

Re: **New Study by Two Rutgers Professors Analyzes EEO-1 Data To Conclude That U.S. Job Discrimination Is Widespread, but Faulty Methodology Used Casts Serious Doubt on Credibility of study**

A study released to the news media this week by two Rutgers University law professors uses comparisons of the employment data companies submit to the federal government to draw a series of alarming but grossly exaggerated conclusions about the extent of job discrimination in U.S. corporations.

The report, titled *The Reality of Intentional Job Discrimination in Metropolitan America*, was prepared by Rutgers University Professors Alfred W. Blumrosen and Ruth G. Blumrosen, who have been active in the EEO field ever since 1965, when they assisted in setting up the U.S. Equal Employment Opportunity Commission (EEOC). The study was funded by a grant from the Ford Foundation. The text is available on-line at www.eeo1.com.

As described in more detail below, the study uses a flawed methodology that brings into serious question the reliability of the Blumrosens' conclusions. It also is worth noting that the release of the study coincided with an announcement by the authors that they have formed a fee for services corporation to market the types of data found in their report to members of the public, including "employees considering whether they have been discriminated against, ... agencies seeking to evaluate claims of discrimination, ... attorneys deciding whether to accept a case, and ... employers seeking some sense of their vulnerability."

Overview: Study Analyzes EEO-1s To Make Sweeping (But Flawed) Conclusions About Extent of "Intentional Discrimination" in U.S. Industries

The report draws on a massive study of "EEO-1 reports" — the standard forms employers are required to submit each year for business establishments with 100 or more employees (50 or more employees for federal contractors). The EEO-1 form lists how many persons of each race and gender the establishment employs in each of nine broad occupational groupings ("EEO-1 categories"), such as "Officials and Managers," "Professionals" and "Service Workers."

By comparing employment rates for minorities and women in the various EEO-1 categories at individual establishments against the averages for all establishments in the same Metropolitan Statistical Area ("MSA") and industry classification, the Blumrosens identify establishments that fall below the average in one or more of the nine EEO-1 categories. Wherever a shortfall in any category exceeds a level of "statistical significance" chosen by the authors, they classify it as an instance of "intentional discrimination." The authors then compile these "s" to draw broad conclusions about the extent of discrimination in each of more than 200 industries.

The report does not identify any company by name or address. Because the government is required by law to keep the identities of employers that submit EEO-1s confidential, the authors did not have that information.

Based on their data comparisons, the authors conclude that in 1999, employers intentionally discriminated against minorities in at least one of the nine EEO-1 categories at 37 percent of all the establishments covered in their survey (75,793 out of 205,393 establishments), and intentionally discriminated against women in at least one such category at 29 percent of the establishments (60,425 out of 208,393). They calculate that, in all, this discrimination affected 1,361,083 minorities and 952,131 women.

These conclusions clearly would be disturbing if they were supported by sound statistical analyses, but the fact is, they are not. Indeed, the authors have used crude data comparisons and overlooked or misapplied fundamental statistical and legal principles in drawing their conclusions about the extent of discrimination. In particular, they have overlooked the fact that random chance would account for much of the statistical disparities shown in their data.

As a result, the study offers grossly exaggerated “s” that ultimately prove nothing about the true extent of job discrimination in America, but seem certain to spur resentment and litigation. At the same time, the underlying data compiled for the study actually reveal a number of positive advancements in equal employment opportunity over the last 25 years.

Underlying Data Reveal Significant Gains by Minorities and Women

Although not the main focus of the Blumrosens’ report, the data compiled for their study show dramatic employment gains by minorities and women over the 25-year period they examine (1975 through 1999). For example, the data show that —

- While overall employment at the surveyed establishments increased by about 60 percent, employment of blacks more than doubled, employment of Hispanics more than tripled, and employment of Asians increased more than six-fold.
- Women increased their share of jobs at the surveyed establishments from 37 percent in 1975 to 47 percent in 1999.
- Minorities and women registered gains in every EEO-1 category, with the greatest increases occurring in traditionally “high-end” occupations:
 - Minorities and women both more than doubled their representation in the “Officials and Managers” category.
 - In the “Professionals” category, minorities increased their representation by 137 percent, and women increased theirs by 67 percent.
 - By 1999, women held over 50 percent of all jobs as “Professionals” at the surveyed establishments.
 - Minorities and women both made significant gains in the “Technicians” category.
 - Minorities also made dramatic gains in the “Sales,” “Office and Clerical” and “Craft Workers (Skilled)” categories.
 - Minorities made less dramatic, but still significant gains in the traditionally lower-paying categories of “Operators,” “Laborers” and “Service Workers.”

These advancements of women and minorities are difficult to reconcile with the “s” of rampant intentional discrimination the authors purport to draw from their data comparisons. It seems particularly counterintuitive that women and minorities would have made their greatest gains in the traditionally best-paid and most coveted occupational categories if, in fact, they were facing the widespread discrimination the authors describe. Also hard to square with the report’s conclusions are statistics (noted but not explained by the authors) showing that by 1999, minorities held nearly 30 percent of all jobs at the

surveyed establishments, even though minorities constituted less than 25 percent of the overall U.S. population.

Flaws in Authors' Methodology

It is when the authors purport to identify job discrimination and measure its extent in metropolitan America that their methodology suffers from serious flaws. They use an approach that, under some circumstances, may be suitable for drawing *preliminary* inferences of *possible* discrimination at individual establishments. But they overextend and misapply this methodology to make purported s of “intentional discrimination,” without ever actually measuring and taking account of legitimate, nondiscriminatory factors that may explain why some establishments employ significantly fewer minorities or women in particular EEO-1 categories than the industry averages.

Building on this foundation of sand, the authors then compile their unsupported “s” to draw sweeping conclusions about the extent of intentional discrimination in whole industries and nationwide. Among the most basic problems with the authors’ approach are the following:

Unreliable Database

The EEO-1 reports are unreliable benchmarks for measuring discrimination. Their completion requires a series of subjective judgments including the identification of race and ethnicity of employees, often by visual observation; the placement of jobs into the nine occupational categories; and the identification of industry codes. Accuracy in making these judgments cannot be assumed and the study itself points out the failure of many establishments to even file their EEO-1 reports.

In addition, EEO-1 reports are filed primarily by large employers who typically employ a *higher* percentage of women and minorities than do smaller companies. Indeed, the authors concede that the representation of both minorities and women in the study’s EEO-1 labor force *exceeds* their representation in the national labor force. This means that any benchmark based upon EEO-1 reports is likely to be higher than the representation of minorities and women in the workforce as a whole. A particular establishment, for example, could employ minorities and women at levels in excess of their labor force representation, and yet still be cast as an intentional discriminator by the study because their workforce representation falls below two standard deviations of the higher EEO-1 benchmark used here.

Crude Data Comparisons

In addition, industry/MSA averages do not necessarily provide reliable measures of the employment rates one could expect to find for minorities and women at a particular establishment in the absence of job discrimination. MSAs are broad geographic regions that do not necessarily conform to recruiting or commuting patterns for particular establishments. For example, it may be unrealistic to expect to find the same minority representation rates at a remote suburban location as at an inner-city facility at the opposite end of the same large MSA, where the workforce demographics are completely different.

Similarly, each EEO-1 category spans a wide range of different jobs with different qualifications and requirements, and each industrial classification used in the study covers a range of different types of business establishments. Indeed, in Census 2000 the Census Bureau collected employment information in

509 distinct occupational classifications; thus, each of the nine broad EEO-1 categories encompasses a great many different kinds of jobs.

The “Officials and Managers” category, for example, includes every supervisor and manager in the establishment from a supervisor on the production line to the CEO. Hence, there is no real assurance that the jobs or business operations compared in the study are truly comparable in terms of skill and experience requirements, available labor pools, and other factors that may account for differences in the race/gender composition of a particular EEO-1 category at different establishments.

Failure To Account for Chance

Even if they could measure and account for all the non-random factors other than discrimination that can result in uneven race and gender distributions at establishments in the same MSA, industry and EEO-1 category, however, the authors’ conclusions still would be fundamentally unsound because of an even more basic problem: They have failed to recognize or acknowledge that a significant portion of the statistical disparities identified in their study reflect nothing more than the probable effects of random chance.

The authors use “two standard deviations” as their principal benchmark of statistical significance. They note that at this level there is about a 5% chance that an observed statistically significant deviation from the norm (here, either above or below the industry/MSA mean) occurred purely by chance, rather than as a result of any non-random cause such as discrimination.

What this means is that the authors could (and should) have expected to find statistically significant (by their own benchmark) variations from the mean in any given EEO-1 category at about 5% of the establishments they surveyed, purely as a function of random chance. Half of these chance variations (2.5%) would be above the mean and the other half below. Yet, again, the authors made no adjustments for these probabilities, but instead erroneously counted *every instance* in which they found a shortfall of two standard deviations or more as an instance of “intentional discrimination.”

Worse yet, the authors compounded this error nine times for every establishment — once for every EEO-1 category. When all nine EEO-1 categories are considered, the compounded probability that an employer would fall below the mean to a statistically significant extent entirely by chance is 19%. This means that approximately half of the alleged “intentional discrimination” against minorities and approximately two-thirds of the alleged “intentional discrimination” against women that the authors purport to have “found” did not involve discrimination at all, but only the effects of random distributions found in any large-scale statistical survey.

By ignoring the effects of chance, the authors have vastly overstated the overall extent of discrimination that might fairly be inferred from their statistical comparisons, even if all their data were properly-tailored and it could be shown that no legitimate, non-random factors were involved.

Unsupported Legal Conclusions

The ultimate conclusion the authors purport to draw from their “s” is one that has profound legal as well as moral significance — *i.e.*, that the differences they observe in their data represent cases of

“intentional discrimination.” Yet the courts — the institutions charged with making legal conclusions — would not go nearly so far absent additional evidence.

Although courts have held that properly-tailored statistical comparisons can support *inferences* of possible discrimination in certain circumstances, they have made clear that such comparisons are only a starting point, not the end of the inquiry. But the authors treat their unrefined industry/MSA comparisons, in effect, as creating irrebuttable presumptions. They proclaim the existence of intentional discrimination based on their statistical comparisons alone, without ever collecting, measuring or systematically accounting for any data about legitimate, nondiscriminatory factors — random or otherwise — that may explain the disparities in their numbers.

Distorted “Sense of Reality”

The Blumrosens claim that the objective of their study is “to advance the public ‘sense of reality’ concerning the extent of intentional job discrimination” in the United States. Unfortunately, however, their report is likely to do just the opposite.

Taken at face value, the report conveys a disturbing and misleading picture of a country in which intentional job discrimination pervades all industries and regions. In reality, however, a careful analysis of the underlying data reveals impressive job gains by minorities and women, and the authors’ data comparisons ultimately show nothing about the real extent of job discrimination.

Questions about this memorandum should be directed to Jeff Norris or Bob Williams at 202-789-8650