless were located on the periphery and given limited support under the old arrangement. This is particularly so following an acquisition, which typically involves extensive restructuring, external oversight, and new leadership. Such a shakeup can greatly benefit racial minorities and women, especially if racial and gender inequalities were previously high. Thus, it may be too soon for a definitive verdict on the inequality consequences of corporate restructuring. As this case on acquisition shows, restructuring can contribute to some forms of inequality while alleviating others.

Interestingly, the acquisition effects reflect macro level trends—growing skill gaps and declining racial and gender gaps. This may not be a coincidence: mergers and acquisitions could be seen as tools that help senior managers to speed up changes in an organizational field, as they can use the restructuring opportunity to shape a firm in their desired direction. If this is the case, then the consequence of acquisition could vary significantly across countries. For instance, we may not observe the same set of effects in countries where shareholder value and demographic diversity have not become widely accepted.

This study's findings also beg a rethinking of the intersectionality between race,
gender, and class. Although post-acquisition restructuring reduces racial and gender gaps, low-skilled racial minorities and women may not reap much benefit from this change. In fact, the resulting skill gap likely diminish their career prospects, perhaps even more than it does for low-skilled whites and men. The growing stratification within racial minority groups and women has already been noted by some scholars, and my findings calls for more attention to this intersection between race, gender, and class.

In addition to the literature on organizational inequality, this paper also contributes to the rich literature on mergers and acquisitions. M&A events are traditionally the realm of economists and management scholars studying corporate finance, and have been an active topic of study. However, as mentioned earlier, the vast majority of this work focuses on profitability and performance as the pertinent outcomes. The few studies that do address employment consequences simply use them to understand workplace productivity and labor costs. This is unfortunate, because M&A events have huge impact on workers, employment relationships, and workplace inequality. Given their prevalence and importance in the contemporary world, there appears to be great potential for sociologists to study M&A events and link them to social inequality and stratification.

This study has its limitations. Given the data is at the establishment level, it is difficult to observe the precise processes at work. Are the reduced racial and gender gaps a result of the re-evaluation process, newly adopted structures and practices, or a conscious effort of the acquirer firm to promote diversity? Future studies could use more detailed micro-level data to better measure the relative impact of these different processes. Additionally, the EEO-1 report does not include data on wages. Does the changing occupational composition accurately reflect a growing wage gap? Although there is increasing managerial diversity, are minority and women managers paid on the same level as their white male counterparts prior to acquisition? Currently, no one dataset in the United States offers information on wage, occupation, race, and gender. For future studies, perhaps the available employer-employee linked datasets in Europe can help us answer these questions.
Although acquisitions are generally pursued for strategic purposes, they have the unintended consequence of causing major employment changes. Using diff-in-diff models on a nationally representative set of firms, I found that acquisitions lead to more skill-based inequality but reduce racial and gender inequality in the workplace. These findings should encourage more studies to focus on the link between organizational dynamics and social inequality.
REFERENCE:


He, Alex, and Daniel Maire. 2018. Mergers and Managers: Manager-Specific Wage Premiums and Rent Extraction in MAs.


Katz, Lawrence F., and Kevin M. Murphy. 1992. Changes in Relative Wages, 19631987:


Figure 1: Trend in Merger and Acquisition Activities over Time

(a) Num of Unique Acquisition Events

(b) Proportion of Workers Affected

Figure 2: Trend in Managerial Composition and Segregation over Time

(a) Managerial Composition

(b) Occupational Segregation
Table 1: Comparing Means for Treatment and Control Groups before an Acquisition Event

<table>
<thead>
<tr>
<th></th>
<th>Treatment mean</th>
<th>Control mean</th>
<th>Rest of Sample mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pct White Managers</td>
<td>87.402</td>
<td>87.097</td>
<td>83.996</td>
</tr>
<tr>
<td>Pct Black Managers</td>
<td>5.500</td>
<td>5.410</td>
<td>6.793</td>
</tr>
<tr>
<td>Pct Hispanic Managers</td>
<td>5.010</td>
<td>5.317</td>
<td>6.703</td>
</tr>
<tr>
<td>Pct Asian Managers</td>
<td>2.089</td>
<td>2.175</td>
<td>2.508</td>
</tr>
<tr>
<td>Pct Women Managers</td>
<td>30.999</td>
<td>31.245</td>
<td>35.331</td>
</tr>
<tr>
<td>Pct White Workers</td>
<td>72.818</td>
<td>72.985</td>
<td>70.034</td>
</tr>
<tr>
<td>Pct Black Workers</td>
<td>12.486</td>
<td>12.070</td>
<td>12.941</td>
</tr>
<tr>
<td>Pct Hispanic Workers</td>
<td>10.149</td>
<td>10.343</td>
<td>11.805</td>
</tr>
<tr>
<td>Pct Asian Workers</td>
<td>3.348</td>
<td>3.289</td>
<td>3.465</td>
</tr>
<tr>
<td>Pct Women Workers</td>
<td>48.518</td>
<td>48.638</td>
<td>50.264</td>
</tr>
<tr>
<td>Blk-Wht Occupational Segregation</td>
<td>29.943</td>
<td>29.994</td>
<td>28.784</td>
</tr>
<tr>
<td>Hisp-Wht Occupational Segregation</td>
<td>31.735</td>
<td>31.840</td>
<td>30.258</td>
</tr>
<tr>
<td>Asian-Wht Occupational Segregation</td>
<td>34.985</td>
<td>34.482</td>
<td>33.200</td>
</tr>
<tr>
<td>Men-Women Occupational Segregation</td>
<td>39.855</td>
<td>40.460</td>
<td>37.532</td>
</tr>
<tr>
<td>Pct Managers</td>
<td>12.861</td>
<td>13.329</td>
<td>13.635</td>
</tr>
<tr>
<td>Pct Professionals</td>
<td>12.108</td>
<td>12.062</td>
<td>11.677</td>
</tr>
<tr>
<td>Pct Backoffice Workers</td>
<td>40.416</td>
<td>40.205</td>
<td>43.056</td>
</tr>
<tr>
<td>Pct Bluecollar Workers</td>
<td>27.556</td>
<td>26.682</td>
<td>22.388</td>
</tr>
</tbody>
</table>
### Table 2: Diff-in-Diff Models: Downsizing and Occupational Change Before and After Acquisition

<table>
<thead>
<tr>
<th></th>
<th>Total Employees</th>
<th>Pct Managers</th>
<th>Pct Prof</th>
<th>Pct Backoffice</th>
<th>Pct Bluecollars</th>
<th>Pct Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Acquisition x</td>
<td>-0.0249***</td>
<td>-0.500***</td>
<td>0.426***</td>
<td>-0.392*</td>
<td>0.252</td>
<td>-0.0701</td>
</tr>
<tr>
<td>Target (treat)</td>
<td>(0.00467)</td>
<td>(0.0903)</td>
<td>(0.0863)</td>
<td>(0.180)</td>
<td>(0.141)</td>
<td>(0.118)</td>
</tr>
<tr>
<td>Total Num Workers (log)</td>
<td>-4.877***</td>
<td>-0.656***</td>
<td>-2.338***</td>
<td>4.434***</td>
<td>1.223***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0700)</td>
<td>(0.0660)</td>
<td>(0.128)</td>
<td>(0.110)</td>
<td>(0.0628)</td>
<td></td>
</tr>
<tr>
<td>Establishment Age (proximation)</td>
<td>-0.00318***</td>
<td>0.0723***</td>
<td>0.176***</td>
<td>-0.271***</td>
<td>-0.0718***</td>
<td>-0.0616***</td>
</tr>
<tr>
<td></td>
<td>(0.000600)</td>
<td>(0.00753)</td>
<td>(0.0107)</td>
<td>(0.0223)</td>
<td>(0.0152)</td>
<td>(0.0149)</td>
</tr>
<tr>
<td>Observations</td>
<td>1432196</td>
<td>1432196</td>
<td>1432196</td>
<td>1432131</td>
<td>1432196</td>
<td>1432131</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.932</td>
<td>0.823</td>
<td>0.908</td>
<td>0.921</td>
<td>0.944</td>
<td>0.954</td>
</tr>
<tr>
<td>Year Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Establishment Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Additional Control Vars</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Figure 3: Predicted Workers Count before and after an Acquisition Event
### Table 3: Diff-in-Diff Models: Managerial Composition and Occupational Segregation Before and After Acquisition

<table>
<thead>
<tr>
<th></th>
<th>Managerial Composition</th>
<th>Segregation Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Acquisition x</td>
<td>-0.421***</td>
<td>0.176***</td>
</tr>
<tr>
<td>Target (treat)</td>
<td>(0.0791)</td>
<td>(0.0483)</td>
</tr>
<tr>
<td>Total Num Workers</td>
<td>-0.770***</td>
<td>0.343***</td>
</tr>
<tr>
<td>(log)</td>
<td>(0.0567)</td>
<td>(0.0366)</td>
</tr>
<tr>
<td>Pct Blue Collars</td>
<td>45.00***</td>
<td>-9.440***</td>
</tr>
<tr>
<td>Pct Service Workers</td>
<td>44.57***</td>
<td>-9.307**</td>
</tr>
<tr>
<td>Establishment Age</td>
<td>-0.178***</td>
<td>0.130***</td>
</tr>
<tr>
<td>(proximation)</td>
<td>(0.0149)</td>
<td>(0.00969)</td>
</tr>
<tr>
<td>Observations</td>
<td>1432196</td>
<td>1432196</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.770</td>
<td>0.712</td>
</tr>
<tr>
<td>Year Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Establishment Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Additional Control Vars</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

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

(a) Pct White Managers

(b) Pct Black Managers

(c) Pct Hispanic Managers

(d) Pct Asian Managers

(e) Pct Women Managers

cont. on next page
Figure 4: Predicted Change in Managerial Diversity and Occupational Segregation before and after an Acquisition Event
(a) Pct White Managers

(b) Pct Black Managers

(c) Pct Hispanic Managers

(d) Pct Asian Managers

(e) Pct Women Managers

cont. on next page
Figure 5: Predicted Change in Managerial Diversity and Occupational Segregation before and after a Withdrawn Acquisition Announcement
Table 4: Moderating the Acquisition Effect: Unemployment Rate

<table>
<thead>
<tr>
<th></th>
<th>Pct White</th>
<th>Pct Men</th>
<th>Pct White</th>
<th>Pct Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Acquisition x</td>
<td>0.0877</td>
<td>-0.00116</td>
<td>-0.423*</td>
<td>-0.195*</td>
</tr>
<tr>
<td>Target (treat)</td>
<td>(0.182)</td>
<td>(0.103)</td>
<td>(0.193)</td>
<td>(0.0936)</td>
</tr>
<tr>
<td>Post Acquisition x</td>
<td>-6.994**</td>
<td>-2.909*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target x County Level UnempRate</td>
<td>(2.660)</td>
<td>(1.349)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Acquisition x</td>
<td></td>
<td>-0.133</td>
<td>-0.361</td>
<td></td>
</tr>
<tr>
<td>Target x State Level UnempRate</td>
<td>(2.806)</td>
<td>(1.260)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>1421792</td>
<td>1400958</td>
<td>1411122</td>
<td>1390293</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.770</td>
<td>0.914</td>
<td>0.770</td>
<td>0.914</td>
</tr>
<tr>
<td>Year Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Establishment Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Additional Control Vars</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Pct Black Managers

Pct Hispanic Managers

Pct Women Managers

contin. on next page
Figure 6: Predicted Change in Managerial Diversity and Occupational Segregation: Splitting High and Low Diversity Establishments prior to an Acquisition Event
Estimated Coefficients

Years relative to Acquisition Event

(a) Acquiring Firm: High

Pct Black Managers

(b) Acquiring Firm: Low

(c) Acquiring Firm: High

Pct Hispanic Managers

(d) Acquiring Firm: Low

(e) Acquiring Firm: High

Pct Women Managers

(f) Acquiring Firm: Low

cont. on next page
Figure 7: Predicted Change in Managerial Composition and Occupational Segregation: Splitting High and Low Diversity Levels for Acquiring Firms
Table 5: Possible Mechanisms (on Racial and Gender Inequality)

<table>
<thead>
<tr>
<th>Possible Mechanisms</th>
<th>Evidence in Support</th>
<th>Evidence Against</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| Restructuring allows for a thorough and extensive re-evaluation of employees, which helps eliminate network homophily and past bias. | • An immediate drop in inequality levels after acquisition events.  
• The effects are mostly concentrated in establishments that had high inequality levels prior to acquisition.  
• Extensive employee reevaluation post acquisition is quite common. | • The reduction in inequality continues slowly after the initial period. | A possible mechanism; could work in conjunctions with other mechanisms to produce the observed effects. |
| Volunteer departures for whites and men, assuming they have better outside options. | • An immediate drop in racial and gender inequality levels after acquisition events. | • The effects are unrelated to economic conditions and unemployment rate.  
• Does not explain why the acquisition effects vary depending the acquirer’s diversity and segregation levels and the establishment's prior levels.  
• The reduction in inequality continues slowly after the initial period. | Unlikely, given that this mechanism should vary according to the availability of jobs on the market. |
| Acquirer firms cut down highly paid senior workers, who tend to be whites and men. | • An immediate drop in racial and gender inequality levels after acquisition events. | • The effects are unrelated to firm performance, cash flow, debt-to-equity ratio, and industry unionization.  
• The reduction in inequality continues slowly after the initial period.  
• Does not explain why the acquisition effects vary depending the acquirer’s diversity and segregation levels. | Unlikely, given that this mechanism should be stronger when the firm is in dire financial situation, low cash flow, high debt-to-equity ratio, and weak unionization support. |

*Continued on next page*
<table>
<thead>
<tr>
<th>Proposed Mechanisms</th>
<th>Evidence in Support</th>
<th>Evidence Against</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spillover of policies, practices, and culture from the acquirer firm to the acquired establishment.</td>
<td>• The reduction in inequality continues slowly after the initial period.</td>
<td>• When the acquirer firm had lower diversity, the opposite effects do not occur (simply no major post-acquisition effects).</td>
<td>Could be one of the mechanisms, but likely not the only one.</td>
</tr>
<tr>
<td></td>
<td>• The effects are stronger when the acquirer firm has more managerial diversity and less segregation.</td>
<td>• An immediate drop in racial and gender inequality levels after acquisition events.</td>
<td></td>
</tr>
<tr>
<td>Acquirer uses restructuring as an opportunity to increase managerial diversity and reduce segregation in the acquired establishment.</td>
<td>• The effects are stronger when the acquirer firm is more concerned about diversity (has more managerial diversity and less segregation).</td>
<td>• The effects are strong even in the earlier decades, even though awareness for diversity was weaker then.</td>
<td>A possible mechanism; could work in conjunctions with other mechanisms to produce the observed effects.</td>
</tr>
<tr>
<td></td>
<td>• The effect on racial managerial equality is stronger in more liberal areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Well supported by qualitative evidence.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal transfer of managers and workers.</td>
<td>• The effects are stronger when the acquired firm has more managerial diversity and less segregation.</td>
<td>• Internal transfer typically starts well after the transaction date.</td>
<td>Unlikely, for all four of these reasons.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The effects are not moderated by the physical distance between the acquirer and the acquired.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• When the acquirer firm had lower managerial diversity and more segregation, the opposite effects do not occur (simply no major post-acquisition effects).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Acquirer firms on average do not have higher managerial diversity and lower segregation than acquired establishments.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDICES
Table A.1: Fixed Effects Models without Matching: Managerial Composition and Occupational Segregation Before and After Acquisition

<table>
<thead>
<tr>
<th>Post Acquisition x</th>
<th>Post Treatment (treat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pct White</td>
<td>0.169***</td>
</tr>
<tr>
<td>(0.0755)</td>
<td>0.148</td>
</tr>
<tr>
<td>Pct Black</td>
<td>0.201***</td>
</tr>
<tr>
<td>(0.0523)</td>
<td>0.0303</td>
</tr>
<tr>
<td>Pct Hispanic</td>
<td>0.0386</td>
</tr>
<tr>
<td>(0.0242)</td>
<td>0.148</td>
</tr>
<tr>
<td>Pct Asian</td>
<td>0.572***</td>
</tr>
<tr>
<td>(0.0998)</td>
<td>(0.148)</td>
</tr>
<tr>
<td>Pct Women</td>
<td>0.0386</td>
</tr>
<tr>
<td>Blk-Wht</td>
<td>-0.743***</td>
</tr>
<tr>
<td>(0.111)</td>
<td>(0.120)</td>
</tr>
<tr>
<td>Hisp-Wht</td>
<td>-0.845***</td>
</tr>
<tr>
<td>(0.0755)</td>
<td>(0.0461)</td>
</tr>
<tr>
<td>Asian-Wht</td>
<td>0.572***</td>
</tr>
<tr>
<td>(0.0998)</td>
<td>(0.148)</td>
</tr>
<tr>
<td>Men-Women</td>
<td>-0.895***</td>
</tr>
<tr>
<td>(0.134)</td>
<td>(0.134)</td>
</tr>
<tr>
<td>Total Num Workers</td>
<td>-0.778***</td>
</tr>
<tr>
<td>(log)</td>
<td>(0.0530)</td>
</tr>
<tr>
<td>Pct Managers</td>
<td>-7.805**</td>
</tr>
<tr>
<td>(7.997)</td>
<td>(2.707)</td>
</tr>
<tr>
<td>Pct Professional</td>
<td>-12.04***</td>
</tr>
<tr>
<td>Workers</td>
<td>(7.949)</td>
</tr>
<tr>
<td>Pct Backoffice</td>
<td>-11.53***</td>
</tr>
<tr>
<td>Workers</td>
<td>(7.944)</td>
</tr>
<tr>
<td>Pct Blue Collars</td>
<td>-11.64***</td>
</tr>
<tr>
<td>(7.958)</td>
<td></td>
</tr>
<tr>
<td>Pct Service Workers</td>
<td>-11.52***</td>
</tr>
<tr>
<td>Establishment Age</td>
<td>-0.183***</td>
</tr>
<tr>
<td>(proximation)</td>
<td>(0.0147)</td>
</tr>
<tr>
<td>Establishement Age</td>
<td>0.131***</td>
</tr>
<tr>
<td>Observations</td>
<td>1701884</td>
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<tr>
<td>R²</td>
<td>0.779</td>
</tr>
<tr>
<td>Year Fixed Effects</td>
<td>Yes</td>
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<tr>
<td>Establishment Fixed Effects</td>
<td>Yes</td>
</tr>
<tr>
<td>Additional Control Vars</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Figure A.1: Acquisition Effect on Occupational Composition: sorted by Decades

(a) 1970s and 1980s
Num Managers (log)

(b) 1990s

(c) 2000s

(d) 1970s and 1980s
Num Professionals (log)

(e) 1990s

(f) 2000s

(g) 1970s and 1980s
Num Backoffice Workers (log)

(h) 1990s

(i) 2000s

(j) 1970s and 1980s
Num Bluecollar and Service Workers (log)

(k) 1990s

(l) 2000s

Figure A.1: Acquisition Effect on Occupational Composition: sorted by Decades
Figure A.2: Acquisition Effect on Occupational Composition: sorted by Broad Industries
Estimated Coefficients

Years relative to Acquisition Event

(a) Bottom Quartile

(b) Second Quartile

(c) Third Quartile

(d) Top Quartile

Num Managers (log)

(e) Bottom Quartile

(f) Second Quartile

(g) Third Quartile

(h) Top Quartile

Num Professionals (log)

cont. on next page
Figure A.3: Acquisition Effect on Occupational Composition: sorted by Firm Size (of the Acquired Firm)
Figure A.4: Acquisition Effect on Managerial Diversity and Segregation: sorted by Decades
Figure A.5: Acquisition Effect on Managerial Diversity and Segregation: sorted by Broad Industries
(a) Bottom Quartile

(b) Second Quartile

(c) Third Quartile

(d) Top Quartile

Pct Minority Managers

(e) Bottom Quartile

(f) Second Quartile

(g) Third Quartile

(h) Top Quartile

Pct Women Managers

cont. on next page
Figure A.6: Acquisition Effect on Managerial Diversity and Segregation: sorted by Firm Size (of the Acquired Firm)