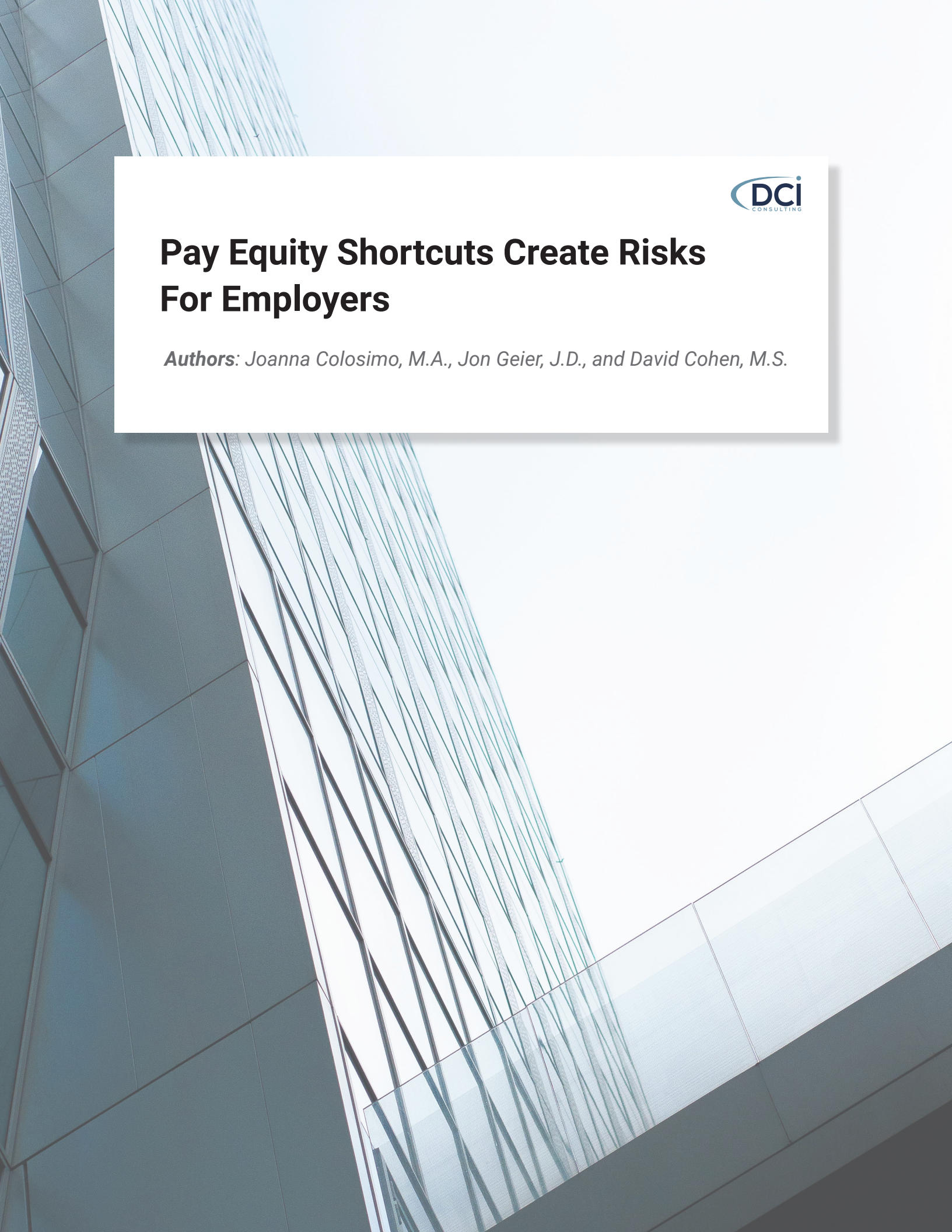


Pay Equity Shortcuts Create Risks For Employers

***Authors**: Joanna Colosimo, M.A., Jon Geier, J.D., and David Cohen, M.S.*

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By **Joanna Colosimo, Jon Geier and David Cohen**



Joanna Colosimo



Jon Geier



David Cohen

Due to the evolving challenges in getting pay equity right across the country and globally, employers are being tempted by vendors claiming that their software and/or services can conduct a reliable pay equity study literally overnight. But buyer beware: There are no simple solutions to such a complex task.

This article alerts readers to the dangers of conducting a pay equity analysis without due diligence and attention to best practices. Specifically, the article identifies: (1) the legal risks of utilizing simplistic pay equity solutions; (2) how failing to accurately model an organization's compensation structure and pay groupings may yield incorrect results; and (3) how failing to conduct an appropriate analysis can undermine an employer's entire pay system and potentially create future unintended risks.

Finally, the article provides critical best practices to reduce both legal and practical risk.

Simply put, taking the easy way out when it comes to pay equity is reckless for employers and creates risks that can be avoided.

Legal Risks

A quick and simple analysis of employee compensation can result in greater legal risk than not doing an analysis at all. Most critically, overnight solutions are generally not done under the direction and supervision of counsel.

It is critical that any statistical study be conducted at the direction of competent legal counsel pursuant to strictly enforced communication protocols. The requirement arises because a pay equity study yields statistical results — expressed as a standard error (often mistakenly referred to as a standard deviation) — that may have adverse legal consequences.[1]

The risk of having to produce statistical results in the event of litigation is magnified because another output of a pay analysis is the residual dollar (or percent) difference between protected group members after accounting for legitimate nondiscriminatory pay factors in the regression. The residual dollars multiplied by the number of protected members in the group being studied is easily calculated and could form the basis of monetary damages.

In addition, failing to group similarly situated employees to be studied increases legal risk as it may result in remediating the wrong employees which may, in turn, lead to a claim of reverse discrimination absent a strong basis in evidence.[2]

Steps for Conducting a Valid Pay Equity Study

1. Due Diligence

A valid pay equity study must start with due diligence to gain a thorough understanding of the employer's compensation system. Compensation professionals believe that compensation is complex and nuanced and there is rarely a one-size-fits-all model.

Gaining information about the compensation system guides the formation of pay groupings and factors. Simplistic analyses do not benefit from the due diligence necessary to create appropriate measurement groups and/or to model an employer's compensation practices or philosophy.

2. Formation of Similarly Situated Employee Groupings

The formation of similarly situated employee groupings, or SSEGs, is arguably the most important step in ensuring a legally and statistically sound analysis. Under Title VII standards,[3] "similarly situated" is defined as, employees that are similar with respect to the work they perform, their responsibility level, and the skills and qualifications involved in their positions.

The development of SSEGs requires professional judgement and is a mix of art and science; the pay equity expert balances the need to group similarly situated employees with the need to have large enough sample sizes to cover a desired amount of the workforce in a statistical study. Although regression is the preferred method of analysis, there are other small-group statistical tests that can be utilized on smaller SSEGs.

The bottom line is that an organization never wants to force a combination of groups of employees that are dissimilar. Not only would this violate the legally required similarly situated standard, but it may also lead to results that are incorrect.

Overbroad or pooled regression models run the risk of misspecified regression models that lead to both false positives and negatives. There is more to come on this topic below.

3. Accounting for the Major Factors

It is obvious that an analysis of compensation must account for the pay structure and philosophy of an employer. However, the groupings and analytic model may differ depending upon the type of compensation or jobs being analyzed.

For example, how employees are grouped together for a base-pay analysis might be different from how the analyst might reasonably group for a merit-increase analysis. It is important to understand that base pay is not in fact an analysis of a specific compensation decision, but rather, the culmination of lots of decisions by both the employer and the employee during the course of an employee's tenure.

Base pay typically includes decisions such as starting salary, merit increase, promotion increase, demotion, etc. Therefore, the pay factors that predict base pay are most likely not the same as those that predict a merit increase or a bonus.

The chart below demonstrates how the pay factors could be different depending upon the form of pay being analyzed or the jobs of interest. The key is to develop a model and include factors that mirror the compensation decision-making process.

Different Models for Different Forms of Pay

	Type of Pay Analyzed	
Regression Factors	**Base Pay**	**Merit Increase**
Time in Company	Yes	No
Time in Job	Yes	No
Prior Experience	Yes	No
Education	Yes	No
Performance	Yes	Yes

Note: The chart above assumes that performance is the only factor that is used in making a determination of a merit increase.

Different Factors for Different Types of Jobs

	Type of Job Analyzed	
Regression Factors	**Accountants**	**Engineers**
Time in Company	Yes	Yes
Time in Job	Yes	Yes
Prior Experience	Yes	Yes
Professional Engineer Certification	No	Yes
Performance	Yes	Yes
CPA	Yes	No

Note: The chart above assumes that certification as a professional engineer is a factor in pay for engineers and not accountants and that CPA is a factor in pay for accountants and not for engineers. This is an important consideration when structuring different pay models.

4. Individual Research for the Groups That Have Statistical Indicators

Most employers have some, but typically not all, of the major factors readily available in the human resource information system to conduct a fully specified regression model.[4] Therefore, at best, employers should use the results of the regression analysis as an initial triage tool to determine which groups have a statistical indicator that requires further research.

The research should include an individual assessment to understand why employees who may be low outliers have the observed compensation and if legitimate nondiscriminatory factors cannot be identified, appropriate adjustments should be made.

Quick and Simple May Undermine an Employer's Compensation System

As stated, formulating appropriate pay groupings is key to an effective pay equity analysis. When a pay equity analysis is conducted at a broad or macro level, without regard to inherent differences in how various merit factors influence dissimilar types of jobs, the

conclusions drawn from the analysis may be incorrect.

Groupings that are too broad may not be consistent with an employer's compensation system, in addition to being legally problematic. If the model is inappropriately constructed, the results can lead the employer to make pay adjustments that are in error — either the wrong employees get adjustments or employees that deserve adjustments do not receive them — and thus pay equity problems are perpetuated year over year.

The following is a simple but hopefully compelling example.

Assume there are two engineering jobs: chemical engineer and mechanical engineer. In accordance with the employer's compensation structure, all chemical engineers have a starting salary of $60,000 a year, and all mechanical engineers have a starting salary of $40,000 a year.

The structured annual merit increase for all chemical engineers is $2,000 a year, and for all mechanical engineers is $1,000 a year. There are nine female and 21 male chemical engineers (30 total employees), and 16 female and 14 male mechanical engineers (30 total employees). Finally, to keep things simple, assume the annual increase is the only factor effecting pay for the two jobs.

If one were to follow the Title VII standard of similarly situated employees, the appropriate method would be to analyze the two jobs separately. A carefully constructed analysis would recognize that the jobs are different and are paid differently. What would be the harm in combining the two jobs together in one regression analysis while controlling for job title as a factor?

As demonstrated below, the regression analysis at the title level shows both jobs pay is perfectly predicted based on years of service. The regression model correctly concludes that there is in fact no discretion in pay and that there are in fact no sex-based differences; the years of service perfectly predict pay when chemical engineers are analyzed as a separate pay group from mechanical engineers.

Chemical Engineers

Regression Statistics	
Adjusted R Square	1.00
Observations	30

	Coefficients	*Standard Error*	*t Stat*
Intercept	$60000.00	0.0000	
Years of Service	$2000.00	0.0000	
Sex Code	$0.00	0.0000	0.00

Mechanical Engineers

Regression Statistics	
Adjusted R Square	1.00
Observations	30

	Coefficients	*Standard Error*	*t Stat*
Intercept	$40000.00	0.0000	
Years of Service	$1000.00	0.0000	
Sex Code	0.00	0.0000	0.00

Alternatively, without considering the distinctions on how pay works differently between the two jobs, chemical and mechanical engineers are combined in a single analysis because they are all engineers. Because the jobs are, in fact, different, the aggregated model is constructed to control for the job in addition to the years of service.

"But we controlled for the job title," is a common retort to justify aggregated pay groupings. However, as shown below, because of differences in starting pay and because each year of service returns a different value in pay, the aggregated group yields incorrect sex-based statistical indicators even when controlling for job.

The regression did not account for the fact that years of service works differently for the two jobs. The model did control for job but did not account for the fact that the variables that predict base pay work differently for the two jobs.

Regression Statistics	
Adjusted R Square	0.96
Observations	60

	Coefficients	*Standard Error*	*t Stat*
Intercept	$33735.06	1376.6828	
Years of Service	$1504.88	63.2455	
SSEG (Structural) Variable	$34817.18	1126.3579	
Sex Code	$-(2926.39)	1142.8258	-2.5607

If an employer relied on these results, it would conclude that there are sex-based differences that are statistically significant. The employer might make salary adjustments for the female mechanical engineers flagged as being underpaid.

If the company makes sex-based salary adjustments based on this model, it would be wholly inconsistent with the company's compensation system and a potential violation of Title VII. What is the strong basis in evidence that unlawful pay discrimination exists?

It is possible however, to correct the aggregated analysis by controlling for the interaction between years of service and job in the model. This is the most important part — we know that years of service works differently for the two jobs we are putting together in this regression model, so we need to account for that interaction in the regression model.

Regression Statistics	
Adjusted R Square	1.00
Observations	60

	Coefficients	*Standard Error*	*t Stat*
Intercept	$40000.00	0.0000	
Years of Service (Yos)	$1000.00	0.0000	
SSEG (Structural) Variable	$20000.00	0.0000	
Interaction YoS*SSEG	$1000.00	0.0000	
Sex Code	0.00	0.0000	0.0000

After accounting for the interaction term, the results no longer show a sex-based difference in this model, which is what we would expect given that the compensation system in this example was constructed to be bias free and structured in a formulaic way. Controlling for job title alone in the regression model did not fully or accurately account for the nuances in the pay system in this example. When we accounted for the interaction of job and years of

service, however, the model was accurately specified.

This example is intended to demonstrate the critical importance of accurately specifying a regression model. If a regression model is not constructed accurately, and the results are used to inform salary mitigation recommendations, there can be unintended and adverse consequences to the employer's structured compensation system.

If the organization systematically continues to make salary adjustments based on the prior erroneous model, without controlling for interactions, the employer will undermine the very structured system they have created. Suddenly the inherent differences between a chemical and mechanical engineer become meaningless and the company will spend years throwing money at the potentially wrong problem. It is possible that, over time, the employer will find it difficult to defend its compensation system.

Best Practices to Get Pay Equity Right

Conducting a pay equity study correctly will reduce, albeit not eliminate, risk to an employer. Here are critical best practices when conducting a pay analysis:

- Under the supervision and direction of experienced counsel, conduct the study pursuant to strictly enforced communication protocols to protect the regression model and its results from discovery.

- Create SSEGs using the existing job structure architecture (depending on the size of the employee population, an SSEG may be a job title or if aggregated across titles, employees whose work requires similar knowledge, skills and abilities).

- Based on input from internal subject matter experts, develop a multiple regression model that (1) is consistent with the employer's compensation philosophy, and (2) uses reliable data from the human resources information system as regression factors that explain pay (e.g., nature and level of work, experience within and prior to current employer).

- Develop a mitigation strategy that should include, but is not limited to, the timing of adjustments, eligibility for an adjustment and allocation of adjustment funds consistent with compensation philosophy.

Final Thoughts

Conducting pay equity studies and mitigating observed differences based on pay models that group dissimilar jobs and do not account for the major factors and appropriate interaction terms are problematic. Such studies are not done in accordance with Title VII standards and adjustments made may in fact violate the law.

Such a study could result in both false positive and false negative findings leading to adjustments to the wrong groups and wrong employees. Finally, and maybe most importantly, any adjustments made on incorrect models will run counter to an employer's legitimate nondiscriminatory compensation system and potentially decrease the ability to defend the organization's compensation practices if challenged in the future.

We encourage employers to engage in meaningful and accurate proactive studies to identify problems where problems exist and engage in meaningful remediation strategies to rectify the problem. True pay equity is in everybody's best interest.

Joanna Colosimo is director of equal employment opportunity compliance and a principal consultant at DCI Consulting Group Inc.

Jon Geier is a principal consultant and David Cohen is president at the firm.

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[1] See, e.g., Hazelwood School District v. United States. 433 U.S. 299 (1977). A standard deviation between 2 and 3 creates adverse inference of discrimination absent employer producing evidence explaining observed difference.

[2] King, A. G. (2007). "Gross statistical disparities" as evidence of a pattern and practice of discrimination: Statistical versus legal significance. The ABA Journal of Labor & Employment Law, 22, 271-291. See also, Ricci et al. v. Stefano et al., 557 U.S. (2009).

[3] Lewis v. City of Union City, Ga.,No. 15-11362, 2019 U.S. App. LEXIS 8450 (11th Cir. Mar. 21, 2019) and Vasquez v. Cty. of Los Angeles, 349 F.3d 634, 641 (9th Cir. 2003).

[4] Colosimo, J.L, Henderson, J., and Sakpal, V. (2019). How Organizations are Approaching Pay Equity Studies Amid Complex and Ever-Changing Regulatory Requirements. DCI Consulting White Paper. Published August 2019. https://content.dciconsult.com/whitepapers/how-organizations-are-approaching-pay-equity-studies.