

Pay Discrimination Case Study

Plaintiff's Report Findings Excluded at Trial



When the plaintiff's pay analysis alleged discrimination against African American employees, our experts examined other factors to give context for the findings.

OVERVIEW

Plaintiff allegations of pay discrimination are based on the claim that one or more minority groups (women, African Americans, older workers) are underpaid compared to the rest of the employees. These claims are even more persuasive when statistical analysis suggests that differences in pay are *not* due to random factors, and therefore may be motivated by racism or sexism.

This was exactly the case in a suit where Welch Consulting labor economists served as expert witnesses. A company's African American employees believed that they were being

systematically paid less than “similarly situated” white employees. (Put another way, white employees were supposedly paid more for roles of roughly the same difficulty and skill level.)

The plaintiff’s expert provided Welch Consulting labor economists with a data set to support this claim. The data included employees’ years of experience, job titles, and several other variables collected over ten years. The opposing expert’s pay analysis (called a “linear regression”) accounted for the years of experience for each employee, and grouped the employees by similar job titles that the company had defined.

The analysis showed pay differences between 1.7% and 16.7% adversely impacting African American employees in the years from 2008 to 2015. Chart 1 shows a summary of these results.

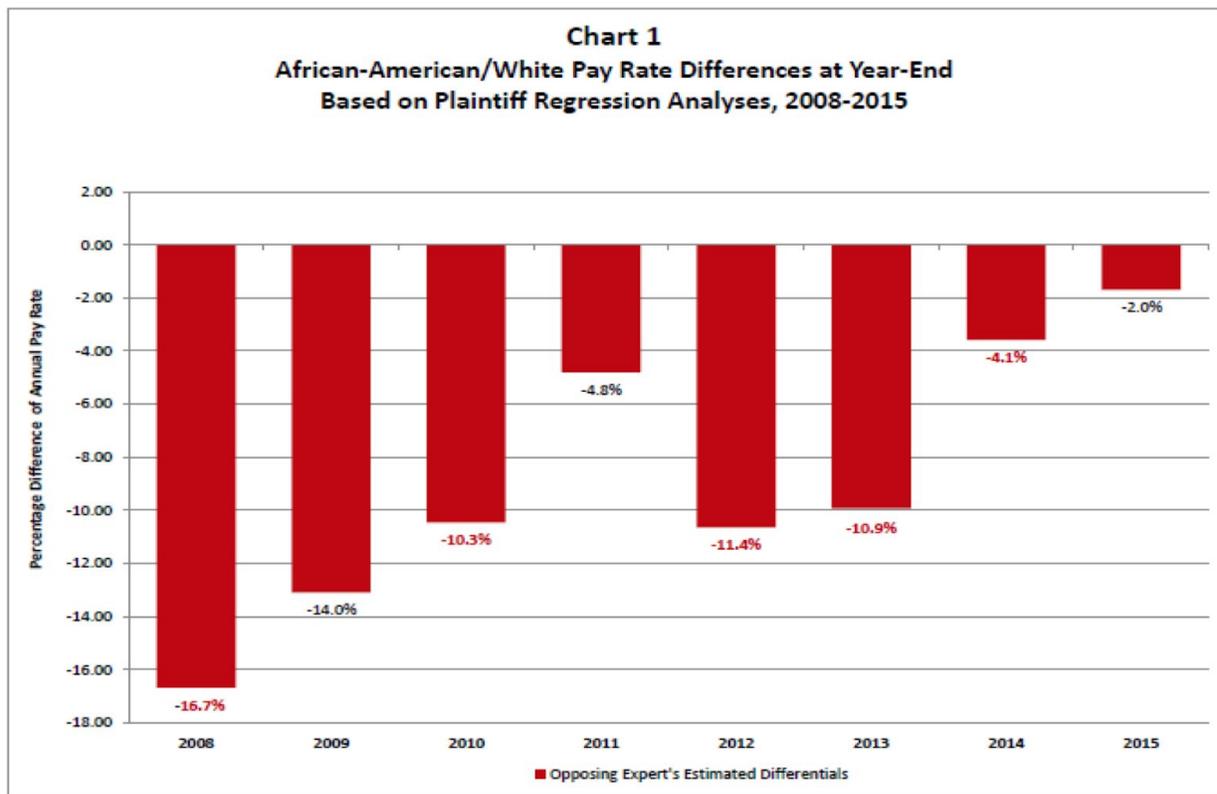


Figure 1: Percentage Difference of Pay Rate

OUR APPROACH

The plaintiff’s analysis illustrated that in five of the eight annual comparisons (from years 2008 to 2015) white employees received more pay than African American employees performing the

“same” work. (These are shown as percentages in Chart 1.) On this basis, the plaintiff’s expert stated that pay discrimination existed to the disadvantage of African American employees.

Our economists reviewed the data produced by the plaintiff’s experts. We noticed one group of employees that had the job title “temporary employees.” The opposing expert had grouped both African American and white employees into this group. Other employees were grouped into job titles describing their specific duties (such as “machinist”, “janitor”, “welder”, “pipefitter,” and so forth.)

We inquired with the company and found that these “temporary employees” were in fact performing the same tasks as three different positions of permanent employees. (For instance, someone who was in fact doing the work of a “welder” or “janitor” was instead labeled as a “temporary employee.”)

The temporary employees were still in a probationary period because they were early in their careers. They were therefore classified differently from permanent employees, even though they were doing similar work.

Since the opposing expert’s pay study was proposing to group the employees doing the same work into the same titles, we realized this “temporary employee” title might be causing an error. We decided to assign each employee with “temporary” status to the job title that best fit that type of work when done by a permanent employee. Then, we re-ran the plaintiff expert’s regression analysis.

OUR FINDINGS

Once we divided the “temporary employees” into the correct categories, we found that the resulting pay differences between white and African American employees were dramatically different. Chart 2 shows the corrected analysis, when employees doing similar jobs were grouped together.

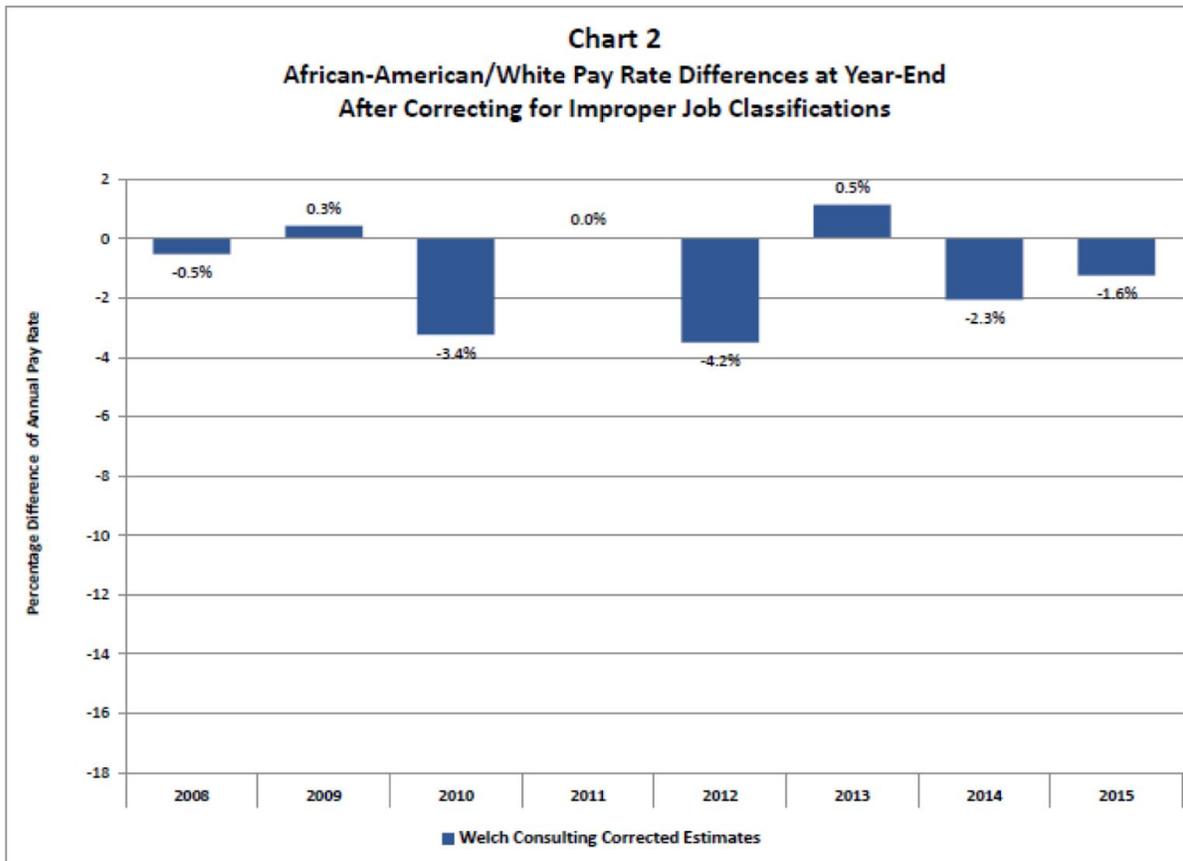


Figure 2: Welch’s Estimations

Chart 1 and Chart 2 look very different. This particular case demonstrates how difficult it is to generate a reliable pay analysis if similarly situated employees are not grouped based on performing the same job functions.

In this company, throughout all of the years measured, both white and African American employees were grouped misleadingly into this one “temporary” job category. This occurred in spite of these workers performing different job functions and receiving different pay. As a result of this error, the data gave an illusion that some employees received substantial pay disparities. This was presumed to be due to racial bias.

Once our experts correctly grouped employees according to their job functions, we found very different results. Our findings negated the opposing expert’s assertions of pay disparities between white and African American employees.

CONCLUSIONS

The following chart shows two measurements side by side: In red, the pay rate differences over the eight years are measured according to the opposing expert's estimates. In blue, our corrections are applied to the model, resulting in employees being more accurately classified by their job functions.

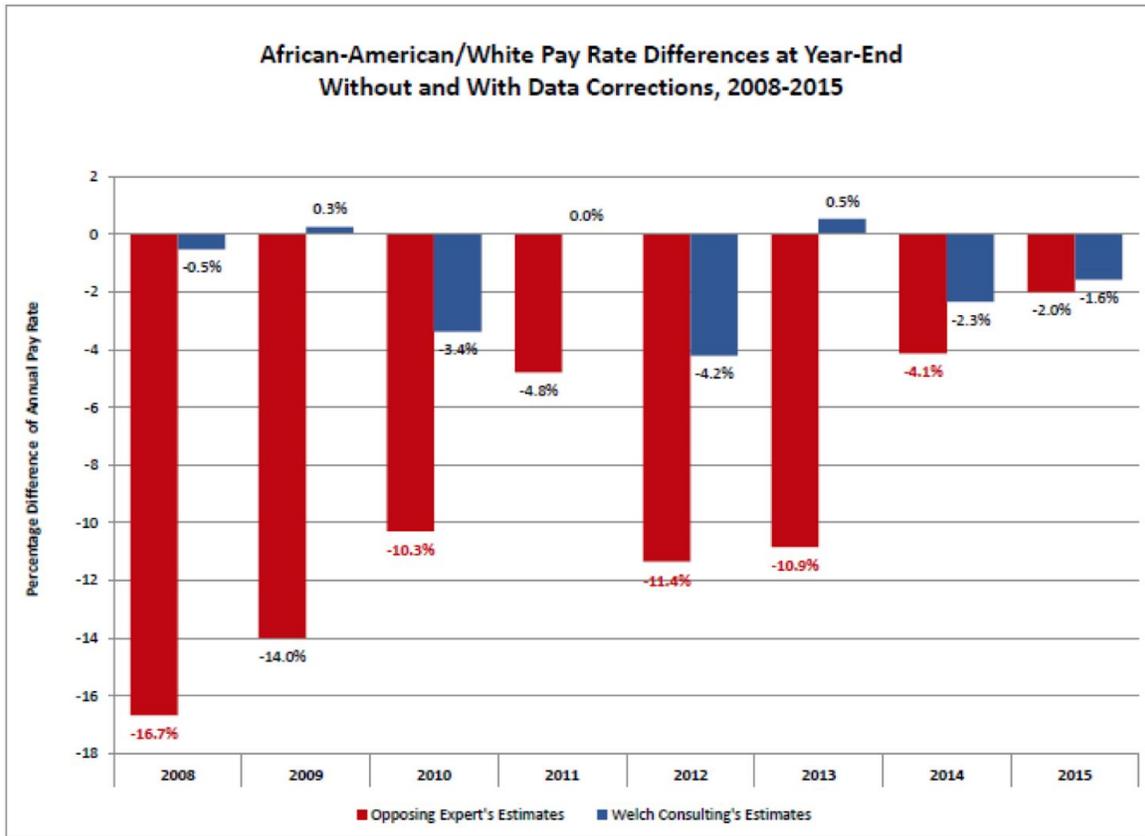


Figure 3: African American Pay Rate Differences with and without Data Correction

This correction was only the first step undertaken by Welch Consulting economists. We later learned that the data contained numerous errors. A system-wide glitch erroneously removed relevant years of experience from some employee measures, and failed to correctly classify some employee jobs.

We made some additional corrections. Afterward, the plaintiff's expert data showed no substantial differences in pay between white and African American employees. In fact, the

corrected analysis negated the charges of employee discrimination. It even showed that some pay differences slightly favored the African-American employees in the firm.

As a result of our data review and corrections, the Court excluded the plaintiff's expert report findings from consideration.