THE EEOC'S PROPOSAL TO START COLLECTING DATA ON COMPENSATION AND HOURS WORKED





Copyright ©2016 by Berkeley Research Group, LLC. Except as may be expressly provided elsewhere in this publication, permission is hereby granted to produce and distribute copies of individual works from this publication for non-profit educational purposes, provided that the author, source, and copyright notice are included on each copy. This permission is in addition to rights of reproduction granted under Sections 107, 108, and other provisions of the U.S. Copyright Act and its amendments.

Disclaimer: The opinions expressed in this publication are those of the individual author and do not represent the opinions of BRG or its other employees and affiliates. The information provided in the publication is not intended to and does not render legal, accounting, tax, or other professional advice or services, and no client relationship is established with BRG by making any information available in this publication, or from you transmitting an email or other message to us. None of the information contained herein should be used as a substitute for consultation with competent advisors.

The EEOC's Proposal to Start Collecting Data on Compensation and Hours Worked

On Friday, January 29, 2016, the U.S. Equal Employment Opportunity Commission (EEOC) unveiled plans to submit to the Office of Management and Budget (OMB) a request for a revision to the Employer Information Report ("EEO-1 Report") data collection. ². Currently, the EEO-1 report requires employers to report, on an annual basis, the number of workers they employ by job category and by race, ethnicity, and sex.3 The EEOC is now proposing that the report also be used to collect data on employee compensation and hours worked. If adopted, this proposal would affect more than 67,100 employers and about 63 million employees.⁴

The EEOC's proposal is the result of President Obama's National Equal Pay Task Force, which engaged the National Academy of Sciences (NAS) to conduct a study⁵ to assess how to most effectively collect compensation data to support its enforcement of wage discrimination laws. Based on the study's recommendation, the EEOC conducted a pilot study's (completed in September 2015) to identify "the most efficient means" to collect employee compensation data. The study made recommendations regarding the unit of pay to be collected; the best measures of central tendency and dispersion; appropriate statistical tests to analyze the pay data; and efficient ways for employers to transmit the pay data to the EEOC. At the same time, in response to a notice by the Office of Federal Contract Compliance Programs (OFCCP) that it would also propose a requirement that certain federal contractors submit compensation data to the OFCCP, various stakeholders urged the federal EEO agencies to develop a coordinated plan for collecting and using the data.

Who would be affected by the EEOC's proposal, if adopted? Starting in 2017, employers with 100 or more employees (both private industry and federal contractors) would be required to submit data on compensation and hours worked, while federal contractors with 50 to 99 employees would continue to report only data on employees' ethnicity, race, and sex by job category. They would not be required to submit employee pay and hours data.

When would this take effect? Employers would submit the compensation data using the same timeline as for the standard EEO-1 report; that is, data would be collected from any pay period occurring in the months of July through September, and the report would be transmitted electronically by September 30 of the same year.

What type of data would be submitted? The EEOC is proposing that W-2 data be the basis for the compensation data to be collected and submitted to the EEOC by employers. The EEOC notes that requiring employers to submit compensation data in the form of pay rates, ranges of pay, and/or average or median pay would have been impractical, more burdensome for employers, or both. The EEOC chose W-2 earnings as the appropriate measure of earnings, as W-2 compensation data considers all earned income, including supplemental pay components such as overtime pay, severance pay, shift differentials, bonuses, fees, commissions, tips, tuition reimbursements, and elective deferrals. Such supplemental forms of pay have been increasing in importance, and in some occupations and industries represent a substantial component of employee pay.

- The U.S. Equal Employment Opportunity Commission, "EEOC Announces Proposed Addition of Pay Data to Annual EEO-1 Reports", Press Release (January 29, 2016), accessed at http://www.eeoc.gov/eeoc/newsroom/release/1-29-16.cfm
- 2 Federal Register, The Daily Journal of the Unites States Government, "Agency Information Collection Activities: Revision of the Employer Information Report (EEO-1) and Comment Request," (February 1, 2016), Document Number 2016-01544, accessed at https://www.federalregister.gov/articles/2016/02/01/2016-01544/ agency-information-collection-activities-revision-of-the-employer-information-report-eeo-1- and #h-13
- The EEO-1 report uses federal race and ethnic categories, which were implemented in 2007. The data include seven race and ethnicity categories and then job categories, by sex.
- 4 http://www.natlawreview.com/article/president-obama-announces-further-efforts-to-combat-gender-pay-inequality
- National Research Council, "Collecting Compensation Data From Employers," Washington, DC: National Academies Press (August 15, 2012), accessed at http:// www.nap.edu/read/13496/chapter/1
- 6 U.S. Equal Employment Opportunity Commission, "EEOC Pay Pilot Study," Sage Computing (September 2015), accessed at http://www.eeoc.gov/employers/ eeo1survey/pay-pilot-study.pdf
- The EEOC's proposed source of compensation data does not include income reported through Schedule K-1.

There are several potential issues and complicating factors in the use of W-2 data as the single measure of compensation for the purpose of the proposed EEOC analysis:

- 1. Since EEO-1 data are submitted by September 30 of each year, while W-2 data are compiled at the end of the calendar year, employers and their payroll vendors may need to adjust their programs, because W-2 data will be required as of October of each year for the preceding twelve-month period.
- 2. Employees who exercise vested restricted stock or stock options in a particular year may have earnings that would place them in a much higher pay bracket than they would be in otherwise, potentially skewing the results of the analysis.
- 3. W-2 data does not differentiate between the types of pay received by employees in any given year. Base pay, overtime pay, shift differentials, and various forms of incentive pay typically have different characteristics and distributions. By lumping them into a single measure of pay, the analysis would ignore these important differences and may result in inaccurate and misleading results.

Under the EEOC's proposal, employers would be required to collect aggregate W-2 data and report the number of employees they have within 12 distinct pay bands, for each job category and ethnicity, race, and sex. The EEO-1 pay bands would track the 12 "wage intervals" used by the Bureau of Labor Statistics of the U.S. Department of Labor in its Occupation Employment Statistics (OES) survey.8 The EEOC indicates that compensation data organized in pay bands "appears to be more likely to generate reliable data while being less burdensome for employers than other reporting alternatives."

Table 1: Proposed EEO-1 Pay Bands									
Pay bands	Pay bands								
1	\$19,239 and under								
2	\$19,240-\$24,439								
3	\$24,440-\$30,679								
4	\$30,680-\$38,999								
5	\$39,000-\$49,919								
6	\$49,920-\$62,919								
7	\$62,920-\$80,079								
8	\$80,080-\$101,919								
9	\$101,920-\$128,959								
10	\$128,960-\$163,799								
11	\$163,800-\$207,999								
12	\$208,000 and over								

Based on the proposed wage bands, an employer would, for example, report the number of African-American women in the "Executive/Senior Level Officials and Managers" job category and who were paid between \$80,080 and \$101,919 (the eighth pay band proposed by the EEOC).

See Survey Methods and Reliability Statement for the May 2014 Occupational Employment Statistics Survey (last modified March 25, 2015), accessed at: http://www. bls.gov/oes/current/methods_statement.pdf

Below is a snapshot of the proposed EEO-1 form. The proposed revised EEO-1 form can be found at: http://www.eeoc.gov/ employers/eeo1survey/2016_new_survey_2.cfm

FIGURE 1: PROPOSED EEO-1 FORM (SNAPSHOT)

Job Categories	Annual Salary in Thousands	Number of Employees (Report employees in only one category)														
		Race/Ethnicity														
		Hispanic or Latino		Non/Hispanic or Latino												
				Male					Female						Total Col	
		Male	Female	White	Black or African American	Native Hawalian or Pacific Islander	Asian	Native American or Alaska Native	Two or More races	White	Black or African American	Native Hawalian or Pacific Islander	Asian	Native American or Alaska Native	Two or More races	A-N
		A	В	С	D	E	F	G	Н	- 1	J	К	L	М	N	0
Executive/Senior Level Officials and Managers 1.1	\$19,239 and under															
	\$19,240 - \$24,439															
	\$24,440 - \$30,679															
	\$30,680 - \$38,999															
	\$39,000 - \$49,919															
	\$49,920 - \$62,919															
	\$62,920 - \$80,079															
	\$80,080 - \$101,919															
	\$101,920 - \$128,959															
	\$128,960 - \$163,799															
	\$163,800 - \$207,999															
	\$208,000 and over															
	540.000 andda-															

In a similar fashion, employers would collect and report the total number of hours worked by employees included in each EEO-1 pay band cell. A challenge for employers will be how to measure the hours worked by salaried employees, because employers typically do not account for their actual number of hours worked and may not collect this information. At present time, the EEOC is not proposing a requirement that employers collect additional data on the actual hours worked by their salaried employees, but it is encouraging employers to provide comments on this particular issue.

EEOC Analysis of the Compensation and Hours Data

The EEOC has indicated that as an initial check, it will use various statistical significance tests that do not rely on an assumption of a normal distribution. For each employer, the EEOC plans to compute within- and across-job category variations, as well as overall variations. This means that the EEOC may analyze the collected data for, among other things, "horizontal" and/or "vertical" occupational segregation.9 Horizontal occupational segregation occurs when members of a particular demographic group are concentrated in occupations or jobs that pay less, while vertical occupational segregation occurs when members of a demographic group are concentrated in the lower-ranked and/or lower-paid positions within an occupation. One measure of occupational segregation is the index of dissimilarity test (e.g., Duncan's D). 10, 11

Occupational segregation represents the differing distribution of workers across and within occupations, jobs, and places of work, based on their demographic characteristics. J. Mincer, "Human Capital and Economic Growth," NBER Working Paper 802 (1981).

¹⁰ The index is based on methodology published in Otis D. Duncan and Beverly Duncan, "A Methodological Analysis of Segregation Indexes," American Sociological Review 20(2): 210-217 (1955).

¹¹ The EEOC has not indicated that it would calculate this index. The index compares the share of a particular demographic group (e.g., women) in each individual occupation to the share of women in the employer's overall workforce and then calculates how many women would have to change occupations to get to a state where each individual occupation had the same gender distribution as the company. A value of 1 of the index would suggest that an occupation is completely segregated, and a value of 0 would suggest that an occupation has the same gender balance as the company overall.

The statistical techniques that the EEOC intends to use will provide markers to identify whether a particular company and/or establishment needs further, more in-depth review of its pay practices. Therefore, the analysis the EEOC proposes to conduct as a first step will merely be used to "flag" certain companies or establishments for potential further review. Companies and/or establishments with results that point to a low probability that pay differences between one or more of the groups compared (e.g., between African-American and non-African-American workers) occurred by chance may be subject to more detailed review and analyses. Statistical analyses and statistical significance will rely on judicially recognized statistical standards used to identify "meaningful discrepancies." Courts have generally determined that when the probability of an event occurring by chance is lower than 5 percent (i.e., more than two standard deviations) or lower than 1 percent (more than three standard deviations), there is something in the process that may be cause for concern.¹³

For the initial review, the EEOC Pilot Study recommends using the following statistical tests and analyses:

- 1. Mann-Whitney test for grouped data and comparison of two groups 14
- 2. Kruskal-Wallis test for comparison of more than two groups¹⁵
- Interval regressions 16 to examine the impact of hours worked, race, and gender on the distribution within pay bands

Additionally, the pilot study suggests a possible comparison of a particular company's regression coefficients for the hours worked, race, and gender variables to those derived from an analysis of the entire labor market by industry, geographic region, or some other characteristic. The study suggests that the EEOC investigators may have a "dashboard" available to them that would allow a quick comparison of the employer-specific results to the labor market-wide results.

Finally, the EEOC and OFCCP have indicated that they plan to develop software tools for their investigators to conduct the initial analysis of looking at the distribution of pay within one establishment or a firm, and the comparison between the employer data and data derived from a specific industry or geographic area.

Next Steps

The EEOC is requesting written comments on the proposed rule to be submitted by April 1, 2016, and there will be a public hearing.

An important point of contention between employers and the EEOC is that the EEOC would be receiving and analyzing the compensation data without much context. Typically, various factors play an important role in determining employee compensation. In addition to hours worked, employee pay may differ because of the employee's particular occupation or job (the EEOC's job categories are broad; each job category includes a multitude of different jobs and occupations), firm tenure, past experience, education, and specialized knowledge and expertise. Additionally, the EEOC's proposed statistical analysis would not take into account the diverse characteristics of the various components of total W-2 pay (as mentioned above)

¹² The EEOC sites Hazelwood School District v. United States, 433 U.S. 299, 311 n.17 (1977) and Wright v. Stern, 450 F. Supp. 2d 335, 363 (S D.N.Y. 2006).

¹³ Whenever an event occurs that is associated with a probability of 0.05 or less, statisticians would say it is statistically significant at the 5 percent level. Similarly, they would determine that events were statistically significant at the 1 percent level if the probability associated is 0.01 or less.

¹⁴ The Mann-Whitney test is a nonparametric statistic test most frequently used to assess whether two independent groups (e.g., male and female workers) are significantly different from each other in terms of pay. Thus, it is often portrayed as the nonparametric equivalent to the "Student's t test."

¹⁵ The Kruskal-Wallis test (sometimes also called the "one-way ANOVA on ranks") is a nonparametric test that can be used to determine if statistically significant differences exist between two or more groups of an independent variable (i.e., race or gender) on a continuous or ordinal dependent variable (compensation). It is considered an extension of the Mann-Whitney test to allow the comparison of more than two groups.

¹⁶ Interval regression analysis is used when the dependent variable (in this case employee compensation) is displayed in the form of intervals or salary bands (i.e., instead of knowing the exact annual compensation for employees, one knows only the salary band the employee compensation falls within).

and the role personal preferences¹⁷ of employees may play in their W-2 earnings. For example, female workers may prefer not to work in certain occupations that require the graveyard shift (paying a shift differential). None of these factors would be considered by the EEOC as it conducts its preliminary analysis. Analyzing compensation data without much context may result in misleading and inappropriate results, leading the EEOC to make further data and information requests to conduct more in-depth analysis. As such, it is anticipated that the EEOC's proposed approach and analyses would require more time and effort by employers to respond.

Further, the EEOC acknowledges that particular care will need to be taken when interpreting statistical significance in light of the importance of the sample size (i.e., the number of employees included in the analyses). For example, even small pay gaps occurring in companies with a large number of employees are more likely to be statistically significant.

In anticipation of this rule being adopted, employers may consider the following next steps:

- Identification of new processes and procedures that would need to be implemented to collect and report data. Such processes and procedures may affect internal and/or external payroll and HR information (HRIS) systems.
- Collection of such data as an initial internal pilot study to identify future potential needs, steps, and requirements.
- Preliminary statistical analyses of employer and/or establishment compensation and hours data, under privilege, to make an initial assessment of potential risks and issues. Conducting the type of proposed statistical analyses may be new to employers and their counsel, as the interpretation of the results of the statistical analysis requires specialized knowledge and experience.

¹⁷ The impact of personal preferences in explaining the wage gap has been widely analyzed. See, for example Thomas N. Daymont and Paul J. Andrisani, "Job Preferences, College Major, and the Gender Gap in Earnings," The Journal of Human Resources 19(3), 408-428 (1984, Summer).

About the Author

Dubravka Tosic

Dubravka Tosic is an economist who provides expert witness consulting in labor and employment disputes, litigation and arbitration matters, and regulatory audits, and in connection with proactive company reviews. She has experience in preparing statistical analyses and damage calculations in connection with allegations of employment discrimination with respect to various employer actions (e.g., hiring, promotion, termination, and compensation), executive compensation, breach of employment contract, personal injury and wrongful death, and wage and hour issues.

Dr. Tosic also has experience in advising on commercial litigation matters involving allegations of breach of contract and lost profits, and management consulting projects requiring analyses of complex information and data.

She is a frequent presenter to professional organizations on economic, financial, and statistical analyses.

About Berkeley Research Group

Berkeley Research Group, LLC (www.thinkbrg.com) is a leading global strategic advisory and expert consulting firm that provides independent advice, expert testimony, authoritative studies, data analytics, and regulatory and dispute support to Fortune 500 corporations, government agencies, major law firms, and regulatory bodies around the world. BRG experts and consultants combine intellectual rigor with practical, realworld experience and an in-depth understanding of industries and markets. Their expertise spans economics and finance, data analytics and statistics, and public policy in many of the major sectors of our economy, including healthcare, banking, information technology, energy, construction, and real estate. BRG is headquartered in Emeryville, California, with offices across the United States and in Asia, Australia, Canada, Latin America, and the United Kingdom.