

USING EEO-1 DATA TO ANALYZE ALLEGATIONS OF EMPLOYMENT DISCRIMINATION

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I. Introduction

Since 1966, the federal government has collected EEO-1 reports annually from all employers with 100 or more employees and government contractors with 50 or more. In 1998, the latest year for which data have been released, these reports covered 191,000 business establishments and their 42 million workers, about 30 percent of the U.S. labor force.

Surprisingly, this rich information source is not widely utilized. The OFCCP allocates its auditing resources partly on the basis of a formula involving these data. EEOC investigators often examine the EEO-1 report of an employer against which complaints have been lodged. And both plaintiffs' and defendants' attorneys commonly review these reports as part of employment discrimination litigation. But such uses are typically limited in one or more ways, being:

- triggered by formal complaints rather than used to identify problems **proactively**, in the absence of complaints.
- focused on a firm's own EEO-1 report with little use of data from other firms to **benchmark** that firm's performance.
- limited to individual establishments rather than considering **systemic** problems throughout a multi-establishment firm.

¹Although I alone bear responsibility for this presentation, I am reporting on joint research by a four member team: Project Director Alfred W. Blumrosen (Cowan Professor of Law, Rutgers University), John J. Miller (Associate Professor of Statistics, George Mason University), Ruth Gerber Blumrosen (Adjunct Professor of Law, Rutgers University), and myself. Our work is supported by the Ford Foundation. All findings reported here are subject to revision and to caveats too complex to discuss within this brief presentation.

- conducted one year at a time, rather than linking years to reveal an employers' long-term **corporate culture**.
- based on simple counts and ratios rather than more sophisticated **statistical measures**.

By transcending each of these limitations, our research provides powerful new information for both the plaintiffs' and defendants' bar.

II. EEO-1 Data and Our Analysis of It

The first step in our work has been to obtain nationwide EEO-1 data for all the years it survives in useable form, which is most years from 1975 to the present. Each establishment's record provides counts of its employees by race/ethnicity and gender, separately in each of nine job groups (e.g., Craft Workers). For reasons of confidentiality, the EEOC has deleted employers' names and street addresses. However, each establishment's record retains information on its general location (e.g., the Orlando Metropolitan Area) and its industry at the Standard Industrial Classification "3 digit" level of detail (e.g., 384, Manufacturing of Surgical, Medical, and Dental Instruments). We can sort these millions of records to form pools of "comparators" -- establishments employing workers in the *same* job class in the *same* industry in the *same* location in the *same* year. We can also link each establishment's information to its counterparts in previous years and in other establishments of the same parent company.

As part of our analysis, we examine these data through the lens of Supreme Court jurisprudence. As I understand it,² the Court has held that when an employer's utilization of a protected group is more than two standard deviations below that of other, similarly situated employers, that disparity gives "substantial reason, based on the statistical manifestations of the net effect of employers' practices, to believe the employer has violated Title VII on a continuing basis."³ This type of evidence, according to the Court, establishes that "discrimination was the company's standard operating procedure -- the regular rather than the unusual practice."⁴ "Such an imbalance is often a telltale sign of purposeful discrimination...In many cases the only available avenue of proof is the use of statistics to uncover clandestine and covert discrimination."⁵ We have embodied this

²See Alfred W. Blumrosen and Ruth Gerber Blumrosen, *The Intentional Discrimination in Employment Project—An Overview* (New Brunswick: Rutgers University School of Law, 1999); Elaine S. Shoben, "The Use of Statistics to Prove Intentional Discrimination," *Law and Contemporary Problems* (Autumn 1983), p. 241; and Barbara Lindemann and Paul Grossman, *Employment Discrimination Law* (Washington: Bureau of National Affairs for the American Bar Association Section on Labor and Employment Law, 1996), Vol. I, pp. 44-47.

³ *EEOC v. Shell Oil Company*, 466 U.S. 54, 71 (1984).

⁴ *Teamsters v. United States*, 431 U.S. 336 (1977).

⁵ *Teamsters v. United States*, 431 U.S. 324, note 20.

two standard deviation test into computer code using our comparator pools – same job class in the same industry in the same location in the same year – as “other, similarly situated employers.” For shorthand, we label an establishment whose utilization of a protected group falls more than two standard deviations below that of its comparators in at least one job class a “**prima facie discriminator.**”

In our analysis, we also define a second level of discrimination, “**hard core discriminators.**” These are employers who, in addition to being prima facie discriminators, meet half a dozen additional criteria, including: (1) their underutilization corresponds to at least 3 standard deviations; (2) their underutilization has persisted over a number of years; (3) the number of workers adversely affected by their underutilization exceeds a minimum threshold; and (4) their underutilization of one protected group is not offset by their utilization of another protected group.

Under these definitions, substantially more than 20 percent of all establishments we examined in 1998 were prima facie discriminators with respect to women, minorities, or both. **About 7 percent of all establishments examined are hard core discriminators with respect to women, and about 12 percent are hard core discriminators with respect to minorities.** Clearly, although the nation has made great progress against discrimination in the past several decades,⁶ a substantial number of employers remain outside the equal opportunity fold.⁷

III. Applying these Analyses in Litigation

Litigation is, of course, one mechanism by which such employers might be addressed, with our EEO-1 analyses potentially relevant to both the plaintiffs’ and defendants’ work in such cases.

Consider, for example, a firm I will refer to as “Southern Retail Company,” facing an allegation of sex discrimination in managerial employment.⁸ An EEO-1 analysis might begin with graphs such as that in Figure 1, which suggest that, consistent with the allegation, this firm’s utilization of women managers in 1998 is dramatically lower than that of peer firms in the same location and industry. Figure 2 confirms that the firm’s deviation from the behavior of its peers is neither transitory nor self-curing, but instead has persisted over several decades. Table One reveals that this firm is much more

⁶See Marc Bendick, Jr., “Adding Employment Testing to the Nation’s Portfolio of Information on Employment Discrimination,” in Michael Fix and Margery Austin Turner (eds.), *A National Report Card on Discrimination in America: The Role of Testing* (Washington: The Urban Institute, 1999), pp. 48-53.

⁷Additional estimates and examples of discriminating employers are provided in Alfred W. Blumrosen, Marc Bendick, Jr., John J. Miller, and Ruth Gerber Blumrosen, *Employment Discrimination Against Women in Washington State, 1977* (New Brunswick: Rutgers University School of Law, 1998), and Alfred W. Blumrosen, Marc Bendick, Jr., John J. Miller, and Ruth Gerber Blumrosen, *Employment Discrimination Against Women and Minorities in Georgia* (New Brunswick: Rutgers University School of Law, 1998).

occupationally segregated than its peer firms in non-managerial as well as managerial employment; this finding suggests that, if the firm practices the promote-from-within approach common in its industry, its underutilization of women as managers may be related to occupational segregation in entry-level positions. And Table Two reveals that the underutilization of women is found consistently across multiple divisions of the company, estimates that the under-utilization affects a large number of women, and computes that the under-utilization is strongly statistically significant.

Together, these tables and figure provide a rough but robust answer to many of the central questions raised in discrimination litigation: proof of underutilization, understanding of intent, dimensions of the adversely affected class, commonality of issues, numerosity of claimants, specific processes leading to discriminatory outcomes, and the magnitude of damages. Most importantly, this analysis was performed before virtually any discovery was conducted and without investing the many hours of experts' time often required before even initial statistical answers are obtained. It provides solid information enabling both plaintiff's and defendant's attorneys to assess very early in litigation the plausibility of individual claimants' allegations, the dimensions of a potential claimant class, the strength of the evidence, and potential damages. In such circumstances, it is likely that cases that are filed will be more solid, and more cases will settle at earlier stages of litigation. Failing settlement, the same analyses are likely to play a central role in the trial itself.

Even in the absence of litigation, employers or their attorneys might wish to commission analyses such as are illustrated here. Such studies could be part of a diversity audit, helping a company measure its progress and identify remaining challenges with respect to discrimination.⁹ They could assist central management of multi-establishment firms to identify trouble spots where local managers are behaving inconsistently with corporate-wide policy. They could provide the factual predicate for voluntary affirmative action that management might wish to initiate.

IV. Conclusion

Objective information, obtained quickly and at low cost very early in the litigation process, should lead to more effective enforcement of employment discrimination statutes against the minority of employers that continue to practice systemic, deliberate employment discrimination. It can assist other, less recalcitrant employers to address discrimination issues proactively. It should lead to resolution of litigation more expeditiously and justly. Those are the potential contributions of our EEO-1 analyses to the continuing struggle against employment discrimination.

⁸Because our data do not include identifying information for individual firms, we can analyze a specific firm only when a firm's EEO-1 identification number is provided to us. Plaintiffs' attorneys might obtain this number from a firm's EEO-1 report (which often appears in EEOC investigative files). Defense attorneys can presumably obtain the number directly from their client employer.

⁹ See Marc Bendick, Jr., Mary Lou Egan, and Suzanne Lofhjelm, *Diversity Training: From Anti-Discrimination Compliance to Organization Development* (Washington: Bendick and Egan Economic Consultants, Inc., 1999).

Figure 1

Percent Females Among Managers at Stores in One Retail Sector
in Non-Metropolitan Areas in One Southern State 1998
(Shaded = Establishments of "Southern Retail Co.")

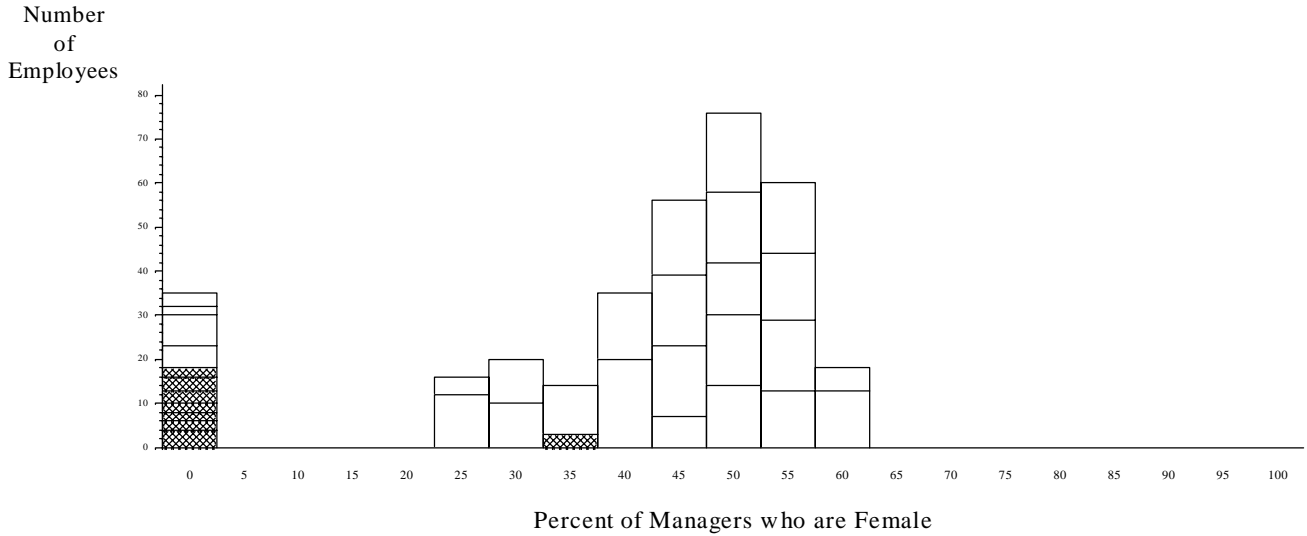


Figure 2

Percent Females by Year for "Southern Retail Co." Managers
("Southern Retail Co." -- triangles, Peer Benchmark -- circles)

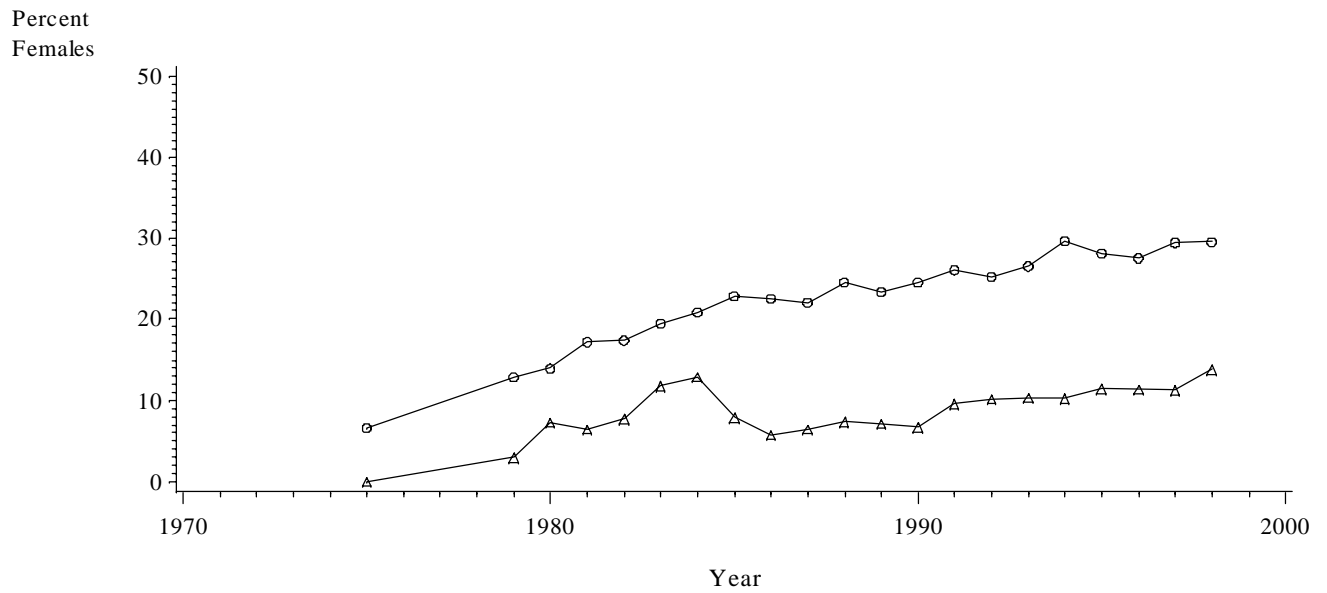


Table One
Occupational Segregation Computed on Nine Broad
Occupational Categories, In-Store Employment, 1998

Occupational Category	Female % of Employees			
	Southern Retail Co.	Comparator Companies	Dominant Gender	More Segregated
Managers	10.7%	31.3%	Men	Southern
Professionals	37.1%	42.8%	--	--
Technician	90.8%	70.2%	Women	Southern
Sales	89.9%	53.6%	Women	Southern
Clerical	95.3%	83.3%	Women	Southern
Craft	33.1%	53.1%	--	--
Operatives	86.8%	17.2%	Women	--
Laborers	7.9%	24.0%	Men	Southern
Service	25.0%	31.8%	--	---
Total	49.1%	48.3%	--	--

Table Two
Employment of Female Managers at Southern Retail Co,
1988, by Operating Component

Component	Southern Retail Co		Local Peers		Shortfall %	Shortfall Number	Std. Devs.
	Estabs.	% Female Managers	Estabs	% Female Managers			
Big Metro Area	25	10.6%	245	27.5%	-16.9%	-11.2	
Small Metro Area	13	11.5%	22	26.4%	- 14.8%	- 2.3	
Rural Area	21	6.5%	130	26.8%	- 20.3%	- 9.3	
Warehouses	5	11.3%	14	14.7%	- 3.4%	- 2.4	
Headquarters	1	23.7%	45	27.9%	- 4.2%	- 6.6	
[continue for 10 other components]							
Company-Wide	109	13.9%	595	29.5%	-15.6%	-70.7	7.2