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# Race in the Workplace and Labor Market Inequality: Dissertation Summary

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My dissertation integrates a labor market stratification and an organizational demography approach to investigate labor market inequalities in race and gender. My foremost research concern is to investigate inequality in employer allocation of rewards to minority and majority group workers and, particularly, how the allocation of rewards occurs in and is patterned by features of work establishments. A secondary concern focuses on the ways in which employers systematically sort whites and minorities into different jobs. Analyses presented in my dissertation are among the first to use establishment-worker linked data to explore the association between race segregation at the job-level and worker outcomes. Following a review of methods used to collect establishment-worker linked data, the first set of empirical analyses tests predictions from three theories about the effects of workplace race composition on individual wages and job benefits. Of the theories I test, Blau's (1977) "minority group power theory," and Blalock's (1967) "minority group threat theory" and "devaluation theory" data support devaluation theory. Compared to predominantly white jobs, predominantly African American and Hispanic jobs pay less and offer fewer benefits to all workers, regardless of their race. Moreover, I find that the devaluation of work done by minorities occurs at the job level as opposed to the occupation or establishment levels.<sup>1</sup> A second set of analyses investigates the sources of variation in the race and gender compositions of an establishment. In brief, an employer's race and gender are strong predictors of the race and gender composition of establishments, net of establishment characteristics and applicant pool demographics. A final set of multivariate analyses explain the black-white pay gap in urban labor markets. These final analyses are grounded in two major theoretical frameworks: human capital theory and institutional theory. The former attributes race differences in pay to individual-level characteristics associated with pay, while the latter argues minority wage penalties are a function of institutional arrangements that operate to their disadvantage. Features of workplaces, especially workplace race segregation, explain a significantly larger share of the black-white wage gap than differences in education, experience, seniority, and work hours among racial

groups. My dissertation concludes with both policy and research suggestions.

## Data Sources and Sample Description

Data for analyses come from two primary sources: the Multi-City Study of Urban Inequality (MCSUI), and its companion, the Multi-City Telephone Employer Survey (MCTES). The MCSUI is a multistage, stratified, clustered area-probability sample of adult residents in Atlanta, Boston, Detroit, and Los Angeles collected between 1992 and 1994. The dataset contains information regarding labor market dynamics, racial attitudes, residential segregation, and demographic characteristics for roughly 9,000 respondents in these four metropolitan areas.

The Multi-City Employer Telephone Survey (MCTES) contains demand-side information for a sample of 3,510 establishments in Atlanta, Boston, Detroit, and Los Angeles, collected as part of the Multi-City Project between June 1992 and May 1994. Interviewers identified roughly one-third of the employers in the MCTES through household respondents in the MCSUI study. As a result, I linked the MCSUI and MCTES to create a dataset containing information about individuals, their jobs, their employers, and their establishments. While some analyses draw strictly from the establishment-only data, a majority of analyses consider both supply- and demand-side factors that contribute to labor market inequality.

Descriptive analyses reveal evidence of job race segregation within the four metropolitan areas; roughly 60 percent of whites work in a job where most of the workers are white, while only one-third of African American, Hispanic, Asian, and other nonwhite workers report working in jobs that are mostly white. At the establishment level, similar race segregation is evident. The average establishment percent minority is significantly higher for African Americans and Hispanics (70 percent) than it is for whites (43 percent). At the MSA-specific occupation level, workers of all races work in predominantly white occupations, but occupation-level race segregation is less severe than either job or establishment level segregation. What is more, I find that occupation-race composition estimates mis-state the race of job holders. Workers who report having predominantly African American (or Hispanic) coworkers have an average metropolitan African American occupation percent of only 15 percent (or 6 percent Hispanic). Workers with mostly Asian coworkers have an average Asian occupation percent of 20 percent. The low correspondence between job race-type and MSA occupation to race composition

leads me to conclude that jobs in specific establishments have much different race compositions than MSA-wide occupations that span establishments. In summary, even MSA-specific occupation-level proxies for job-race composition are inaccurate and underestimate the racial diversity of the jobs held by a population.

On average, pay and benefit levels are lower among African American and Hispanics compared to whites. What is more, employers reward workers in predominantly minority work settings with lower pay and fewer benefits than those working in mostly white settings. In this sample, predominantly minority jobs are lower-skilled than those held by non-minorities, but there is no evidence to suggest that workers in predominantly minority settings have overall lower-than-average human capital than those in mostly white settings. The characteristics of establishments employing whites, African Americans, Asians, and Hispanics partly explain race differences in pay levels. In general, compared to white establishments, the typical predominantly minority establishment has fewer of the “primary market” characteristics associated with high pay and rewards. To demonstrate, compared to mostly white establishments, occupations in mostly minority establishments have, on average, lower occupational cognitive skill requirements, lower unionization rates, are less likely to have internal labor markets than predominantly white establishments, and are smaller. Based on the descriptive evidence in this chapter, one might conclude that differences in the characteristics of establishments that employ minorities and whites, or skill requirements of predominantly minority versus predominately white jobs, drive the race wage differential. Multivariate analyses illustrate that these differences are not the only cause of the wage gap or the lower pay for those in mostly minority settings. Before summarizing these analyses, however, I highlight the second set of descriptive analyses in my dissertation.

### **Establishment-Worker Linked Data: A Review**

My dissertation includes a review of publicly available establishment-worker linked data sets and four common methods researchers use to generate these data. I include this review because establishment-worker linked data is necessary to study the mechanisms that influence worker outcomes, as well as how individuals use workplace context to emphasize or minimize the importance of ascriptive characteristics for work outcomes. Also, establishment-worker linked data is necessary to correctly model workplace processes (Baron and Bielby 1980; Nelson and Bridges

1999; Reskin 2000). Studying only work establishments obscures our understanding of the extent to which individual-level attributes affect employment outcomes while studying only the individuals within establishments obscures our understanding of the ways in which workplaces influence employer and worker decisions.

I review three methods of matched data generation, all of which begin with a random sample of individuals. In the first method (what I call the “person-based method”), researchers use a random sample of individuals to report on characteristics of their place of employment. The second method (which I refer to as the “mapped archival method”) begins with a random sample of individuals who report information about themselves and the name and location of their employing establishment. Researchers attach published data about the respondent’s establishment to an individual’s records to generate a matched dataset. The third method (which I define as the “multiple step method”) begins with a random sample of individuals. From this sample, researchers generate an establishment sample by asking individuals to identify their place of employment, then interview an employer there. The matched data set results from linking information reported by an individual with establishment data provided by an employer.

Of the three methods of establishment-worker matched data generation I reviewed, the latter method is a relatively attractive method for collecting matched data. This method ranks well on representativeness, avoids applying a size threshold for inclusion, avoids the complicated process of identifying an establishment sampling frame, and generates a sample that includes informal sector establishments. Using this method, researchers do not compromise the accuracy of data on establishment attributes because employers report organizational characteristics, and they can gather information about a greater range of information unknown to a worker in the establishment (e.g., hiring practices, recruitment techniques, or screening methods). This point is significant because a comparison of employer and employee responses to similar questions regarding the establishment in which they work reveals that, even within the same workplace, employer and worker reports of establishment characteristics—especially establishment size—are often very different and weakly correlated. Specifically, when I compared the percentage difference in reports of establishment size as reported by an employer and worker in the same establishment, over half of reports were not within 50 percent of each other, regardless of establishment sector location (public versus private) or multiple-site operation. These

findings call into question a reliance on individual reports of establishment characteristics and emphasize the necessity of matched data for accurate empirical tests. I conclude that, whenever possible, researchers should rely on the employer reports of establishment-level attributes and use matched establishment-worker data to capture the supply- and demand-side features that affect work outcomes.

### **Why Does Coworker Race Matter? A Test of Three Theories of Workplace Race Composition**

The first set of multivariate analyses uses the linked establishment-worker sample to investigate how the race distribution of workers across jobs affects an individual's wages and job benefits. These analyses accomplish two things: First, they clarify the level—job, occupation, or establishment—at which workplace racial composition affects an individual's work rewards. Second, they test which theory—Blau's (1977) minority group power theory, Blalock's (1967) minority group threat theory or devaluation theory—best explains the association between workplace race composition on the hourly wages and job benefits of minorities relative to whites. Analyses find that the establishment-specific job, as opposed to the occupation or establishment, is the appropriate level at which to measure workplace race composition. I speculate that job-level measures of minority concentration are more suitable than either occupation or establishment-level measures for identifying racial workplace inequality because individuals work and receive wages in a specific job, and they are the most proximate to both employer decisions and the mechanisms that influence worker outcomes. At the same time, job-level measures capture finer distinctions of race segregation and minority concentration than either occupation-level or establishment-level measures.

Results also suggest that employers do not reward or penalize minority workers more than whites because of their presence in jobs, occupations, or establishments. The effect of minority job presence on wages and benefits was no different for whites or minorities. In other words, I did not find that the greater a minority's share of the workplace, the less their reward relative to whites (support for "minority group threat" theory); nor did I find higher relative wages and benefits for minorities as their share of the workplace increased (support for "minority group power" theory). Instead, data support devaluation theory; net of city, individual, job, and establishment controls indicate that employers pay whites and minorities who work in mostly African

American or Hispanic jobs *less* per hour and provide them with *fewer* job benefits than their counterparts who work in mostly white jobs. If jobs are the location of inequality producing mechanisms, this has important implications for the ways in which we can solve the problem of racial wage inequality. It suggests that race inequality will persist unless establishments create policies or practices that target specific jobs, or unless employers open jobs to racial minorities. Moreover, analyses in this section suggest that because a job's race is salient to the reward process, ignoring it will misrepresent our understanding of what influences a worker's pay and benefit levels.

### **Sources of Establishment Demographic Composition: A Strong Case for In-Group Preferences**

A second set of multivariate analyses investigates the sources of an establishment's demographic composition. This chapter advances organizational demography literature by empirically linking the demographic characteristics of employers in charge of hiring with applicant pool demographics and establishment characteristics of race and gender composition. Earlier analyses demonstrated that individual wage and job benefit levels are generally lower in settings with a greater proportion of minorities, so understanding what affects the placement of racial minorities and women in different establishments than whites and men can reduce wage and benefit differences across groups.

Gary Becker's "taste discrimination" theory (1957, 1971) and Rosabeth M. Kanter's "homosocial reproduction" theory (1971) form the theoretical basis for this chapter. Becker's taste discrimination theory states that some employers have a "taste" for discrimination, interpreted as a desire for physical distance from certain groups. As such, some employers will hire fewer racial minorities and women because of their overt, intentional discriminatory preferences. On the other hand, Kanter's explanation for why some establishments hire more minorities and women than others does not come simply from employer's intentional behavior. Kanter's work introduced the idea that employer discrimination stems from unintentional, cognitive choices; an employer's "taste" for discrimination can stem from attraction to similar others (in-group others). In fact, Kanter introduced the idea of "homosocial reproduction," the process whereby an employer looks for outward signs of demographic similarity among (potential) employees, classifies employees on the basis of their similarities and differences to him- or herself, and uses these social

similarities to make employment-related decisions. Employers believe outward similarity signals a basis for trust, mutual understanding, and ease of communication (Kanter 1977). Both taste discrimination and homosocial reproduction theory would argue that the race and gender of the employer in charge of hiring will match the race/sex composition of his or her workplace.

Analyses estimating variation in an establishment's African American, Hispanic, and Asian workforce, as well as female representation in blue-collar and sales occupations, find that employer race and gender are strong predictors of an establishment's demographic composition, but suggest support for homosocial reproduction because measures of "distaste" were not related to outcomes. For example, compared to all minority employers, white employers hire more whites net of applicant pool race composition, city and establishment characteristics, *and* employer discriminatory race preferences (measured as their belief about inner-city workers and their willingness to hire workers with GEDs, criminal records, or irregular employment records—proxies for racial minority workers). At the same time, employers also show a strong tendency for in-group gender preferences; compared to men, women hire significantly more women into blue-collar and sales positions net of city and establishment characteristics, and discriminatory employer sex preferences (e.g., an employer's belief that men are better at certain tasks than women).

These findings have certain implications for race and gender labor market inequality. First, because racial minorities and women are disproportionately underrepresented as employers with hiring power in these four metropolitan areas, employer in-group preferences disproportionately hurt minorities and women. At the same time, employer in-group favoritism is considered discrimination, but it does not fit the "familiar" explanation for why some establishments employ more minorities and women than others because it is not overt or even intentional. In many cases, this type of discrimination is "invisible" and employers may not even realize their actions or behaviors have a tendency to exclude out-groups, making it difficult to target and remedy.

To conclude, employer in-group preferences affect who they hire. Even when an employer uses formal hiring procedures and rules of operation, and when applicant demographics and employer discriminatory tastes are held constant, employers have a tendency to hire in-group race and gender applicants. The main implication from these analyses is that stronger checks of an employer's discriminatory preferences are

necessary to eliminate ascriptive labor market inequality.

### **Explanations of the Black–White Wage Gap in Urban Labor Markets**

A final analytic chapter considers possible explanations of the race and gender wage gap in urban labor markets. In this sample, African American workers earn 24 percent less than whites. Nationwide, year-round, and full-time, African Americans earn roughly 17 percent of the average wage earned by a white worker (U.S. Bureau of the Census 2001), despite the African American community's gains in human capital and the government's efforts to equalize white and minority workplace opportunities with affirmative action (Reskin 1998). Human capital theory and institutional theory offer competing explanations for this gap. Using establishment–worker matched data and regression decomposition, I test these explanations of the race earnings gap. I consider the gross relationship between race and wages and the net relationship of individual-level attributes and three groups of structural characteristics: 1) occupation/job skill demands; 2) formalization and industrial sector; and 3) workplace demographic composition. Central to my analysis—and what distinguishes it from earlier explanations of the black–white wage gap—is the inclusion of a job-level race composition measure in wage attainment models.

I can account for 83 percent of the black–white wage gap, and a majority of the gap is explained by institutional factors. Human capital theory suggests that the attributes one brings to the workplace influence wages, and black–white differences in such attributes drive the race wage gap. African Americans and whites have significantly different levels of human capital, but black–white education, seniority, and work hour differences account for only 20 percent of the black–white wage gap. Institutional theory suggests that differences in the characteristics of the workplaces employing African Americans and whites drive the wage gap. To test the utility of this theory in explaining the gap, I estimated the percent of the black–white wage gap explained by three types of workplace features. Research suggests that black–white differences in occupation and job skill demand explained just over one-third of the racial wage gap, and that workplace formalization and industry location explain none of the gap. The demographic composition of workplaces (e.g., occupation percent female, job race type, and supervisor race), on the other hand, accounted for roughly 30 percent of the black–white wage gap. In other words, the segregation of

blacks and whites into different *jobs* and *occupations* within establishments is central to explanations of the race wage gap.

## Conclusions

Overall, the analyses in my dissertation have demonstrated three crucial results for future studies of labor market inequality and policies meant to eliminate ascriptive inequality in employment and wages. First, analyses locate jobs within specific establishments as the place where mechanisms responsible for producing racial wage inequality occur; reward levels are lower in predominantly minority jobs as compared to jobs held mainly by whites, even net of job cognitive skill demands and workplace features. Moreover, racial minorities suffer disproportionately from lower wages because they are more likely than whites to have minority coworkers. Focusing attention on broad, aggregate industries or occupations will miss racial inequality resulting from processes that occur at the job level. Second, regardless of who applies or the presence of formal operating and recruiting procedures, employers have a tendency to hire in-group members. Whether the tendency to hire in-group workers is due to out-group animus (taste discrimination), similarity attraction (homosocial reproduction), or even the demographic composition of one's social networks, to curb hiring inequalities employers and policymakers must implement and enforce procedures that eliminate employer discretion during the hiring process. Blind hiring procedures, holding employers accountable for their hiring decisions, or having a powerful in-house agency to check an employer's decision may reduce the tendency toward bias in hiring. Finally, analyses in the dissertation suggest that the elimination of job-level race segregation will have a sizeable impact on race wage and employment inequality. The formal procedures I noted above are a first step to open jobs to all workers, regardless of their race or gender. To conclude, research from my dissertation suggests that ascriptive inequality exists in urban labor markets but that with attention to job-level processes, consideration of employers' decision-making processes, and the reduction of workplace race segregation, employers and policymakers can eliminate wage inequality.

## Note

1. A "job" is defined as a specific position in a workplace, while an "occupation" is a collection of jobs involving similar activities across establishments.

## References

- Baron, James, and William Bielby. 1980. "Bringing the Firms Back In: Stratification, Segmentation, and the Organization of Work." *American Sociological Review* 49: 454-473.
- Becker, Gary S. 1957. *The Economics of Discrimination*. Chicago: The University of Chicago Press.
- . 1971. *The Economics of Discrimination*. 2d ed. Chicago: The University of Chicago Press.
- Blalock, Herbert. 1967. *Toward a Theory of Minority-Group Relations*. New York: Wiley.
- Blau, Peter. 1977. *Inequality and Heterogeneity: A Primitive Theory of Social Structure*. New York: The Free Press.
- Kanter, Rosabeth Moss. 1977. *Men and Women of the Corporation*. New York: Basic Books.
- Nelson, Robert L., and William P. Bridges. 1999. *Legalizing Gender Inequality: Courts, Markets, and Unequal Pay for Women in America*. Cambridge: Cambridge University Press.
- Reskin, Barbara F. 1998. *The Realities of Affirmative Action in Employment*. Washington, DC: American Sociological Association.
- . 2000. "Getting it Right: Sex and Race Inequality in Work Organizations." *Annual Review of Sociology* 26: 707-709.
- U.S. Bureau of the Census. 2001. *Current Population Survey*. March 2001.