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**AMERICAN EMPLOYMENT LAW COUNCIL
TWELFTH ANNUAL CONFERENCE**

**THE GOVERNMENT'S NEW APPROACH:
COMPENSATION AND ADVERSE IMPACT
ISSUES**

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**THE GOVERNMENT’S NEW APPROACH:
COMPENSATION AND ADVERSE IMPACT ISSUES**

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I. INTRODUCTION

In recent years, the compensation practices of employers have increasingly come under attack by the government and plaintiffs. These attacks have taken place in a number of forums, ranging from administrative investigations, to single-plaintiff and multi-plaintiff litigation and, perhaps most significantly, to the class action arena. An employer’s potential exposure in these types of cases – especially those brought on behalf of multitudes of employees – can be significant. This past summer, Morgan Stanley announced a \$54 million settlement with the Equal Employment Opportunity Commission (“EEOC”) of a class action that included claims of disparate pay on the basis of gender.^{2/} After years of administrative proceedings, Wyeth Pharmaceuticals reached a settlement with the Office of Federal Contract Compliance Programs (“OFCCP”) of an Administrative Complaint involving disparate pay growing out of a 1997 audit.^{3/} The Boeing Co. agreed to pay up to \$72.5 million to settle a class action sex discrimination suit brought by approximately 29,000 salaried and hourly female employees alleging discrimination in pay, promotions, overtime, assignments, bonuses and other conditions

^{1/} The authors would like to thank Jeremy Blumenfeld, Paul Evans and Tamsin Newman for their assistance in preparing this Paper.

^{2/} “Morgan Stanley To Pay \$54 Million To Settle 2001 Bias Lawsuit By EEOC,” *Daily Labor Report*, July 13, 2004; see also EEOC v. Morgan Stanley & Co., Inc., 324 F. Supp. 2d 451 (S.D.N.Y. 2004).

^{3/} “Wyeth Pharmaceutical, OFCCP Reach Accord Settling Allegations Of Pay Discrimination,” *Daily Labor Report*, June 10, 2004; see also OFCCP v. Wyeth, Department of Labor Office of Administrative Law Judges, No. 2003-OFC-00007.

of employment.^{4/} And in the well-publicized Wal-Mart case, the district court certified a class action involving pay discrimination claims covering more than one million women in both hourly and salaried jobs in Wal-Mart's 3,400 stores across the nation.^{5/}

Government and plaintiffs have advanced increasingly sophisticated arguments focusing on statistical disparities in compensation. To combat these attacks and understand the potential risks posed by them, employers should understand the different approaches that the government and plaintiffs have taken, and likely will take, in analyzing compensation data. Employers also should consider conducting an analysis of their compensation data to identify areas of vulnerability and assess the litigation risk where there are statistically significant disparities between similarly situated male/female and non-minority/minority employees.

This Paper surveys the various methods for analyzing compensation in the workplace. First, the Paper will review the methods that have been used by plaintiffs and defendants in litigation challenging employer compensation systems. Second, the paper will address the various methods employed by the government when analyzing employer compensation, including the most recent approach announced by the OFCCP and a case study of perhaps the OFCCP's first implementation of that approach. Finally, the Paper will discuss an approach for employers to analyze their own compensation practices before litigation and to assess their vulnerability to litigation.

^{4/} "Boeing Agrees To Pay Up To \$72.5 Million To Settle Sex Discrimination Class Action," *Daily Labor Report*, July 19, 2004; see also Beck v. Boeing, 203 F.R.D. 459 (W.D. Wash., 2001).

^{5/} See Dukes v. Wal-Mart Stores, Inc., 222 F.R.D. 137 (N.D. Cal. 2004).

II. THE LEGAL LANDSCAPE

A. Methodology

The most widely accepted and widely used statistical approach for analyzing compensation in litigation is the multiple regression analysis. See Bazemore v. Friday, 478 U.S. 385, 399 (1986). A multiple regression analysis attempts to reveal relationships between explanatory variables and a dependent variable. Daniel L. Rubinfeld, Reference Guide on Multiple Regression, in Federal Judicial Center, Reference Manual on Scientific Evidence 181 (2d ed. 2000).⁶ Explanatory variables are the expected influences on the dependent variable. Id. In a pay equity analysis, compensation is the dependent variable. The regression controls for the nondiscriminatory explanatory variables and then compares the wages of protected group and non-protected group employees. “At best, the regression equation used to assess discrimination in compensation levels can be viewed as a good representation, based on available information, of what factors seem to be related to compensation levels, on average.” Morgan v. UPS, --- F.3d ---, 2004 WL 1920198, *6 (8th Cir., Aug. 30, 2004) (quoting Ramona L. Paetzold & Steven L. Willborn, The Statistics of Discrimination: Using Statistical Evidence in Discrimination Cases § 6.01, at 3 (2002)).

⁶ The Reference Manual on Scientific Evidence, a “product of a cooperative effort by the Federal Judicial Center and the Carnegie Corporation of New York,” was created in 1990 after the Federal Courts Study Committee recommended the creation of a manual to help federal judges deal with scientific evidence. See Reference Manual on Scientific Evidence, at vii. Accordingly, this resource is often used by Courts when considering multiple regression analyses and related statistical studies. See, e.g., Morgan v. UPS, --- F.3d ---, 2004 WL 1920198, *6 (8th Cir., Aug. 30, 2004).

However, “when inappropriately used, regression analysis can confuse important issues while having little, if any, probative value.” David H. Kaye & David A. Freedman, Reference Guide on Statistics, in Federal Judicial Center, Reference Manual on Scientific Evidence at 183. As the Second Circuit has observed:

As with any multiple regression analysis, the validity of the influence attributed to a particular variable will depend heavily on how accurately the model mimics the actual factors influencing the dependant variable, salary. For example, if the model omits an important variable that affects salaries, the portion explained by that variable will seem to be unexplained, and thus may erroneously be attributed to sex. Conversely, if an extraneous factor is erroneously credited with influencing salary, it may serve to mask the effect of sex on . . . compensation.

Sobel v. Yeshiva Univ., 839 F.2d 18, 22 (2d Cir. 1988). More specifically, two variables that are closely related (e.g., age and salary) may be misinterpreted as having a causal relation, even though they are both caused by a third, unexplained, variable (e.g., productivity). Kaye & Freedman, supra at 183. For this reason, courts require that the “major” factors affecting salary be accounted for in any model testing for compensation disparities.⁷ Bazemore, 478 U.S. at 399; Smith v. Va. Commonwealth Univ., 84 F.3d 672, 676-77 (4th Cir. 1996) (observing that “common sense require[s] that any multiple regression analysis used to determine pay disparity must include all the major factors on which pay is determined”).

1. The Workforce Studied

The first step in a multiple regression analysis is to determine the workforce to be analyzed. A study might look only at particular categories of employees (e.g., sales, store employees), only employees associated with particular lines of business, or only employees at particular locations.

It is imperative that a study properly identify the workforces that can and should be assessed together. If categories of employees are included in the study who do not belong, the results may not be reliable and will be subject to attack. See, e.g., Bakewell v. Stephen F. Austin State Univ., 975 F. Supp. 858, 895 (E.D. Tex. 1996) (noting that administrative faculty members were not properly included in workforce analyzed where they were unrepresentative of faculty members because, for example, departmental chairs received a stipend for administrative work), aff'd 124 F.3d 191 (5th 1997). Specifically, when improper workforces are included in the study, the explanatory variables included in the multiple regression analysis will be skewed. For example, in Penk v. Oregon State Bd. of Higher Educ., No. Civ. A. 80-436, 1985 WL 25631, at *53 n.4 (D. Or. Feb. 13, 1985), aff'd 816 F.2d 458 (9th Cir. 1987), the district court noted that plaintiffs studied a workforce that included not just positions eligible for tenure, but also research assistants and research associates, both of whom were who are not ordinarily eligible for tenure. The court acknowledged that doing so “may skew plaintiff’s results, because although research assistants and associates may have high ‘years since’ variable values, they will be in fixed-term positions.” Id. In other words, the creation of an improper workforce inappropriately affected the weight given to a variable attempting to explain compensation.

2. Aggregation Of The Data

In addition to identifying the workforce to be studied, any study of compensation requires a determination of whether the workforces analyzed should be assessed separately or together. See, e.g., Dukes v. Wal-Mart Stores, Inc., 222 F.R.D. 137, 157 n.25 (N.D. Cal. 2004) (wherein defendant challenged plaintiffs’ multiple regression analysis because it aggregated

¹ In Bazemore, the Supreme Court rejected the notion that a multiple regression analysis must account for all variables affected the dependent variable. 478 U.S. at 399-

defendant's workforce data); see also Stastny v. S. Bell Tel. & Tel. Co., 628 F.2d 267, 278-80 (4th Cir. 1980) (affirming the district court's denial of class certification in part based upon a rejection of statistical evidence because the statistics were not probative of separate facilities, but only showed overall disparities); Carson v. Giant Food, Inc., 187 F. Supp. 2d 462, 471 n.8 (D. Md. 2002) (denying class certification in part because plaintiffs' "statistics are not separated by facilities or departments"); Abram v. UPS, 200 F.R.D. 424, 431 (E.D. Wis. 2001) (stating that aggregate statistical evidence "masks differences from district to district and from supervisor to supervisor that preclude a finding of 'commonality'").

Aggregation of data will typically create a greater likelihood of a finding of statistical significance because statistical significance is a function of not only the salary difference between protected and non-protected groups which nondiscriminatory variables cannot explain, but also, among other things, the size of the sample. See Kaye & Freedman, supra, at 149; see also Abram, 200 F.R.D. at 431 ("If Microsoft-founder Bill Gates and nine monks are together in a room, it is accurate to say that on average the people in the room are extremely well-to-do, but this kind of aggregate analysis obscures the fact that 90% of the people in the room have taken a vow of poverty."). It is common for plaintiffs to aggregate data when attempting to prove compensation disparities. See, e.g., Dukes, 222 F.R.D. at 157 n.25; EEOC v. Morgan Stanley, 324 F. Supp. 2d 451, 457 (S.D.N.Y. 2004) (wherein defendant argued that plaintiffs' expert should not be allowed to improperly combine separate sets of results to create the appearance of statistically significant disparities); Fields v. Abbott Labs., No. Civ. A. 97C3882, 2001 WL 1663310, at *1-2 (N.D. Ill. Mar 12, 2001) (wherein plaintiffs' expert initially aggregated data related to five divisions to find promotion disparities between African

Americans and whites but abandoned that analysis when defense expert demonstrated that breaking down data into employer's five divisions demonstrated that only two of the five had any statistically significant disparities).

In general, the determination of whether to aggregate data will turn on the compensation system in place for an employer. Dukes, 222 F.R.D. at 157 (“The proper test of whether workforce statistics should be viewed at the macro (regional) or micro (store or sub-store) level depends largely on the similarity of the employment practices, and the interchange of employees, at the various facilities.”) (citing Kirkland v. N.Y. State Dept. of Corr. Servs., 520 F.2d 420, 425 (2d Cir. 1975)). If there is a material issue of disputed fact on the appropriate level of analysis, courts are inclined to allow the finder of fact to weigh the appropriate approaches. See, e.g., id. One way to help demonstrate the propriety of an aggregate or non-aggregated approach is to conduct a “Chow” test.⁸ Id. Although a court may not require a Chow test where sufficient evidence demonstrates a material fact as to whether it is appropriate to aggregate employer compensation data, such a test may help prove to a factfinder that such aggregation was inappropriate. Id. (citing Coates v. Johnson & Johnson, 756 F.2d 524, 542 (7th Cir. 1985) (in which a defendant used the Chow Test, among other evidence, to convince the factfinder that the weight of the competing expert testimony favored the defendant's position that the data should not be aggregated in the manner proposed by plaintiffs)).

⁸ The Chow test “can be used to analyze whether two or more sets of data may be aggregated as a single sample in a statistical model.” Dukes v. Wal-Mart Stores, Inc., 222 F.R.D. at 157; see also Gregory C. Chow, Tests of Equality Between Sets of Coefficients in Two Linear Regressions, 28 *Econometrica* 591 (1960).

3. Accounting For Nondiscriminatory Variables That Affect Compensation
a. What Variables Should Be Included In The Analysis

“Selecting proper explanatory variables is a function of the particular employer’s compensation determinations.” Morgan, 2004 WL 1920198, at *8. See also Smith, 84 F.3d at 676 (observing that “common sense require[s] that any multiple regression analysis used to determine pay disparity must include all the major factors on which pay is determined”); Sobel, 839 F.2d at 22 (“As with any multiple regression analysis, the validity of the influence attributed to a particular variable will depend heavily on how accurately the model mimics the actual factors influencing the dependent variable, salary.”). Typically those variables can be broken down into two broad categories: (a) job related characteristics and (2) productivity related characteristics. Job related characteristics can include the type of work performed, the level of responsibility for the position, and the geographic location of the position. Productivity related characteristics can include direct measures of performance (e.g. performance rating, sales data), as well as indirect measures that may have a bearing on performance (e.g. education, prior experience, seniority). It is important that the explanatory variables selected actually impact compensation or else the precision of the regression results is diminished. See Daniel L. Rubinfeld, Reference Guide on Multiple Regression p. 189. Where the sample size is small, this diminution can be significant. Id.

The difference between subjective and objective variables is also important. Subjective factors that affect compensation, especially those that can be controlled by the employer, are often challenged by plaintiffs as masking discrimination in the regression analysis. See id. at 187 n. 22 (“Whether a particular variable reflects ‘legitimate’ considerations or itself reflects or incorporates illegitimate biases is a recurring theme in discrimination cases.”);

Rudebusch v. Hughes, 313 F.3d 506, 511 (9th Cir. 2002) (noting that adjustments for rank in compensation analysis may be inappropriate if it were the case that because of discrimination male faculty members are more likely to be promoted than females; in that situation, “controlling for rank in the analysis would result in underestimating salary inequities.”). In general, explanatory factors that themselves are potentially the product of the unlawful discrimination at issue in litigation should be excluded from a regression analysis. See Ramona L. Paetzold & Steven L. Wilborn, The Statistics of Discrimination: Using Statistical Evidence in Discrimination Cases § 6.13.

It is usually not sufficient, however, for plaintiffs simply to challenge all subjective variables as discriminatory. Instead, they must demonstrate that the variable actually reflects past discrimination. For example, in Bazemore, the district court and the court of appeals both found that past pay, the subjective variable at issue, was set according to race. 478 U.S. at 390-91, 401-02. Accordingly, it was not appropriate to include past pay as an explanatory variable in the regression model used to study current pay in that case. In contrast, in Morgan, the plaintiffs were unable to link past pay to discrimination. See 2004 WL 1920198, at *9. The plaintiffs could only argue that the existence of a disparity in pay found during the class period, which only resulted when the variable of past pay was excluded, itself demonstrated discrimination in past pay. The court held that this argument was circular and insufficient to justify the removal of an otherwise explanatory variable from the multiple regression where there was no evidence of discrimination in past pay. Id.

One means of testing the propriety of the factors included in a statistical model is to test the model on only a group of white or male employees, where one assumes discrimination does not impact compensation. If the factors considered effectively explain differences in the

compensation of these groups, then there will be a greater comfort that the relevant factors affecting compensation have been accounted for in the aggregate model. If the factors do not adequately explain the differences in compensation, then additional work on the model is advisable.

b. What Party Must Account For The Significant Variables

In many cases, plaintiffs support their claims of discrimination by referencing multiple regression analyses that employers argue do not account for significant variables affecting compensation. Depending on the reasonableness of the plaintiffs' analysis, courts may not allow an employer on summary judgment to succeed by simply attacking the plaintiffs' statistical model by noting additional factors not considered in that model. Morgan, 2004 WL 1920198, at *8. As the Eighth Circuit explained in Morgan:

Evaluating the propriety of explanatory variables is a somewhat comparative exercise. When a defendant attacks a plaintiff's regression, he must typically do more than point out the flaws in his opponent's analysis. Instead, the defendant must show that the omission had an impact on the result.

Id.

Thus, for example, in Dukes, the plaintiffs' expert considered a number of factors in his regression analysis: position, tenure, number of weeks worked during the year, whether the employee was hiring or terminated during the year, full-time/part-time status, which store the employee worked in, whether the employee was ever hired into a management position, and performance. 222 F.R.D. at 159. The defendant argued that the plaintiffs' expert's analysis should nonetheless be rejected, and class certification therefore denied, because the expert failed to consider eleven additional variables that could impact compensation: hours worked, seniority, leave of absence, full-time/part-time status at hire, recent promotion or demotion, prior grocery experience, pay group, night shift, department, store size, and store profitability. Id. The district

court rejected the defendant's argument because the defendant failed to prove that including those additional factors would have eliminated any pay disparity, holding:

[T]he law does not require the near-impossible standard of eliminating all possible nondiscriminatory factors. Rather, it is clear that a regression analysis that includes less than 'all measurable variables' may serve to prove a plaintiff's case. Given that [plaintiffs' expert] clearly considered a broad array of significant factors, whether he omitted some other, relevant factors – and if so, whether that failure is of sufficient magnitude to discredit his analysis – are questions that should await resolution at trial.

Id. at 160 (citations omitted). Thus, missing variables must be likely to affect the results to be considered significant.

There are instances, however, in which the relevance of a factor to the selection process is “so obvious that the defendants, by merely pointing out its omission, can defeat the inference of discrimination created by plaintiffs’ statistics.” Morgan, 2004 WL 1920198, at *8 (citing Palmer v. Schultz, 815 F.2d 84, 101 (D.C. Cir. 1987)). Other courts have similarly rejected plaintiff’s regression model where key variable affecting compensation are omitted without requiring the defendant to show the impact of the omitted variables. Munoz v. Orr, 200 F.3d 291, 301 (5th Cir. 2000) (statistical expert's report found unreliable for summary judgment purposes in part because the analysis failed to account for other variables such as education and experience); Tagatz v. Marquette Univ., 861 F.2d 1040, 1045 (7th Cir. 1988) (holding that failure to control for certain explanatory variables makes an expert's table “essentially worthless”); Penk, 816 F.2d at 465 (plaintiffs’ multiple regression analyses failed to account for factors so central to the academic employment decisions at issue – the subjective variables of teaching quality, community and institutional service commitment, and research and scholarship quality – that defendants could defeat any inference of discrimination simply by pointing out such omissions); Webb v. Merck & Co., Inc., 206 F.R.D. 399, 408 n.2 (E.D. Pa. 2002) (holding

that because plaintiffs' expert's "statistics do not account for non-discriminatory variables such as the effect of collective bargaining agreements and position grades in her analysis, her statistics are not instructive or determinative").

Also significant to this issue is whether the allegedly excluded factors were available to the plaintiffs when they conducted their analysis. Courts are particularly loathe to allow an employer to profit from its own failure to provide or maintain the complete employee data needed for a robust analysis. See, e.g., Hemmings v. Tidyman's Inc., 285 F.3d 1174, 1188-89 (9th Cir. 2002) ("If the defendant believed information about the employees' educational background, for example, would have explained the differences in promotions and compensation between male and female upper level employees, [it] should have provided information about education level to the plaintiffs . . .").

For example, in Morgan, the plaintiffs alleged that UPS engaged in a pattern and practice of pay discrimination against certain minority managers. Morgan, 2004 WL 1920198, at *3. The plaintiffs' experts did not include prior salary as a variable in their regression analyses, although at least one expert admitted that including prior salary would eliminate any statistical disparities. In addition, the plaintiffs' experts included only two years worth of performance data, although at least five years of data was available. The Eighth Circuit held that these omissions rendered the plaintiffs' analysis insufficient to create an issue of fact on their discrimination claims. Compare Boykin v. Ga.-Pac. Corp., 706 F.2d 1384, 1391-92, 1394 (1983) (defendant could not rest on criticisms of plaintiff's promotion regression when plaintiff considered all information on available application forms).

Where possible, reasonable proxies can be used to attempt to account for missing variables. For example, although an employer may not have access to electronic information

documenting employees' performance in past positions within the company, it may be able to substitute employees' "time in position" and "rank" for this factor, reasoning that successful employees will retain their jobs longer and be in higher ranks than unsuccessful ones. Where multiple proxies are used to demonstrate one variable, they must be shown not to be multicollinear with those variables already included or with each other, and also not tainted by discrimination themselves. Sobel, 839 F.2d at 35. It is imperative, moreover, that any such proxies are created only after determining their viability with input from the business leaders and human resources personnel. For instance, it may be that "time in position" is actually a negative factor in compensation because it reflects slow career advancement in lower level positions where rapid advancement of successful employees is the norm.

B. Statistically Significant Evidence of Discrimination

When statistical evidence is introduced in either a disparate impact or a disparate treatment case, a similar question is raised: at what point does evidence of a disparity become "sufficiently significant" to establish an inference of discrimination? The method generally employed by the courts in measuring the significance of a particular statistical disparity involves a calculation of "the standard deviation as a measure of predicted fluctuations from the expected value of a sample." Hazelwood Sch. Dist. v. U.S., 433 U.S. 299, 309 n.14 (1977). As the Supreme Court stated in Castaneda v. Partida, "[a]s a general rule for such large samples, if the difference between the expected value and the observed number is greater than two or three standard deviations," then an inference of discrimination could be raised. 430 U.S. 482, 496-97 n.17 (1977).

While in the past most courts have applied the "two standard deviations" test in discrimination cases, several courts have observed that there is no bright line rule that a

particular statistical threshold mandates a finding of discrimination. For example, the Second Circuit has acknowledged that “[a] finding of two to three standard deviations can be highly probative of discriminatory treatment.” Ottaviani v. State Univ. of N.Y., 875 F.2d 365, 372-73 (2d Cir. 1989). Yet the Second Circuit has also concluded that:

[T]here is no minimum statistical threshold requiring a mandatory finding that a plaintiff has demonstrated a violation of Title VII. Courts should take a ‘case-by-case’ approach in judging the significance or substantiality of disparities, one that considers not only statistics but also all the surrounding facts and circumstances.

Waisome v. Port Auth. of N.Y. and N.J., 948 F.2d 1370, 1376 (2d Cir. 1991). In fact, the Supreme Court has noted that it has never ruled “that any particular number of standard deviations can determine whether a plaintiff has made out a prima facie case in the complex area of employment discrimination.” Watson v. Fort Worth Bank & Trust, 487 U.S. 977, 995 (1988). See also Smith v. Xerox Corp., 196 F.3d 358, 366 (2d Cir. 1999) (“The substantiality of a disparity is judged on a case-by-case basis.”); EEOC v. Joe’s Stone Crab, Inc., 220 F.3d 1263, 1277 n.14 (11th Cir. 2000) (“[N]o particular numerical deviation is required to establish a prima facie case; instead courts employ a case-by-case approach dependent on the particularized case facts.”).

In Ottaviani, the Second Circuit affirmed the district court’s determination that the plaintiffs’ statistical evidence of sex discrimination was “persuasive, but not dispositive.” Ottaviani, 875 F.2d at 373. Despite the fact that the statistics reached the two standard deviation threshold, the court affirmed the district court’s finding of no discrimination. Specifically, the court noted that “the defendants were able to successfully undermine the plaintiffs’ case by attacking the validity of the plaintiffs’ statistical evidence, and by introducing statistical evidence of their own to negate the inference of discrimination that had been raised. Id. See also Xerox, 196 F.3d at 370-71 (holding that plaintiffs’ statistical evidence failed to raise an inference of

discrimination where defendant argued that, *inter alia*, plaintiffs' evidence failed to control for significant variables and failed to account for non-discriminatory causes for the disparity).

Thus, the trend among the courts has been to use a finding of two standard deviations as *probative* of discrimination. At that point, the courts will consider any rebuttal statistics proffered by the defendant or any other evidence attacking the validity or reliability of the plaintiff's statistics. Such counter evidence and statistics can preclude a *finding* that the defendant engaged in discrimination. However, Judge Posner of the Seventh Circuit has challenged the use of the two standard deviations threshold. See Kadas v. MCI Systemhouse Corp., 255 F.3d 359, 362-63 (7th Cir. 2001). In Kadas, a former employee alleged he was terminated in connection with a reduction in force because of his age. In support of his allegation, the plaintiff offered statistical evidence showing that all three of the terminated employees were over the age of 40. Id. at 361. However, the court noted that only 5 of the 32 employees in the department were *under* the age of 40 and, as a result, there was a 59% chance that all three terminated employees would be over 40 years old. Id. Thus, the court ruled that summary judgment in favor of the employer was properly granted, finding that the evidence was insufficient to establish a *prima facie* case of age discrimination. Id. at 361.

At that point, the court decided to make "observations about the record, for such bearing as they may have on future discrimination cases." Id. Specifically, the court stated that it is "arbitrary" to have a rule that statistical evidence is not admissible to show discrimination unless it reaches the two standard deviations threshold. Id. at 362. The court further noted that:

[A] lower significance level may show that the correlation is spurious, but may also be a result of 'noise' in the data or collinearity (correlation between independent variables, such as sex and weight); and such evidence, when corroborated by other evidence, need not be deemed worthless. Conversely, a high significance level may be a misleading artifact of the study's design; and there is always the risk that the party's statistical witness ran 20 regressions, one

and only one of which supported the party's position and that was the only one presented, though, in the circumstances, it was a chance result with no actual evidentiary significance.

Id. The court then stated that “[i]t is for the judge to say, on the basis of the evidence of a trained statistician, whether a particular significance level, in the context of a particular study in a particular case, is too low to make the study worth the consideration of judge or jury.” Id. at 363.

Although the Kadas decision could have dramatically changed the way statistics were viewed in employment discrimination cases, it does not appear to have been adopted since it was issued. Instead, courts continue to apply the two standard deviation threshold as the benchmark for discrimination. See, e.g., Malave v. Potter, 320 F.3d 321, 327 (2d Cir. 2003) (holding that district court, on remand, should consider whether Postal Service employee could show statistically significant disparity of two standard deviations for purposes of determining whether Postal Service employee established prima facie case of disparate impact under Title VII); Thomas v. Deloitte Consulting LP, No. Civ. A. 3-02-CV-0343, 2004 WL 1960097, *5 (N.D. Tex. Sept. 2, 2004) (rejecting bright line rule regarding standard deviations but acknowledging that “statisticians tend to discard chance as an explanation for a result when deviations from the expected value approach two standard deviations”); Richardson v. Sugg, 325 F. Supp. 2d 919, 935 (E.D. Ark. 2004) (“Statistical studies resulting in two or more standard deviations are required to allow inferences of discrimination to be drawn from numerical workforce data.”). If courts adopt the Kadas approach in place of the two standard deviation threshold, plaintiffs and defendants will face a great deal of uncertainty in both assessing and arguing their respective cases. Analyzing the sufficiency of statistical disparities on a strictly case-by-case basis will make it increasingly difficult to predict how much of a statistical

disparity would be sufficient to establish an inference of discrimination.

III. STATISTICAL APPROACHES USED BY THE GOVERNMENT

A. OFCCP Dubray Method

For a number of years, the OFCCP has utilized the Dubray Method² to analyze compensation when it conducts compliance reviews of government contractors. The Dubray Method compares the median salaries of men and women, or whites and minorities, within a particular salary grade. See, e.g., *Systematic Compensation Analysis, An Investigatory Approach*, attributed to Joseph Dubray, p. 6 (“The initial step in this approach is a comparison of the median salaries of men to women and minorities to non-minorities within the same salary grades and, generally within the same E.E.O.-1 category.”). A difference in median salaries of \$1,000 or more is considered by the OFCCP to reflect potential discrimination. See OFCCP Workshop, *Understanding OFCCP’s Approach to Statistical Analysis (Attachment A)* (“Typical: considered problematic if mean/median difference exceeds \$1000 and impacts more than specified # and/or % of employees.”). See also *OFCCP v. Wyeth*, Notice of Violation. If such a difference exists, the OFCCP compares median performance, level of education and/or experience (and possibly other factors) in the salary grade at issue to see if differences in education or performance can explain the differences in the median salary. See *Systematic Compensation Analysis, An Investigatory Approach*, p. 7-8.

If the Dubray Method reveals a compensation disparity, the OFCCP typically would pursue enforcement through issuance of a Notice of Violation or Show Cause. See 41 C.F.R. 60-1.28. If the Notice of Violation or Show Cause is not resolved through the

² The Dubray Method is named after Joseph Dubray, the former Regional Director for the mid-Atlantic region of OFCCP.

conciliation process, i.e., settlement, the OFCCP can file an Administrative Complaint seeking back-pay for affected employees and debarment from further federal contracts. E.g., OFCCP v. Wyeth, 2003 OFC-0007 (2003). Most cases, however, are either abandoned by the OFCCP or settled during the conciliation process. The OFCCP has filed only two administrative complaints alleging a pattern or practice of compensation discrimination in the last twenty years: OFCCP v. Wyeth and OFCCP v. First Union Corp., 2001 OFC – 0004 (2001). In litigation, moreover, the OFCCP will not rely on the Dubray Method to prove its case. To the contrary, Mr. Dubray has admitted that he “would never litigate using this [Dubray] approach. I know we’d have to put together a real multiple regression analysis.” See Selected Materials on New Tactics At The Office Of Federal Contract Compliance, American Law Institute - American Bar Association Continuing Legal Education, SD34 ALI-ABA 803 (1998) (quoting Dubray testimony).

The Dubray Method is simple and easy to perform. Indeed, the OFCCP has acknowledged that it utilized the Dubray method because the agency lacked the resources necessary to perform more complex regression analyses for each compliance review. See Systematic Compensation Analysis, An Investigatory Approach, p. 4 (“OFCCP has neither the computer capabilities, nor the in-house expertise nor the monetary resources to contract for the services of a statistician for every single compliance review.”). Because of its simplicity, however, the Dubray Method has numerous flaws that make it subject to substantial criticism. As the OFCCP has acknowledged, these criticisms fall into three basic categories:

- (1) The Dubray Method compares employees in the same salary grade without regard to the type of work performed.
- (2) The Dubray Method does not test whether any salary differences are statistically significant. That is, there is no test of the whether a particular disparity is due to chance or is evidence of discrimination, as determined by the Supreme Court precedent.

- (3) The Dubray Method ignores numerous legitimate factors that impact compensation and therefore should be included in the analysis.

See Update On System Compensation Analysis, attributed to Joseph Dubray, p. 2. Although the OFCCP has attempted to respond to these specific criticisms (based in part on the case law cited above), the OFCCP also has argued that its Dubray Method need not satisfy any legal standards because it is not designed to prove discrimination, but rather just to see if a potential problem exists such that it should pursue the matter further. As the OFCCP argued:

The investigation process is much less formal, however. It is not OFCCP's policy or practice to 'litigate' the merits of investigation findings at the investigatory stage of a review. That being said, our investigative findings should be persuasive enough that a reasonable person might conclude that a serious problem exists.

See Update On System Compensation Analysis, p. 1-2.

Nonetheless, because of flaws with the Dubray Model, and enhanced capabilities at the OFCCP, it has recently signaled a shift away from the Dubray Method in favor of more statistically sound, and more widely accepted, methods of analyzing compensation.

B. OFCCP's Human Capital Theory Approach In The Wyeth Case

In July 2003, the OFCCP filed an Administrative Complaint against Wyeth and Wyeth Pharmaceuticals Inc. for alleged discrimination against women in compensation based upon an OFCCP compliance review conducted in 1997. The OFCCP alleged compensation discrimination in all exempt salary grades from 1997 to the present, even though OFCCP had no evidence of discrimination for 1998 to 2003, and even though the OFCCP had found no discrimination in certain salary grades as a result of the 1997 compliance review.

Although the 1997 compliance review utilized the Dubray Method of analyzing compensation, the OFCCP abandoned the Dubray approach in 2003. Instead, the OFCCP relied upon a regression analysis based upon the "human capital" theory. Relying upon the analysis

and testimony of Dr. Henry S. Farber, a professor of economics at Princeton University, the OFCCP argued that employees with similar measures of education and experience in the same field of work should earn the same salary regardless of the specific jobs that the employees held or the level of responsibility for the positions (e.g., whether manager or subordinate, or senior or junior engineer). When there was a pay difference between men employed in higher level jobs and women in lower level jobs, the OFCCP argued that the difference was attributable to sex discrimination. See also Segar v. Smith, 738 F.2d 1249, 1261, 1280 (D.C. Cir. 1984) (affirming district court’s finding of pattern and practice of race discrimination based upon plaintiffs’ expert testimony using human capital model), cert. denied sub nom, Meese v. Segar, 471 U.S. 1115 (1985).

Wyeth argued that the OFCCP’s human capital theory failed to consider that pay differences may be attributable to a variety of employment decisions within the control of Wyeth, prior employers, and the employees themselves. The allegations at issue related to pay discrimination; there were no allegations of discrimination in promotion or job placement. There were many other variables – such as job performance, specific job duties and an employee’s level of responsibility – which could legitimately result in employees with the same measures of education and experience being paid differently in 1997. Wyeth pointed out, for example, that the OFCCP’s analyses did not consider ability or actual performance, even though job performance affects compensation. See, e.g., Cooper v. S. Co., 260 F. Supp. 2d 1258, 1276-77 (N.D. Ga. 2003) (granting summary judgment in favor of employer on Title VII pattern or practice claim where plaintiffs’ statistical model failed to control for employees’ skill level); Amro v. Boeing Co., 232 F.3d 790, 798 (10th Cir. 2000) (affirming summary judgment on Title VII wage discrimination claim because plaintiff failed to present evidence of the “performance”

of his comparators); Willis v. Morris, No. 96-6265, 1997 WL 561332, at *2 (6th Cir. Sept. 9, 1997) (noting that plaintiff’s comparator “possesses the newer and more marketable skills, while [plaintiff] possesses the older and soon-to-be obsolete skills” and “[t]herefore, any difference in their salaries was due to the nature of their skills, not gender”). In addition, the OFCCP’s analyses failed to consider salary grade, even though all of the OFCCP’s prior analyses – including the ones conducted as part of the OFCCP’s 1997 compliance review – had specifically relied on salary grade as a critical factor. As such, the OFCCP’s analyses did not compare similarly situated persons with regard to education or ability.^{10/}

Moreover, by failing to include a job level variable, the problem with the OFCCP’s regression models was that such analyses “will invariably find discrimination against women by means of a statistically significant sex coefficient that shows women receiving lower pay than men after controlling for the effects of the other variables in the regression—usually years of schooling and experience, and variants thereof.” Walter Fogel, Class Pay Discrimination and Multiple Regression Proofs, 65 NEB. L. REV. 289, 308 (1986). This predictable result is caused, in part, by the fact that this statistical model compares “salaries paid to employees for performing unequal jobs.” Id.

^{10/} Wyeth also pointed out that the OFCCP’s analyses considered only the level of degree obtained (e.g., high school, bachelor’s, master’s, Ph.D.), without regard to the relevance of the field of study (Chemistry, French, etc.) to the job in question. See, e.g., Cullen v. Ind. Univ. Bd. of Trustees, 338 F.3d 693, 702-03 (7th Cir. 2003) (observing that the fact that comparator “clearly holds more degrees with a focus in his respective discipline . . . supports the University’s position that this was a valid reason other than sex to pay [comparator] more”); Heims v. Subaru-Isuzu Auto. Inc., No. 4:02-CV-0001-AS, 2003 WL 1086362, at *3 (N.D. Ind. Jan. 10, 2003) (holding that plaintiff failed to establish a prima facie case of pay discrimination for computer programmer position where plaintiff had “a degree from Indiana Business College in an executive secretarial studies program,” while her comparators “held college degrees in computer-related fields”).

Accordingly, because the OFCCP's regression models failed to account for job level, Wyeth argued that the more likely explanation for any statistically significant difference in pay was that, because of a variety of employment decisions – and because of employee choices – a higher percentage of men ended up in higher-level positions, and not because similarly situated women are paid less than their male counterparts. For this reason, while the difference in pay that the OFCCP's models attributed to sex discrimination in pay might have been informative on the subject of job allocation (e.g., initial job placement, promotion, or transfer), it did not establish pay discrimination. Id. at 309.

The OFCCP attempted to justify its failure to consider factors within the control of the employer and employee – such as the employer's evaluation of performance, specific job duties and level of responsibilities – based on the theory that these factors could simply mask discrimination. Absent discrimination, the OFCCP argued that all of these factors should, on average, be the same for men and women. Indeed, the issues of whether women and men (or whites and non-whites) make different occupational choices, and whether a purported “lack of interest” in higher-paying jobs should be factored into an analysis, have been hotly debated in the judicial and academic arenas. This debate featured prominently in EEOC v. Sears, Roebuck & Co., 628 F. Supp. 1264, 1323 (N.D. Ill. 1986), a case in which the court found that Sears had proffered “credible evidence” that “men and women tend to have different interests and aspirations regarding work, and that these differences explain in large part the lower percentage of women” in higher paying jobs. See also Gary Becker, A Treatise on the Family, p. 22 (1981) (“If women have a comparative advantage over men in the household sector when they make the same investments in human capital, an efficient household with both sexes would allocate the

time of women mainly to the household sector and the time of men mainly to the market sector.”).

Of course, the counter-argument to the “lack of interest” version of the human capital theory is that it is impermissibly based upon gender (or racial) stereotypes. E.g., Vicki Schultz & Stephen Petterson, *Race, Gender, Work and Choice: An Empirical Study of the Lack of Interest Defense In Title VII Cases Challenging Job Segregation*, 59 U. Chi. L. Rev. 1073 (1992) (survey of all published Title VII race and sex discrimination cases decided from 1965 to 1989; concluding that “courts have compromised both women’s and minorities’ protections against job segregation”; “On the whole, judges have imposed more stringent standards of proof for refuting the lack of interest defense on sex discrimination plaintiffs than on race discrimination plaintiffs.”).

The debate continues today. Most recently, in *EEOC v. Morgan Stanley*, 324 F. Supp. 2d 451, 465 (S.D.N.Y. 2004), Morgan Stanley sought to introduce the testimony of a labor economist to demonstrate that some pay disparities between men and women are attributable to gender roles and occupational choices. 324 F. Supp. 2d at 464. The court excluded the testimony, finding that it was irrelevant to claims of disparity in pay and promotion, but observed that the testimony might be admissible in a discriminatory hiring case. Id. at 465.

Wyeth and the OFCCP ultimately entered into a settlement agreement, in which the OFCCP agreed to an analysis of Wyeth’s compensation using yet another approach described below.

C. The New OFCCP Approach To Compensation Analysis

Recent presentations by the OFCCP indicate their new approach to analyzing compensation, typically based on a regression analysis that considers appropriate factors that affect compensation. This new approach purports to be flexible and take into consideration the employer's particular workforce and compensation system.

In January 2004, the OFCCP officials gave a presentation to contractors, explaining, in a dramatic departure from the Dubray Model, that as part of the OFCCP's new way of analyzing compensation, it will (depending on the workforce and the compensation practices at issue), identify similarly situated individuals based on similar (1) job content, (2) responsibility, (3) skills and qualifications; and (4) job descriptions, and by conducting employee interviews. See January, 2004 OFCCP Presentation, "What to Expect When OFCCP Audits Your Compensation Practices" (Attachment B). The OFCCP further stated that it will utilize multiple regression analyses to determine whether disparities exists and will use cohort analyses, i.e., individual comparisons of similarly situated individuals, "to show how [the] pattern affects real people," but not to "deduce [a] pattern" in the first instance.

A few months after the January presentation, in March 2004, the OFCCP's new Director of Statistical Analysis, Dr. Michael Sinclair, gave a workshop entitled "Understanding OFCCP's Approach to Statistical Analysis" in which he explained the OFCCP's view that compensation generally should be analyzed by grouping jobs according to:

- "functional requirements of the job" (e.g., work performed, responsibility level, and skills/qualifications)
- "internal/external market value of the position"¹¹

¹¹ Dr. Sinclair indicated that the OFCCP intends to utilize market survey data in its analyses of compensation. Presumably, the OFCCP will use such data only when an

- Dr. Sinclair further recommended that any job groupings contain 30 people or more, at least five of whom are members of the class (women or minorities) being analyzed, to ensure meaningful sample sizes.
- Importantly, moreover, Dr. Sinclair acknowledged the impact of leaves of absence, red-circling, and mergers and acquisitions on any compensation analysis.
- Dr. Sinclair suggested that an analysis of compensation could exclude as many as twenty percent of the workforce, if such employees are in special jobs or have other unique circumstances.

Michael Sinclair, March 25, 2004 Workshop, Understanding OFCCP's Approach to Statistical Analysis. Consistent with Supreme Court precedent, the OFCCP has indicated that it will consider 1.96 standard deviations – less than 5% probability that the disparity is due to chance – to be statistically significant and require further analysis. See id. Furthermore, the OFCCP will examine the diagnostics of any statistical model, including multicollinearity, outliers, residual plots, and undue influencers as part of its analysis. See id.

D. The Wyeth Settlement

While the settlement agreement¹² expressly provides that it is not to be relied upon, the Wyeth settlement is an example of a model consistent with the OFCCP's new announced approach. Specifically, the OFCCP agreed to the following analysis of Wyeth's compensation:

employer relies on it as part of its compensation decisions. It would be troubling if the OFCCP used such data in all circumstances to determine if female or minority employees are paid commensurate with external market forces.

¹² A copy of the complete settlement agreement in OFCCP v. Wyeth is available at: <http://www.oalj.dol.gov/public/ofccp/refrnc/ofclist.htm> (as of September 11, 2004).

- The analysis would be done separately, i.e., separate regressions, for each of Wyeth's job families;¹³
- Factors in the regression would include: (1) highest degree attained, (2) age at hire (as a proxy for prior experience), (3) performance, (4) job sub-family, as defined by Wyeth, (5) salary grade, as a proxy for level of responsibility, (6) tenure; and (7) time in grade;
- The time in grade and tenure variables would be interacted with grade to account for the different impact that time and grade or tenure may have on an employee's compensation depending on the employee's salary grade;
- If a salary disparity in a particular job family exceeds 1.96 standard deviations, it will be deemed statistically significant.
- If a statistically significant disparity is found in a particular job family, Wyeth can choose to run a more accurate regression model using actual data for education and prior experience. Specifically, Wyeth can include in the regression measures of (1) actual prior experience, (2) the relevance of that experience, and (3) the relevance of the employee's field of education to their job;
- If a statistically significant (1.96 standard deviations) disparity is not eliminated by including these additional factors, Wyeth would adjust female salaries in the job family sufficiently to eliminate the disparity. Prospective adjustments would be made as part of the company's regular compensation review process. At least

¹³ Wyeth's job families were designed to distinguish between different fields of work. Examples include: Human Resources, Financial/Accounting, and Engineering, Facilities, and Technical Services.

eighty percent of the females in the job family would get at least the statistical difference. The remaining twenty percent could receive no increase, or a lesser increase, based on “legitimate business reasons.” Retroactive adjustments would then be some percentage of the prospective adjustment, with the percentage dependant on the statistical significance of the disparity found.

Although the settlement is not formally binding on the OFCCP in other cases, it is consistent with the formal position it announced in January-March, 2004. Because this approach is still new to the agency, however, it is too early to tell the extent to which it will ultimately be implemented.

IV. ANALYZING EMPLOYER DATA BEFORE LITIGATION

As outlined above, plaintiffs and the government have increasingly challenged employer compensation systems in a variety of legal forums. Many employers have responded to the increased litigation in this area by conducting compensation reviews and risk assessments. This section discusses the practical considerations an employer should explore before undertaking such a review. The paper also proposes a two-step approach to reviewing compensation data, designed to assess the risk of future litigation and, if necessary, assess and perhaps correct any significant statistical disparities.

A. Protecting Internal Analyses Of Compensation From Disclosure

Although the principal purpose of this paper is not to address whether, and how, an internal analysis of compensation might be protected from disclosure by one or more privileges, it is important to consider the potential discoverability of such an analysis. Only by considering these issues at the outset can an employer develop a strategy to maximize the likelihood that an analysis will be protected from disclosure.

There are three privileges which, depending on the circumstances, may apply to

preclude discovery of an analysis: the attorney-client privilege, the attorney work product doctrine, and the self-critical analysis privilege.

1. Attorney-Client Privilege

Parties seeking to invoke the attorney-client privilege must satisfy three elements: (1) counsel must be acting as an attorney giving legal advice (as opposed to business or management advice); (2) the communication must be between attorney and client; and (3) the communication must have been made and maintained in confidence.

In the context of compensation analyses, whether the attorney-client privilege applies often turns on the purpose for conducting the analyses. If an analysis is done for business reasons, e.g., to determine if the compensation system is working properly or if pay is being distributed equitably, the analysis may not be privileged, even if an attorney is involved in the process. For example, in Barfoot v. Boeing Co., 184 F.R.D. 642 (N.D. Ala. 1999), the court held that communications regarding a company's investigation of an internal discrimination complaint were not privileged despite in-house counsel's involvement in those communications because the investigation was not done to provide legal advice regarding the complaint.

If, however, a compensation analysis is done to provide legal advice regarding a company's compliance with various EEO laws, or litigation risk, the attorney-client privilege should apply.¹⁴ Thus, in Abdallah v. Coca-Cola Co., No. Civ. A. 1:98-CV-3679RWS, 2000

¹⁴ It is well-settled that analyses performed by an expert, such as a statistician, for the purpose of enabling an attorney to provide legal advice to a client are protected by the attorney-client privilege. See, e.g., U.S. v. Kovel, 296 F.2d 918, 920 (2d Cir. 1961) (J. Story) (finding communications to accountant employed by an attorney to interpret defendant's tax information covered by the attorney-client privilege); Cavallaro v. U.S., 284 F.3d 236, 246 (1st Cir. 2002) (holding that the attorney-client privilege extends to "third parties employed to assist a lawyer in rendering legal advice"); Westinghouse Elec. Corp. v. Rep. of Philippines, 951 F.2d 1414, 1423 (3d Cir. 1991) ("When disclosure to a

WL 33249254 (N.D. Ga. Jan. 25, 2000), the court held that the attorney-client privilege protected from disclosure an internal audit of the company's compliance with affirmative action requirements because the audit was prepared at the behest of counsel so that counsel could advise the employer regarding its response to an OFCCP inquiry.

To preserve the privilege, it also is important to document the reasons for conducting the analysis and only use the analysis for the provision of legal advice, because the failure to do so may lead a court to conclude that the information is discoverable. In Beck v. Boeing,¹⁵ for example, Boeing argued that its own internal statistical analyses of its compensation practices were privileged because they were performed at the direction of counsel to help counsel provide legal advice to the company. The court, however, rejected Boeing's claim. After an *in camera* review of the documents, the court found that the analyses were used for regular business purposes, not just to obtain legal advice, and therefore were not privileged:

[D]ocuments related to [the expert's] analyses lost their privileged status when they were used in the normal course of Boeing's business – for purposes of planning and establishing salaries pursuant to the OFCCP agreement.

The court also found that Boeing employees had improperly tried to shield certain documents from disclosure by including counsel on the distribution list even though the documents were not otherwise privileged. Indeed, some of the documents (which the court was able to read as part of its *in camera* review) apparently contained language suggesting that they were sent to counsel solely to prevent disclosure of the contents. Not surprisingly, the court rejected this tactic, holding:

third party is necessary for the client to obtain informed legal advice, courts have recognized exceptions to the rule that disclosure waives the attorney-client privilege. For example, courts have held that the client may allow disclosure to an 'agent' assisting the attorney in giving legal advice to the client without waiving the privilege").

Boeing is attempting to stretch both the work product doctrine and the concept of attorney-client privilege beyond the boundaries of what they were intended to protect. The Special Master found that Boeing was attempting to shield documents which had not been prepared in anticipation of litigation from discovery by transmitting them to (or passing them through) its attorneys. This is not effective, nor does a document prepared for a business purpose which is later employed in litigation fall under the protection of the rule.

The legal principles upon which the Boeing court relied were not novel.

Nonetheless, the results of that decision – the disclosure of Boeing’s internal analyses of compensation – substantially impaired the company’s ability to defend itself in litigation and in the press. See, e.g., “Coverup At Boeing?,” *BusinessWeek Online*, June 28, 2004. Accordingly, the implications of the Boeing court’s rulings must be considered as part of any decision on whether, and how, to conduct an analysis of compensation.

2. Attorney Work Product

The work product doctrine protects from disclosure confidential information that an attorney has obtained or prepared in anticipation of litigation. The protection covers two kinds of information: “opinion” and “factual” work product. Opinion work product consists of the attorney’s mental impressions, conclusions, opinions, or legal theories. Factual work product is any factual, non-opinion material gathered in preparation for a lawsuit. See, e.g., Baker v. Gen. Motors Corp., 209 F.3d 1051 (8th Cir. 2000) (“There are two kinds of work product-- ordinary work product and opinion work product. Ordinary work product includes raw factual information. Opinion work product includes counsel's mental impressions, conclusions, opinions or legal theories.”). Opinion work product is, when applicable, afforded almost absolute protection; factual work product, by contrast, may be discoverable under some circumstances:

Ordinary work product is not discoverable unless the party seeking discovery has

¹⁵ Case No. C00-301P (W.D.Wash. Oct. 30, 2003).

a substantial need for the materials and the party cannot obtain the substantial equivalent of the materials by other means. In contrast, opinion work product enjoys almost absolute immunity and can be discovered only in very rare and extraordinary circumstances, such as when the material demonstrates that an attorney engaged in illegal conduct or fraud.

Id.

If an attorney is involved in designing and implementing the statistical analysis of compensation, such an analysis will necessarily reflect the attorney's opinions and mental impressions. Whether an analysis of compensation is protected from disclosure as attorney-work product therefore often will turn on whether the documents were prepared in anticipation of litigation. Most courts require that the information be prepared "because of" the prospect of litigation. See, e.g. U.S. v. Adlman, 134 F.3d 1194 (2d Cir. 1998) (holding that the proper standard was whether the memorandum was prepared "because of" the prospect of litigation, not prepared "principally or exclusively" for litigation, and noting that five other circuits had adopted this formulation). Courts are split, however, on whether documents prepared for dual purposes, i.e., those that are prepared both in anticipation of litigation and for other business purposes, are considered work product. Compare U.S. v. Frederick, 182 F.3d 496 (7th Cir. 1999) ("[A] dual-purpose document . . . is not privileged.") with In re Woolworth Corp. Sec. Class Action Litig., No. 94 CIV. 2217 (RO), 1996 WL 306576 (S.D.N.Y. June 7, 1996) (company's business purpose for creating material would not preclude application of work product privilege).

Typically, moreover, the litigation must be reasonably anticipated on an objective basis before work product protection is afforded. Thus, a letter from an experienced plaintiffs' attorney making claims of civil rights act violations and warning of the initiation of administrative action with the EEOC was sufficient to invoke the work production protection.

See McPeck v. Ashcroft, 202 F.R.D. 332 (D.D.C. 2001). Most courts, however, have held that general concerns that litigation might be instituted, without a specific threat, generally are insufficient to invoke the work product privilege. As one court recently explained:

The inchoate possibility, or even the likely chance of litigation, does not give rise to work product. To justify work product protection, the threat of litigation must be real and imminent.

Heavin v. Owens-Corning Fiberglass, No. 02-2572, 2004 WL 316072 (D. Kan. Feb. 3, 2004). There are exceptions to this rule, however. For example, in Maloney v. Sisters of Charity Hosp., 165 F.R.D. 26 (W.D.N.Y. 1995), the plaintiff sought discovery of computer printouts containing statistical information and analysis pertaining to a proposed reduction in force and a worksheet consisting of the human resource director's notes, all of which were prepared at the direction of counsel in preparation for a meeting regarding the planned RIF. The court held that each of the documents were protected by the work product doctrine because, based on counsel's experience in the area of employment and labor law, it was reasonable for counsel to believe that litigation would likely result from the employees affected by the downsizing.

Ultimately, whether an internal compensation analysis constitutes protected attorney work product will depend on the motivation for conducting the analysis, *i.e.*, whether it was prepared in anticipation of litigation, and the use made of the results.

3. Self-Critical Analysis Privilege

The self-critical analysis privilege is the least accepted of the three privileges. It is designed to protect from disclosure certain internal self-critical analyses that meet five criteria (or some variation thereof):

(1) the information sought must be the result of a critical self-analysis undertaken by the party seeking protection; (2) there must be a strong public interest in preserving the free flow of the type of information sought; (3) the information sought must be of the type whose flow would be curtailed if discovery were

permitted; (4) the information sought must have been prepared with the expectation that it would be kept confidential; and (5) the information sought must be subjective analysis designed to have a positive societal effect.

Johnson v. UPS, 206 F.R.D. 686 (M.D. Fla. 2002).

Although some courts recognize the privilege, many do not, particularly in the discrimination context. Even where the privilege is recognized, moreover, it is narrowly applied.

The court in Johnson explained:

In the context of employment discrimination, the self-critical analysis privilege was first recognized in Banks v. Lockheed-Ga. Co. [, 53 F.R.D. 283 (N.D. Ga. 1971)] Since the Banks decision, many courts have addressed the self-critical analysis privilege in the context of employment discrimination. ‘A fair number’ of district courts have recognized the privilege in this context, while an equal or greater number have either categorically denied the existence of a ‘self-critical analysis’ privilege or have rejected its application as to particular documents.

206 F.R.D. at 689 (collecting cases).¹⁶ In particular, some courts have held the privilege

inapplicable in discrimination cases for the reasons explained by the Johnson court:

In addition, this Court is concerned that the important issue of public policy purportedly implicated by disclosing information in the context of employment discrimination (e.g., Banks) does not rise to the level of the ‘overwhelming public interest’ clearly implicated by disclosing self-critical analysis in a medical context (e.g., Bredice). Thus, in the employment discrimination context, the rationale for recognizing a judicially created evidentiary privilege is lacking. In fact, many courts and commentators have concluded that the policy objectives underlying employment discrimination laws are more effectively realized through litigation, with unimpeded discovery for plaintiffs, than through a special evidentiary

¹⁶ See also Reid v. Lockheed Martin Aeronautics Co., 199 F.R.D. 379, 385-86 (N.D. Ga. 2001) (finding that self-critical analysis privilege applied to employer’s diversity reports but did not apply to documents containing information mandated by OFCCP), with Freiermuth v. PPG Indus., Inc., 218 F.R.D. 694, 697 (N.D. Ala. 2003) (refusing to recognize self-critical analysis privilege; “The policy arguments espoused in support of recognizing a self-critical analysis in the employment context ring hollow in this post-Enron era where corporate governance is not only expected, but *en vogue*.”); see also Etienne v. Mitre Corp., 146 F.R.D. 145, 148-49 (E.D. Va. 1993) (holding that the self-critical analysis privilege did not apply to salary and promotion reviews performed by an outside consultant).

privilege that may or may not actually encourage employers to critically evaluate and improve their employment practices.

Id. at 693.

Because the existence of the privilege is questionable, and the applicability of the privilege is so dependent on the jurisdiction considering the question, employers cannot, at the time an analysis of compensation is being created, expect the analysis to be protected from discovery solely because of the self-critical analysis privilege. Therefore, only by involving counsel in the process – and conducting the analyses of compensation for the purpose of obtaining legal advice and analyzing litigation risks – can an employer offer the best chance of protecting its compensation analysis from disclosure.

4. Conclusion

Any analysis of compensation must be undertaken with the understanding that it may be discoverable. Nonetheless, there are steps that can be taken before the analysis is conducted to increase the likelihood of protecting it from discovery based on one of the above privileges. These steps should include (1) defining the purpose of the analysis in advance, in writing (e.g. to obtain legal risk assessment); (2) controlling those involved in collecting data for the analysis, preparing the analysis, and reviewing the results of the analysis (e.g. inside counsel and key executives); (3) identifying the information in question as confidential; and (4) ensuring that the results of the analysis are not used for ordinary business purposes or for purposes other than those identified above. Critically, the failure to follow these principles can, as reflected in the Boeing decision discussed previously, contribute to a perception that a privilege is being invoked merely to hide unfavorable information and cause the loss of the privilege.

Moreover, even after a statistical analysis is complete, employers (like Boeing) often desire to use those results as the basis for making adjustments to a compensation system, or

the compensation of particular individuals. Before undertaking this exercise, however, consideration must be given to the fact that these business uses of the information may render a previously privileged analysis discoverable. Working with counsel throughout this process – to make clear that the analyses are being conducted to obtain legal advice and/or assess legal risks – can minimize the chance of losing the privilege.

At the end of the day, it may be in an employer's best interest in litigation to disclose its own analyses of its compensation system to dissuade a government agency (e.g., EEOC or OFCCP) from pursuing a potential lawsuit or to demonstrate in litigation an employer's commitment to non-discrimination. Only by carefully developing and following a strategy to protect the confidentiality of the information from the beginning, however, can an employer maximize its chances of having the control over whether those analyses are disclosed.

B. Developing A Multiple Regression Model

The first step in assessing an employer's compensation practices will be to develop a multiple regression analysis of the compensation system being analyzed. The two-step approach to compensation analysis and risk assessment described below involves conducting regression analyses without and with protected characteristics included in the model. Of course, unlike some of the governmental approaches described above, employers will want a robust analysis that analyzes the key factors that influence compensation and that explains differences among employees rather than using an approach that excludes variables and/or presumes the existence of tainted variables based on alleged past discrimination. The employer will want to develop a model, similar to one that they would create if in litigation, which includes the major variables impacting compensation and tests the appropriate population of employees.

In making determinations regarding the factors relevant to the multiple regression analysis, it is important that employers consider how their compensation system currently works. Plaintiffs will often point to the employer's own written materials and policies to justify their method of grouping employees in a multiple regression analysis. For example, in Hemmings v. Tidyman's Inc., 285 F.3d 1174, 1186 n. 14 (9th Cir. 2002), the defendant argued that plaintiffs' regression improperly considered store managers and corporate managers together. The court rejected this argument, noting that defendant treated corporate staff and store management in the same group for the purpose of its salary policy and its internal corporate management flow charts included store director and manager positions. See also Abram, 200 F.R.D. at 426-433 (finding that plaintiffs improperly aggregated compensation data where employer's standardized personnel procedures involved compensation decisions that took place on decentralized and individualized level). Accordingly, employers will want to consult written compensation documents and policies and craft their multiple regression analysis around the actual variables considered when compensation decisions are made. It is advisable that both counsel and a statistical expert be involved in the decisions regarding the composition of the multiple regression model used.

C. Conducting A Compensation Equity Analysis Without Regard To Any Protected Category

Before developing a multiple regression model to determine whether there are statistically significant disparities between males and females or minorities and non-minorities, it may be desirable to develop a multiple regression model that does not account for the protected characteristics of its employees. Using this model, the employer can determine employees' statistically anticipated compensation and identify individuals who are earning significantly more or less than that amount.

An employer's statistical analysis of compensation will be more credible and defensible if decisions made regarding how that analysis should be conducted are made without knowing how those decisions will affect the results of any analysis of discrimination.¹⁷ Such an analysis can be used to test and refine the statistical model before reaching any conclusions, or even performing any analysis, about the existence of discrimination in the workplace. Perhaps more importantly, however, this analysis can be used as a diagnostic tool to test which factors actually affect compensation and whether factors an employer considers important to compensation (e.g., performance, education) actually impact compensation as intended. A model can also provide a basis for identifying compensation issues which should be addressed independent of their impact on employees in protected categories.

1. Analyzing The Results

Once an appropriate model is selected, an employer will need to analyze the results of the regression analysis. This process should begin with a determination as to whether the model is effectively accounting for the nondiscriminatory factors that impact employee compensation.¹⁸ In any multiple regression analysis it is possible for outliers in the data to unduly influence the overall statistical results. See David H. Kaye and David A. Freedman, Reference Guide on Statistics p. 137 (demonstrating how, in the extreme case, one outlier can “reduce a perfect correlation to nearly nothing”); Penk, 1985 WL 25631, at *49 (“Because regression is an averaging technique, the sex coefficients may be strongly influenced by a few

¹⁷ Even under the cloak of the attorney-client privilege, a statistical analysis conducted by an employer that indicates the existence of discrimination may raise issues and present greater risks than desired.

¹⁸ Of course, if the results indicate potential errors in the data being analyzed (e.g., full-time or part-time status, improperly coded data, missing data, mis-classified employees),

extreme cases”). Examining these employees’ circumstances may indicate that they should be excluded from any further statistical analyses because of unique circumstances and/or may indicate potential changes that should be made to the statistical model. *Id.* at 137-38. To the extent such outliers are heavily weighted toward one group, the employer will face a heavier burden to justify their exclusion. In such situations, a plaintiff may argue that the explanatory variable is used by the employer to mask discrimination. *See, e.g., Penk*, 1985 WL 25631, at *49 (rejecting plaintiff’s argument that expert’s “outlier analysis,” which removed individuals more than two standard deviations from the mean, simply removed highly paid men and low paid women).

Moreover, if it appears that some employees are underpaid relative to similarly situated co-workers, compensation adjustments can then be made on a race/gender neutral basis.¹⁹ Such adjustments, even though undertaken without regard to a protected characteristic, may help an employer avoid any statistically significant differences in compensation for its minority employees because they may drive any overall disparity between protected group compensation and non-protected group compensation below statistical significance. This is significant because it may allow employers to avoid the reverse discrimination litigation that can arise when employers make broad compensation adjustments based upon statistical disparities in compensation. *See infra* Sec. IV.D.2.a.

Furthermore, by doing these adjustments without regard to protected characteristics, employers avoid the argument that last-minute compensation adjustments to a

it must be corrected. Any analysis based on data with too many errors is useless and, in fact, can lead to a false sense of security.

¹⁹ Every regression model will have outliers. If salary adjustments are made, or outliers are removed from the analysis, a new analysis will simply identify a new set of outliers.

relatively few number of employees were used by the employer to mask its intentional discrimination. Indeed, many employers already have procedures in place to make equity adjustments to employees who appear underpaid relative to their peers. Using a statistical analysis to identify those individuals adds an additional layer of objectivity, and appearance of fairness, to the process.

D. Assessing Whether A Compensation System Has A Disparate Impact On Any Protected Group

Any review of compensation will ultimately analyze whether disparities exist among groups of employees based upon their protected characteristics, *i.e.* race, nationality, gender, age, etc. Under the Equal Pay Act, employees who perform “equal work on jobs the performance of which requires equal skill, effort, and responsibility, and which are performed under similar working conditions,” should be paid the same compensation. *See* 29 U.S.C. § 206(d)(1). Similarly, under Title VII of the Civil Rights Act of 1964, an analysis of compensation should compare employees who perform substantially similar work. *See, e.g., Am. Nurses’ Ass’n v. State of Ill.*, 783 F.2d 716, 721 (7th Cir. 1986) (noting in Title VII pattern or practice case that one cannot prove discrimination “based on a comparison of the wage rates of dissimilar jobs”) (citation omitted).²⁰ Having reviewed the compensation system without regard to protected characteristics, and having made any necessary and appropriate adjustments,

²⁰ *See also Conti v. Universal Enters., Inc.*, 50 Fed. Appx. 690, 699 (6th Cir. Sept. 20, 2002) (“In a Title VII case where the plaintiff seeks to compare herself to another employee, she must prove that all relevant aspects of her employment situation were similar to those of the other employee,” which includes an evaluation of whether the individuals performed “equal work” as under the EPA); *Rodriguez v. Smithkline Beecham*, 224 F.3d 1, 8 (1st Cir. 2000) (“plaintiff’s Title VII claim fails as a matter of law for lack of a prima facie case” where plaintiff could not make a showing that she was paid less than a male employee for substantially equal work).

employers should next conduct a multiple regression analysis accounting for the protected characteristics of its employees.

1. Considering The Plaintiffs' Approach

As noted throughout, there are a number of theories of analyzing compensation upon which a statistical model can be based. Rarely, of course, will an employer reach agreement with an adversary, whether it be the government or plaintiffs, as to the appropriate method for examining whether a pattern or practice of discrimination in compensation exists, except perhaps in a settlement context. Typically a party will utilize the method(s) of analyzing compensation that are most favorable to them and are the easiest to defend against a challenge in litigation. Accordingly, despite attempting to compile a multiple regression model that accurately reflects legitimate, nondiscriminatory explanatory variables in compensation, as part of a risk assessment, employers may also want to undertake analyses similar to those expected from plaintiffs and the government. Of course, before doing so, employers will want to review a number of considerations, including (1) cost, which will vary depending upon the uniformity and number of databases maintaining compensation data; (2) the existence of or imminence of litigation regarding the employer's compensation system; and (3) the party, if any, challenging the employer's compensation system.

Plaintiffs frequently argue that factors that are within the control of the employer – *e.g.* performance ratings – should not be included in a statistical analysis because they can mask discrimination. The argument is as follows:

- Overall, men and women should have the same performance ratings;

- If including performance in a regression analysis eliminates any statistical differences in compensation between men and women, then men and women must have different performance ratings;
- If men and women have different performance ratings, those ratings must be discriminatory.

See, e.g., Smith v. Virginia Commonwealth Univ., 84 F.3d 672, 692 (4th Cir. 1996) (Michael, J., dissenting) (“For the purposes of conducting [a multiple regression analysis], it is . . . entirely proper to assume that the sexes on the average are equally productive.”); but see Morgan, --- F.3d ---, 2004 WL 1920198, *10 (discussing and rejecting plaintiffs’ arguments that past pay and performance should not be included as variables in the regression because those factors may mask discrimination).

Plaintiffs also often attempt to aggregate data in a manner that disregards valid distinctions among an employer’s workforce. E.g., EEOC v. Morgan Stanley, 324 F. Supp. 2d 451, 457-58 (S.D.N.Y. 2004) (admitting testimony of plaintiffs’ expert who aggregated data to include foreign offices, finding that the validity of expert’s testimony should be left to the jury). This technique will increase the likelihood of a finding of a statistically significant pay disparity between protected group and non-protected group employees. See Daniel L. Rubinfeld, Reference Guide on Multiple Regression, p. 189.

Plaintiffs may also attempt to use the testimony of social science experts to shift the burden of proof to the employer. For instance, in Morgan Stanley, the plaintiffs sought to introduce the testimony of a social scientist who testifies frequently for plaintiffs, Dr. William Bielby, regarding factors that affect workplace gender bias and the kinds of policies and

procedures that minimize gender bias, based upon the assumption that a male-dominated environment existed at Morgan Stanley. 324 F. Supp. 2d at 460. The court observed:

Bielby’s discussion about the susceptibility of the [Institutional Equities Division]’s pay and promotion procedures to gender bias would tend to confuse the jury about the burden of proof. The gist of his conclusion is that in a male-dominated context where men are in charge[,] women are discriminated against unless certain safety measures are instituted. He therefore asks the jury to begin with the expectation of discrimination and compel Morgan Stanley to prove that it took enough steps to prevent it.

. . . . While his testimony would be helpful in understanding the mechanism of discrimination, and consequently, in fashioning an appropriate remedial scheme, it may not illuminate the initial inquiry, i.e., whether Morgan Stanley discriminates.

Id. at 461.

As a result, although the court allowed Dr. Bielby to testify regarding gender stereotypes, how these stereotypes may have affected decisions at Morgan Stanley, and whether policies and practices relating to gender bias might affect employees’ utilization of an EEO program, the court held that Dr. Bielby could not give testimony regarding whether there was any evidence of discrimination at Morgan Stanley. Id. Cf. Butler v. Home Depot, Inc., Nos. C-94-4335 SI, C-95-2182 SI, 1997 WL 605754, at *7 (N.D. Cal. Aug. 29, 1997) (denying Home Depot’s summary judgment motion in part based upon Dr. Bielby’s expert opinion that in a male-dominated culture, there is a strong testimony for women to be considered unqualified for “men’s work” based upon gender stereotypes); Dukes, 222 F.R.D. at 154 (granting class certification based in part upon Dr. Bielby’s expert opinion that gender stereotypes contributed to disparities in pay and promotions).

2. Dealing With Findings Of Statistical Disparities

Once an employer determines which factors can and should be included in the statistical model, the form of the model, and the workforce to be studied, the employer can assess whether statistically significant disparities exist in the compensation of employees in various protected categories that are not explained by the nondiscriminatory factors accounted for in the statistical model. One seemingly simple solution to such disparities is to provide additional compensation to the protected employees found to be underpaid. As discussed below, however, this approach could subject the employer to a reverse discrimination claim, which, at a minimum, puts the employer in a position of announcing and attempting to prove its prior compensation disparities. It is also likely to disrupt an employer's compensation system. As an alternative, employers should consider a more individualized review of the compensation data and less reliance upon broad assumptions drawn from a multiple regression analysis.

a. The Risks Inherent In Making Broad Compensation Adjustments Based On Statistical Analysis

Employers need to tread carefully when determining whether to make broad compensation adjustments designed to address disparities in pay identified by a multiple regression analysis. Although relatively infrequent to date, such adjustments have been challenged on reverse discrimination grounds by male and non-minority employees not provided with comparable adjustments, most typically in the public sector or academia. See Rudebusch v. Hughes, 313 F.3d 506, 523-24 (9th Cir. 2002) (class action brought by professors alleging equal protection and Title VII violations based on salary adjustments made for female and minority professors as a result of an internal pay equity analysis; fact issues mandated reversal of summary judgment for university); Maitland v. Univ. of Minn., 155 F.3d 1013, 1018 (8th Cir. 1998) (reversing summary judgment for university in reverse discrimination action brought by

male professor challenging salary adjustment plan for female academic employees implemented pursuant to consent decree); Smith v. Virginia Commonwealth Univ., 84 F.3d 672, 677 (4th Cir. 1996) (en banc) (class action brought by professors alleging Title VII violations based upon salary adjustments for female professors as result of internal pay equity analysis; summary judgment for university reversed). At least one court has noted the irony that such adjustments, often undertaken to avoid Title VII litigation, have spawned that very litigation. Rudebusch, 313 F.3d at 520.

Courts that have addressed reverse discrimination challenges to compensation adjustments designed to alleviate disparities between women and/or minority and men and/or non-minorities have applied the Supreme Court's affirmative action jurisprudence.²¹ See Rudebusch, 313 F.3d 506; Maitland, 155 F.3d 1013; Smith, 84 F.3d 672. Accordingly, these courts have held that pay equity adjustments may be undertaken only if: (1) they are justified by the existence of a "manifest imbalance"; (2) they do not "unnecessarily trammel" the rights of non-protected group employees; and (3) the adjustments are necessary to "attain a balance" rather than "maintain a balance." Rudebusch, 313 F.3d at 520-21; Maitland, 155 F.3d at 1016 (citing Johnson v. Transportation Agency, Santa Clara County Cal., 480 U.S. 616, 631 (1987)). In determining whether and how to make any compensation adjustment, employers should consider how each of these factors have been analyzed by the courts.²²

²¹ The Ninth Circuit, however, has explicitly noted that unlike affirmative action promotion and/or hiring plans, which are viewed as providing preferential treatment for women and/or minorities, a pay equity adjustment does not provide an ultimate advantage, but rather seeks to eliminate existing salary disparities. Rudebusch, 313 F.3d at 520.

(i) Manifest Imbalance

A manifest imbalance “need not be such that it would support a prima facie case against the employer.” Rudebusch, 313 F.3d at 520 (citing Johnson, 480 U.S. at 632). In the reported cases, employers have uniformly demonstrated manifest imbalance by pointing to one or more regression analyses demonstrate statistically significant disparities in pay among a group of protected employees. Of course, this places an employer in an uncomfortable position of affirmatively stating that discrimination has occurred in the past that requires remedial action.

Ironically, plaintiffs in these cases have challenged the models used by employers by identifying factors affecting compensation that were not accounted for in finding compensation disparities. In these instances, courts have refused to grant summary judgment, and instead held that the question of whether a manifest imbalance exists is a material issue of fact requiring a determination by a jury. Maitland, 155 F.3d at 1017 (“[If] a regression analysis omits variables, it is for the finder of fact to consider the variables that have been left out of an analysis, and the reasons given for the omissions, and then to determine the weight to accord the study’s results – in this case, whether those results show a manifest . . . imbalance in salaries.”). Smith, 84 F.3d at 676 (reversing summary judgment because, *inter alia*, the parties disputed the viability of accounting for performance variables in the regression analysis). Accordingly, employers that are challenged on a pay equity increase need to be prepared to defend their statistical model, and, more importantly, to understand that they will likely have to do so before a jury.

²² The burden on proving that an employer’s pay equity adjustments violate Title VII is on the plaintiff. Smith, 84 F.3d at 676.

Application of the manifest imbalance analysis should follow the question of whether there are statistically significant disparities in the compensation of protected group and non-protected group employees. Assuming that an employer conducted a reasoned multiple regression analysis, a finding of a manifest imbalance should follow. It becomes more complicated if an employer purports to rely upon a plaintiff or government approach which improperly aggregates employee data or excludes major variables from the regression. In those instances, like in Smith and Maitland, the likelihood of a trial on the propriety of that model increases.

(ii) Unnecessarily Trammel Rights Of Non-Protected Employees

In considering whether pay adjustments unnecessarily trammel the rights of males and/or non-minorities, what is at stake is the “opportunity [by whites and/or males] to compete for an otherwise available employment opportunity.” Rudebusch, 313 F.3d at 521. Employers making pay adjustments to rectify statistical disparities in compensation, therefore, must be careful to avoid denying male and non-minority employees access to the opportunity to compete for pay increases. In Rudebusch, the employer created a new fund of money, separate and apart from its standard pay increase funds, from which it increased the salaries of minority and female employees.²³ The Ninth Circuit found that this process of pay equity increases did not trammel the rights of white male employees because “there would have been no opportunity or funds available for any pay adjustments but for the [employer’s] decision to address manifest

²³ In Maitland, the employer, by way of a consent decree reached after litigation against a class of female professors, nominally provided such an opportunity by setting aside a fund from which any employee – male or female – was permitted to file a claim to seek a salary increase. 155 F.3d at 1015. The Eighth Circuit, however, never discussed whether this framework provided sufficient protection the rights of male employees.

imbalance.” Id. at 522. The court distinguished the circumstance where funds earmarked for an across-the-board or merit-based raise were distributed exclusively to minority or female employees. Id.

(iii) Attain A Competitive Balance

Finally, any pay equity increases must be designed to attain a compensation balance, not to maintain one. Maitland, 155 F.3d at 1016. Thus, an employer may not remedy pay inequities in a manner that overcompensates protected employees. In the context of adjustments, this creates unique problems for an employer attempting to make compensation adjustments based upon compensation disparities between different groups in its workforce.

Rudebusch is illustrative of these problems. In Rudebusch, 313 F.3d at 511, the Ninth Circuit addressed a reverse discrimination challenge levied by white male professors from Northern Arizona University (“NAU”) whose female and minority counterparts received a pay increase as part of a pay equity adjustment designed to bring underpaid females and minorities in line with their male or non-minority counterparts.²⁴ The background for the claim laid in a regression analysis undertaken on behalf of NAU. This analysis identified statistically significant disparities in the compensation of female and minority professors.²⁵

To correct these disparities, NAU implemented a pay equity plan, through which it brought the pay of those minority and female employees who were identified as being paid less than their anticipated salary, as determined by the multiple regression model, up to that

²⁴ The University of Northern Arizona, a recipient of federal funding, was required to implement an affirmative action program (under the Office of Federal Contract Compliance Programs) to increase the recruitment and retention of minority faculty and assure parity between men and women in all areas.

anticipated salary. Female and non-minority employees who were already earning at or above their anticipated salaries received no compensation increase. Although more than half of NAU's white male professors were also found to be earning below their anticipated compensation, NAU did not increase the salaries of these individuals. The Ninth Circuit reversed the district court's grant of summary judgment in favor of NAU, holding that there was a material issue of fact regarding whether "using the predicted salary of similarly situated white male faculty member for the minority and female adjustments somehow overcompensated [those individuals], *i.e.*, whether the adjustments were more than remedial." *Id.* at 523.

In a separate opinion concurring with the majority's remand of the plaintiffs' Title VII reverse discrimination claim, Judge Kleinfeld noted that NAU's own multiple regression model found that male professors made only \$751 more than comparable female professors and white professors made \$87 more than comparable minority employ professors. *Id.* at 530. However, because many women and minorities made more than their predicted salaries, the pay equity increases averaged approximately \$2,400 and \$3,000, respectively. Judge Kleinfeld stated that that on remand "there seems to me to be only one correct answer" to the question of whether the pay equity system used by NAU was designed to attain a balance. *Id.* He reasoned, "I cannot see how, even if . . . raises of \$751 and \$87 could be 'designed to attain balance,' that the female and minority raises averaging approximately \$2400 and \$3000 could be to 'attain balance.'" *Id.*; *but see Chalikia v. Moorehead State Univ.*, Civ. A. No. 99-2027, 2002 WL 27119, *2-3 (D. Minn. Jan 08, 2002) (approving settlement of classwide gender discrimination claims and reasoning that adjusting pay of female employees who fell below anticipated salary

²⁵ NAU's multiple regression analysis was subjected to a vigorous attack in other areas of the case, but plaintiffs failed to challenge it on appeal of their Title VII reverse

derived from regression analysis solved the problem, set forth in reverse discrimination lawsuits, that any women would be over-compensated). Of course, across the board pay increase of the type Judge Kleinfeld tacitly approves would inure to the benefit of female employees making more than their comparable male counterparts and, presumably, would be attacked as providing a windfall to those employees rather than attaining balance to correct discriminatory pay practices.

b. An Alternative Approach – Conducting A Targeted Individualized Review Of Employee Compensation

Employers attempting to avoid the costs and pitfalls of a broad pay equity adjustment can consider using their statistical risk assessment to help them conduct a targeted review of individual employee compensation. In this individualized review, employers could undertake case studies that look at categories of employees, or cohorts, who despite being similarly situated are identified as having significant disparities in compensation. Counsel can conduct a more detailed review of those groups by reviewing appropriate performance and personnel files and interviewing relevant managers and human resources personnel.²⁶ As discussed in Section IV.C.1 above, using a regression analysis to identify outliers can be very useful in this process. This detailed review may unearth factors that explain the compensation for those groups, but that were not or could not be accounted for in the aggregate statistical model. Alternatively, this detailed review may help the employer identify areas where targeted compensation adjustments are warranted.

discrimination claims.

²⁶ As explained, supra, as greater number of lower level employees outside of the employer's upper management become involved in the process, the privileged status of the review becomes more attenuated.

V. CONCLUSION

Determining how best to analyze an employer's compensation practices depends on the type of compensation system in place and the reasons for performing the analysis. It is critical, however, that counsel and a statistician be involved in the process to ensure that the process is statistically sound, legally defensible, and consistent with the employer's goals.

Regardless of the method used to analyze compensation, once the analysis is complete, the question then becomes what to do with the results. If the results indicate a disparity between men and women, or whites and minorities, an employer must examine why those disparities exist and whether they can be explained. Potential causes could include a flawed model, flawed data, or a problem with the compensation system. To address the disparity, a new model might need to be developed, the data might need to be corrected, additional data may need to be collected and put in an electronic format, adjustments may be needed to the compensation system or compensation of particular employees, or, very often, the employer might simply need to delve behind the statistics to find explanations for differences in employees' salaries that cannot be identified with statistics. An employer should take care when making gender or race-based compensation adjustments to avoid "reverse" discrimination and to avoid the suggestion of past discrimination.

Even if the statistical model utilized indicates no statistically significant disparities, an employer should consider whether other analyses (e.g., a plaintiffs' attorneys' model) would yield similar results. If favorable results are obtained only because a particular statistical model is used, an employer must be prepared to defend the use of that model over others. Furthermore, once a database of employee information has been gathered for one statistical analysis, performing additional analyses can be an inexpensive way to further assess the litigation and public relations risk going forward.