Pay Inequality, Job Satisfaction, and Firm Performance

T. Clifton Green and Dexin Zhou [*]

July 2019

Abstract

We find that within-firm base pay inequality is negatively associated with employee morale. Increases in hourly wages improve morale even among high-salaried employees. In contrast, total pay inequality is positively associated with morale. Low base pay (high total pay) inequality corresponds with employer reviews that emphasize fairness and commitment (talent and reward). Base pay inequality is negatively related to firm performance with no significant relation for total pay inequality. The evidence is consistent with employees viewing base pay as compensation for unobservable effort, with disparity harming morale and productivity. Incentive-based pay disparity may positively signal the value of promotions, yet it is not associated with greater overall productivity.

JEL: G32, J31, M12, M14, M52

Keywords: Income inequality, employee satisfaction, CEO pay ratio, corporate culture, compensation

---

[*] Green is from Goizueta Business School, Emory University, clifton.green@emory.edu. Zhou is from Zicklin School of Business, Baruch College, dexin.zhou@baruch.cuny.edu.

1. Introduction

Income inequality has grown significantly in recent decades, with roughly one-third of the rise being attributed to increased pay variation within firms (Song et al., 2019). This trend has attracted attention from regulators, business leaders, and in the media and led to heightened interest in understanding the effects of pay dispersion on worker morale and firm performance.[1] Although in traditional agency models workers choose effort levels conditioning only on their own wage, the notion that individuals care about relative pay has a long tradition in economics.[2] Studies of pay disparity tend to emphasize two competing theories. Tournament Theory focuses on the motivating aspects of pay inequality and suggests that greater disparity increases the value of promotions, which fosters increased effort and better performance (Lazear and Rosen, 1981). Equity Theory, on the other hand, posits that pay inequality engenders feelings of unfairness, which harms morale and can lead to lower productivity (Akerlof and Yellen, 1990).

Empirically, Clark and Oswald (1996) and Card et al. (2012) find evidence that job satisfaction is negatively related to coworker pay, whereas Clark, Kristensen, and Westergard-Nielsen (2009) find the opposite relation holds. Similarly, firm performance has been shown to be both positively (Kale, Reis, and Venkateswaran, 2009; Mueller, Ouimet, and Simintzi, 2017b) and negatively (Bebchuk, Cremers, and Peyer, 2011) associated with corporate pay disparity.

In this study, we explore the relation between within-firm pay inequality, job satisfaction, and firm performance using data from Glassdoor. The sample contains over 900 thousand salaries

---

[1] For example, see Alan Krueger's (2012) speech as Chair of the Council of Economic Advisers on the "The Rise and Consequences of Inequality," as well as media discussions following Joseph Stiglitz's (2012) book "The Price of Inequality," and Thomas Piketty's (2014) book "Capital in the Twenty-First Century." Concern from business leaders is apparent in Peter Georgescu's *New York Times* (8/5/2015) op-ed "Capitalists, Arise: We Need to Deal with Income Inequality."

[2] A common early reference is Veblen (1899). Clark, Frijters, and Shields (2008) provide a review. Relative pay is also addressed in well-established literatures in psychology, sociology, and organizational behavior. See Cook and Hegtvedt (1983), Gupta, Gonroy, and Delery (2012), and Shaw (2014) for reviews from other disciplines.

and one million employee-authored company reviews for more than 1,200 public US firms. We measure base and total pay inequality within each firm using Gini coefficients, a widely-accepted measure of income inequality (e.g., Mehran, 1976; Deininger and Squire, 1996; Atkinson, Piketty, and Saez, 2011; Aghion et al. 2015). We also construct ratios of CEO compensation to median worker pay, which US firms are required to disclose beginning in 2018 as mandated by Section 953(b) of the Dodd-Frank Act. The job satisfaction data contain one-to-five star ratings for Overall employer quality as well as ratings for Career Opportunities, Compensation & Benefits, Work/Life Balance, Senior Management, and Culture & Values.

We observe considerable variation in within-firm pay inequality. For example, the median firm-level total pay Gini coefficient is 0.27, on par with the country Gini for Sweden, whereas the 90th percentile is 0.59, similar to the level for Namibia.[3] Moreover, the interquartile range for the ratio of total CEO to median worker pay varies from 69 to 170. Our focus is on whether variation in pay inequality within firms is associated with differences in employee morale and firm performance.

In a field study of Indian manufacturing workers, Breza, Kaur, and Shamdasani (2018) find that pay inequality harms morale and output only when coworkers' productivity is hard to observe, with no discernable effect when the greater productivity of higher paid coworkers is readily apparent. In our setting, we conjecture that incentive pay may be more likely than base pay to be perceived as equitable compensation for higher productivity, and we hypothesize that base pay inequality may harm morale and productivity more so than total pay inequality.

Our analysis uncovers strong evidence that pay inequality is associated with job satisfaction. After controlling for median firm pay, we find that a one standard deviation increase

---

[3] https://data.worldbank.org/indicator/si.pov.gini

in base pay Gini is associated with a 0.19 standard deviation decrease in the Overall employer rating across firms. In contrast, total pay Gini is significantly positively related to employer ratings, with the economic effect being roughly one half as large as the negative effect of base pay inequality. The evidence is consistent with pay disparity engendering concerns of fairness as well as signaling the potential value of a promotion, with the fairness aspect dominating the effect on morale when measuring inequality using base pay, whereas the signaling aspect is more prominent when including incentive pay in the disparity measure. Supporting this view, the positive relation between total pay inequality and employee morale is strong for evaluations of Career Opportunities but insignificant for Compensation & Benefits, consistent with a disparity in incentive pay signaling the value of future promotions rather than satisfaction with current levels of pay. When measuring pay inequality using base pay, the negative relation is generally strongest for the Compensation & Benefits and Career Opportunities dimensions, although it is also significant for views of Senior Management and Culture and Values.

We explore whether the effect of pay inequality on morale varies by income and experience level by partitioning employees into quartiles based on pay and experience within firms. We find that the job satisfaction of lower and upper paid employees is significantly more negatively related to base pay inequality and less positively associated with total pay inequality than employees with incomes in the middles two quartiles. Moreover, the morale of employees with less experience (bottom quartile) is less negatively influenced by base pay inequality and more positively influenced by total pay inequality. The evidence is consistent with less experienced, mid-level income employees having the most to gain from potential promotions.

The evidence that lower paid employees react more strongly to firm-level pay inequality than mid-level employees helps mitigate concern that relation between pay inequality and morale

4

is driven by firm characteristics. In additional analysis, we address endogeneity concerns more carefully by examining how job satisfaction changes following plausibly exogenous shocks to pay inequality. Specifically, we study how employer ratings change following firm-level increases in the minimum wage following the Tax Cuts and Jobs Act of 2017.

Using a propensity score matched difference-in-difference approach, we find that hourly workers at minimum wage hike firms significantly raise their assessments of Compensation & Benefits in the six months following the announcement, indicating that the wage increase represents a material effect on hourly workers' income. As expected, the change has no effect on the assessments of Compensation & Benefits for high (above median) salary employees. However, high salary employees nevertheless do raise their Overall ratings for their firm, consistent with reduced pay inequality improving overall employee morale.

We next explore the effect of pay inequality on corporate culture. Guiso, Sapienza, and Zingales (2015) categorize corporate culture into nine dimensions based on corporate mission statements. We analyze whether the net prevalence of cultural words in the free-response Pros and Cons section of employer reviews vary with levels of pay inequality. We find that base pay inequality is negatively related to the *Integrity* cultural dimension, which includes the cultural words "Fairness," "Honesty," and "Do the right thing." Base pay inequality is also negatively associated with the *Quality* dimension, which includes "Meet needs," "Make a difference," and "Exceed Expectations." In contrast, total pay inequality is positively associated with the *Innovation* cultural dimension, which includes "Excellence," "Performance," and "Results." Total pay inequality is also positively related to *Respect*, which includes "Development," and "Talent," as well as the *Hard Work* dimension, which includes "Reward."

Taken together, the employer review evidence provides support for both Equity Theory and the Tournament Theory of compensation. Base pay inequality is negatively associated with employee morale, consistent with concerns of inequity harming employee morale. On the other hand, when incentive compensation is included, we observe a positive relation between total pay inequality and morale, consistent with pay disparity signaling future pay increases and improving morale.

In our final analysis, we study whether the differences in job satisfaction related to pay inequality are associated with differences firm performance. We begin by documenting a significant positive relation between employee satisfaction and firm performance, consistent with previous work (e.g. Edmans, 2011; Edmans, Li, Zhang, 2017). Our emphasis is on the relation between within-firm pay inequality and firm performance. We find a significant negative relation between base pay inequality and return on assets and Tobin's Q. For example, a one standard deviation increase in base pay Gini is associated with ROA that is one-tenth of a standard deviation lower. In contrast, we observe no significant relation between total pay inequality and firm performance.

As with Mueller, Ouimet, and Simintzi (2017b), our performance analysis does not permit causal inferences due to the lack of cleanly identified shocks to pay inequality. However, the findings provide prima facie support for the Equity Theory notion that pay inequality within a firm can have a negative influence on performance. More generally, our findings support the experimental evidence in Breza, Kaur, and Shamdasani (2018) and are consistent with the interpretation that employees view base pay as compensation for unobservable effort, with disparity harming morale and productivity. While incentive-based pay disparity may play a positive signaling role, we find no evidence that it is associated with greater overall productivity.

Our morale findings have implications for recent SEC regulations that require firm disclosure of CEO pay ratios.[4] When repeating the job satisfaction analysis using ratios of CEO compensation to median worker pay, we find generally weaker results than when using Gini coefficients to measure income inequality. Although there is some evidence that base and total pay CEO ratios are negatively related to the Overall employer rating, and in particular views of Senior Management, the relation is driven primarily by the denominator. When CEO pay and median worker pay are considered separately, we find that median worker pay is significantly positively associated with all aspects of job satisfaction, while CEO pay is generally negative but insignificantly related to morale. Our findings question the efficacy of the newly SEC-mandated measure of pay disparity and suggest that CEO pay should not be overemphasized when measuring the income inequality within firms.[5]

Our study contributes to a several strands of research. First, we extend the literature that addresses the relation between pay inequality and employee morale. Clark and Oswald (1996) find evidence that job satisfaction is negatively related to coworker pay in a sample of British workers, and Card et al. (2012) find similar evidence among University of California employees. On the other hand, Clark, Kristensen, and Westergard-Nielsen (2009) find the opposite relation holds for a sample of Danish workers. More recently, Breza, Kaur, and Shamdasani (2018) finds that pay inequality increases absenteeism among Indian manufacturing workers when productivity is hard to observe. Our sample is orders of magnitude larger than existing studies and allows us to measure job satisfaction along a number of dimensions for a large cross-section of economically important U.S. firms. Our setting also allows us to distinguish between the effects of base and incentive pay

---

[4] https://www.sec.gov/corpfin/pay-ratio-disclosure
[5] We also gather data on firm-announced CEO pay ratios for 468 firms (announced through the first eight months of 2018). The cross-sectional correlation between the announced CEO Pay ratios and our constructed total CEO Pay ratio is 0.51. We find no evidence that employer ratings react negatively to CEO pay ratio announcements.

when measuring pay inequality, and we explore the performance implications of pay inequality for employers.[6]

Our work is related to studies that link job satisfaction and firm performance. Edmans (2011) and Edmans, Li, and Zhang (2017) argue that employee morale is an intangible asset that can foster employee productivity. In other recent work, Liu, et al. (2017) find evidence that firm investments in non-wage compensation designed to in part to mitigate the disutility of work are associated with better performance. We also observe a positive relation between job morale and firm performance in our sample, yet our emphasis is on the role of pay inequality and we add specifically to the literature on pay disparity and firm performance.[7]

Existing finance research on pay disparity emphasizes top executive pay. For example, Kale, Reis, and Venkateswaran (2009) find that tournament incentives, measured by the pay differential between the CEO and VPs, relate positively to firm performance. In contrast, Bebchuk, Cremers, and Peyer (2011) find that the CEO pay slice, the fraction of top five salaries accounted for by the CEO, is negatively related to firm value, consistent with agency concerns. In recent work, Rouen (2019) finds that the portion of the CEO pay ratio that is explained (unexplained) by economic conditions and firm characteristics is positively (negatively) associated with firm performance. We consider a wide distribution of salary data to construct firm-level pay inequality measures, and we find evidence that base pay inequality is negatively associated with firm performance, with no significant relation for total pay inequality.

---

[6] Several recent papers examine the underlying drivers of inequality within firms (e.g. Song et al., 2019, Mueller, Ouimet, and Simintzi, 2017a, Ma, Ouimet, and Simintzi, 2019). Our emphasis is on the consequences of inequality for morale and performance.

[7] Our wage hike analysis also extends work that studies how pay changes affect morale and performance. For example, Cohn et al. (2014) find that perceived inequality from wage cuts lead to significant productivity losses. Sandvik et al. (2018) find that a reduction in commission pay leads to greater employee turnover but limited effort responses. Mas (2006) finds that failure to obtain a pay raise leads to poor performance among police officers. Kube, Marechal, and Puppe (2013) find that morale falls after wage cuts but does not rise following wage increases.

Mueller, Ouimet, and Simintzi (2017b) studies hierarchical pay ratios at a sample of UK firms and finds evidence of a positive association between pay disparity and performance. Our sample is from the United States, which exhibits greater income inequality than the UK, and is comprised of large firms.[8] While our finding of a negative association between base pay inequality and firm performance is not definitive, it does suggest that concerns regarding the productivity impact of pay inequality should not be summarily dismissed.

2. The Glassdoor Sample

Glassdoor is an employee review and rating website launched in 2008. It hosts a database in which current and former employees voluntarily and anonymously review their companies, salaries, interview experience, senior management, and corporate benefits. Glassdoor encourages users to provide information for their employer by requiring it to unlock ratings and information for other firms. Contributors are generally incentivized to provide honest evaluations due to the benefits associated with contributing to the public good (Lerner and Tirole, 2002). Glassdoor attempts to mitigate misinformation by requiring email verification or linking to an active social network account. Further, the administrator of the site uses a two-step verification procedure, combining a machine learning algorithm and human screening, to detect suspicious activities. In this study, we focus on the employee salary survey and employee satisfaction survey.

2.1 Glassdoor Salary Data

The Glassdoor salary survey contains the following required salary-related information: base pay and base pay period (i.e., per year, per hour, or per month), and whether and if so how

---

[8] The Gini coefficient for the UK was 0.34 in 2014 vs 0.42 for the US in 2016 (most recent data available). The median number of employees in the UK sample of Mueller, Ouimet, and Simintzi (2017b) is 1,705 employees, compared 15,000 employees in our US sample.

much the contributor receives in tips/gratuity, sales commissions, cash or stock bonuses, or profit sharing. They also encourage the employee to provide her job title, years of experience, employment location, employment status (e.g., full-time or part-time), and whether the contributor is a current or former employee. The contributor may also optionally provide their gender information.

Our primary measure of within-firm pay inequality is the Gini coefficient, a widely accepted measure of income inequality (e.g., Mehran, 1976; Deininger and Squire, 1996; Atkinson, Piketty and Saez, 2011; Aghion et al. 2015). Specifically, let $y_{i,j}$ be the income of employee i at firm j and index $i = 1$ to n_j in non-decreasing order (i.e. $y_{i,j} \leq y_{i+1,j}$). We then calculate the Gini coefficient or for firm j as:

$$G_j = \frac{1}{n_j}\left(n_j + 1 - 2\left(\frac{\sum_{i=1}^{n}\left(n_j + 1 - i\right)y_{i,j}}{\sum_{i=1}^{n} y_{i,j}} \right) \right).$$

(1)

Gini coefficients are bounded by 0 and 1, with 0 representing perfect income equality and 1 representing perfect inequality. We calculate G_j using two-year rolling windows and require at least thirty observations for each coefficient (i.e. $n_j \geq 30$).[9]

We also consider a separate measure of income inequality based on CEO pay ratios. Specifically, we take the ratio of CEO total compensation (ExecuComp TDC1) divided by median total firm-level employee pay submitted to Glassdoor in a two-year rolling window. We also construct a similar CEO base pay ratio using SALARY in ExecuComp and base pay in Glassdoor. While Gini coefficients and CEO pay ratios both capture aspects of income inequality within the firm, Gini coefficients utilize the entire distribution of employee salaries to measure dispersion

---

[9] The average autocorrelation in base pay Gini using non-overlapping two-year periods is 0.54.

and more closely measure inequality among rank and file employees. The CEO pay ratio captures the pay disparity between ordinary employees and the (likely) highest paid employee.

2.2 Glassdoor Employer Review Data

Glassdoor employer reviews contain employees' one-to-five star overall rating of the firm (Rating), as well as optional star ratings for Career Opportunities, Compensation & Benefits, Work/Life Balance, Senior Management, and Cultures & Values. In addition to the star ratings, employees are also able to enter separate textual responses for Pros ("Share some of the best reasons to work at …") and Cons ("Share some of the downsides of working at …"). Glassdoor's guidelines stipulate that reviews should be about the company and cannot target any identified individuals. For each employee review, we are able to discern employee status (current or previous employee) and employee work location using data obtained from Glassdoor.[10] We calculate firm-year level ratings by averaging all the firm reviews in a given calendar year.

2.3 Sample Statistics

The Glassdoor salary survey and the employee review sample spans from June 2008 to September 2018. Our main analyses are at the firm-year level, and Table 1 tabulates summary statistics and pairwise correlations for the variables used in our analysis. In Panel A, we tabulate moments and quartile distributions. The mean (median) number of observations to calculate the Gini coefficient is 243 (113). The base pay Gini coefficient has a mean and median of 0.21, and the interquartile range is 0.18 to 0.24. Total pay Gini tends to be larger and exhibits greater variation. The mean (median) Total Pay Gini is 0.34 (0.27), and the interquartile range is 0.22 to 0.41. Unsurprisingly, CEO pay ratios are considerably larger with measured using total pay. The

---

[10] We gather data on each firm's number of employees from Bloomberg, and we rely on Glassdoor when Bloomberg data is missing (reporting of number of employees in Glassdoor is relatively course).

mean (median) CEO base pay ratio is 16 (15), whereas the CEO total pay ratio has a mean (median) of 138 (111).

Figure IA.1 in the Internet Appendix plots the average firm-level base and total pay Gini coefficients for each of the Fama-French 12 industries. The industries with the highest average within-firm levels of base (total) income inequality are Finance with Gini's of 0.24 (0.34) and Telecom with 0.25 (0.34). Industries with the lowest pay inequality are Utilities, with Gini's of 0.17 (0.27) and Manufacturers with 0.19 (0.26). Notably, firms in the Business Equipment industry have the third lowest base pay inequality but the eighth lowest total pay inequality.

The mean (median) of overall Employer rating is 3.27 (3.28), with an interquartile range varying from 1 to 3.56, which indicates that firm-level ratings are not highly polarized. Among the rating subcategories, the highest is Compensation & Benefits, with a mean (median) of 3.33(3.35). The category that tends to have the lowest ratings is views of Senior Management, with a mean (median) of 2.87 (2.85). Green et al. (2018) provide more detailed summary statistics at the review level.

Panel B of Table 1 reports the pairwise correlations between each pair of variables, with Pearson correlations above the diagonal and Spearman rank correlations below. The four pay inequality measures are correlated. For example, the Pearson correlation between base and total pay Gini is 0.27, and the Pearson correlation between base pay Gini and the CEO base (total) pay ratio is 0.18 (0.27). The positive correlations indicate that these measures capture common information about a firm's compensation structure. On the other hand, base pay Gini is negatively correlated with the Overall employer rating (Pearson Correlation=-0.10), whereas total pay Gini is positively correlated (Pearson Correlation=0.12) which suggest that employees may interpret base and incentive pay differently.

3. Pay Inequality and Employee Satisfaction

In this section, we explore the relation between firm-level pay inequality and measures of employee job satisfaction.

3.1 Pay Inequality and Employer Ratings

We begin by examining how measures of pay inequality relate to Overall employer ratings. Specifically, we conduct the following panel regression:

$$Overall\ Rating_{i,t} = \alpha + \beta Gini_{i,t-1} + \gamma X_{i,t-1} + \epsilon_{i,t}, \tag{2}$$

where *Overall Rating$_{i,t}$* is the average star rating of firm *i* in year *t*. The main variable of interest is *Gini$_{i,t-1}$*, which measures pay inequality among employees for firm *i* measured using years *t*-2 and *t*-1. X$_{i,t-1}$ is a set of control variables that includes log of employee median pay (Median Pay), log of number of employees (Employees), and time and industry fixed effects. The time fixed effects are based on yearly frequency and the industry classification is based on Fama-French 12 industries.[11] We cluster standard errors by firm and year.

We control for median employee pay to account for the negative correlation between the median pay level and within-firm income inequality. It might be expected that well paid employees have higher job satisfaction. Thus, controlling for median pay allows us to separate the effect of the level of pay from the disparity in employee income. We also include the number of employees as a control for firm size as in Muller, Ouimet, and Simintzi (2017b).[12] To facilitate interpretation of the results, we standardize all continuous independent variables in the regressions.

The regression estimates are reported in Table 2. The first column reports the coefficient from a univariate regression with time fixed effects. In Panel A, the coefficient on the base pay

---

[11] http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_12_ind_port.html
[12] In Table IA.1 in the internet appendix, we repeat Table 2 after replacing number of employees with market value of equity and find very similar results.

Gini coefficient is significantly negative. Since a larger Gini coefficient indicates greater income inequality, our baseline result indicates that high base pay income inequality is associated with lower levels of employee satisfaction. Specifically, a one standard deviation increase in base pay Gini is associated with a 0.19 (0.078 / 0.42) standard deviation decrease in the Overall employer rating. Including industry fixed effects, which control for variation in pay inequality across industries, and controls for median pay and number of employees reduces the Gini coefficient but it remains statistically significant. Unsurprisingly, higher median pay is associated with greater job satisfaction and we also observe that the number of employees is positively related to satisfaction.

In Panel B of Table 2, the coefficients on total pay Gini are significantly positive. The evidence indicates that job satisfaction is positively associated with total pay inequality, although the economic significance is roughly half as large as the negative relation for base pay Gini. The positive relation between total pay inequality and job satisfaction is consistent with the Tournament Theory notion that greater disparity increases the value of promotions and signals the prospect of greater future pay (Lazear and Rosen, 1981). On the other hand, the negative relation between base pay inequality and job satisfaction supports Equity Theory, in which pay inequality engenders feelings of unfairness which harms morale (Akerlof and Yellen, 1990).

We next investigate how income disparity affects different dimensions of employee satisfaction. We use the same regression specification as in Equation (2) for the following job satisfaction dependent variables: Career Opportunities, Compensations & Benefits, Senior Management, Work/Life Balance, and Culture & Values. The panel regression estimates are reported in Table 3 with and without controls for median pay and the number of employees.

In Panel A of Table 3, the estimates generally reveal a negative relation between base pay inequality and various categories of employee satisfaction. However, there is varying significance across the rating categories. The negative relation is strongest for Compensation & Benefits, Career Opportunities, and Senior Management, weaker for Culture & Values and insignificant for Work/Life Balance after including controls. Perhaps unsurprisingly, assessments of Compensation & Benefits are strongly related to median pay, although controlling for this relation does not change the significance of the negative coefficient on base pay inequality.

Panel B reports the results for total pay inequality. The results generally confirm the overall positive relation between total pay inequality and job satisfaction in Table 3. The positive relation is strongest for Career Opportunities and insignificant for Compensation & Benefits (after controlling for median pay) consistent with a disparity in incentive pay signaling the value of future promotions rather than satisfaction with current levels of pay.

3.2 CEO Pay Ratio and Job Satisfaction

We next consider the CEO pay ratio as a measure of within-firm pay inequality. In contrast to Gini coefficients, which measure income disparity among rank-and-file employees, CEO pay ratio captures the disparity of the top and median income earners within a firm. The two pay inequality measures may capture different aspects of pay inequality, and we view this analysis as a way to further validate the relation between income inequality and job satisfaction. Additionally, the relation between the CEO pay ratio and morale may be of interest in its own right. In particular, beginning with reporting for fiscal year 2017, US publicly traded companies are required by the Dodd-Frank Wall Street Reform and Consumer Protection Act to disclose this ratio.

We use Glassdoor and Compustat data to create base and total pay historical CEO Pay Ratios back to the year 2009. As a validity check, we collect a sample of 668 disclosed pay ratios

for fiscal year 2017 (disclosed January-September of 2018). The cross-sectional correlation between the log CEO Pay Ratio disclosed by firms and our constructed log CEO total pay ratio is 0.55, which leads credence to our approach. Moreover, Glassdoor constructed measures of CEO pay ratios may be more relevant for the morale of US-based employees than the disclosed measures since median pay may be influenced by low-paid overseas workers that are unlikely to post reviews on Glassdoor.

We estimate the following panel regression specification to study the relation between CEO Pay Ratios and Employee Ratings:

$$Employee\ Rating_{i,t} = \alpha + \beta CEO\ Pay\ Ratio_{i,t-1} + \gamma X_{i,t-1} + \epsilon_{i,t}, \tag{3}$$

where CEO Pay Ratio is the log difference between CEO compensation and median employee salaries. We consider specifications with ratios constructed from both base and total pay. We include industry fixed effects and control for median pay and number of employees. Standard errors are clustered by firm and year.

The results are reported in Table 4. In Panel A, we observe that the CEO base pay ratios are generally consistent with the base pay Gini results, with higher CEO pay ratios leading to lower job satisfaction, although the results are statistically weaker. However, if we split the pay ratio into separate components for CEO pay and median pay, we see that the negative relation is driven by the denominator. Job satisfaction is strongly positively related to median pay and since this is inversely related to the CEO pay ratio, it produces the significant negative relation. Although the coefficients on CEO are negative, none of the estimates are statistically different from zero. In Panel B of Table 4, CEO total pay ratios are largely unrelated to job satisfaction with Senior Management having the only significantly negative coefficient, and again this relation is driven by median pay rather than CEO pay.

We also consider whether employer ratings react negatively to firm-announced CEO pay ratios for the sample of 668 announcements from January to September of 2018. We find no evidence of a negative reaction on average or in relation to the magnitude of the announced ratio. The weak relation between CEO pay ratios and job satisfaction questions the informativeness of the newly SEC-mandated measure of pay disparity and suggests that CEO pay should not be overemphasized when measuring the income inequality within firms.

3.3 Pay Inequality and Employer Ratings: The Role of Pay Level and Work Experience

In this section, we conduct analyses at the employee level to explore how employee relative pay and work experience influences the effect of pay inequality on employee morale. Roughly half of the employees submitting information to Glassdoor include both satisfaction ratings and salary information. We merge the data from these two sources based on the employee identity code in Glassdoor system. In this analysis, we aim to examine how different employee characteristics affect their view of pay inequality. Our baseline specification is given as follows:

$$Rating_{i,j,t} = \alpha + \beta Gini_{i,t-1} + \gamma X_{i,j,t-1} + \epsilon_{i,j,t}, \tag{4}$$

where Rating is for employee *j*, employed by firm *i* in year *t*. Base and total pay Gini coefficients are estimated at the firm level, and we require at least 30 observations for consistency with our firm-level analysis. For this subset of reviews, we can obtain information regarding employee's own pay. We therefore include employee *j*'s own pay rather than the median pay a control variable. We additionally include the number of employees as an additional control as well as time and industry fixed effects. Standard errors are clustered by firm and time.

The employee-level income analysis is reported in Table 5. We first confirm our baseline result. Specifically, we observe that Overall employer ratings are negatively related to base pay inequality and positively related to total pay inequality after controlling for an employee's own

pay. Our emphasis is on whether the effects of income inequality on job satisfaction vary by relative pay level. Specifically, for each firm year we separate employees into pay quartiles based on base or total compensation. We then include interaction terms for the top and bottom compensation quartiles as follows:

$$Rating_{i,j,t} = \alpha + \beta_1 Gini_{i,t-1} + \beta_2 LowPay_{i,j,t} + \beta_3 HighPay_{i,j,t} +$$
$$\beta_4 LowPay_{i,j,t} \times Gini_{i,t-1} + \beta_5 HighPay_{i,j,t} \times Gini_{i,t-1} + \gamma X_{i,j,t-1} + \epsilon_{i,j,t} \quad (5)$$

where *LowPay* and *HighPay* are indicator variables that equal one if an employee's income is in a firm's top and bottom quartile, respectively. The set of results are reported in Columns (2) and (4) of Table 5. The regressions examining Base Pay Inequality and Total Pay Inequality exhibit similar patterns. Overall, employees belonging to the top and the bottom quartiles view both types of pay inequality more negatively. The results are consistent with employees in the bottom quartile having stronger concerns of unfairness of base pay inequality and feeling less motivated by incentive pay disparity than earners in the middle group. Top earners also appear less satisfied with incentive pay disparity, consistent with these employees already having won the income tournament within their firms and having limited room for additional compensation advancement. Top earners are also more concerned about base pay inequality than middle earners, perhaps due to a perception that pay disparity influences performance.

We next examine how employee work experience influences the effects pay inequality on job satisfaction. We use the self-reported number of years of relevant experience as a proxy for employee experience. Similar to the previous regression, we estimate:

$$Rating_{i,j,t} = \alpha + \beta_1 Gini_{j,t-1} + \beta_2 LowExp_{i,j,t} + \beta_3 HighExp_{i,j,t} +$$
$$\beta_4 LowExp_{i,j,t} \times Gini_{j,t-1} + \beta_5 HighExp_{i,j,t} \times Gini_{j,t-1} + \gamma X_{i,j,t-1} + \epsilon_{i,j,t}, \quad (6)$$

where *LowExp* and *HighExp* are indicator variables that are equal to one if an employee is among the least and most experienced quartiles, respectively. We report the regression estimates in Table

6. The results indicate that the employees with the least experience tend to have higher Overall job satisfaction and view base pay inequality less negatively and total pay inequality more positively. The most experienced employees tend to have the lowest Overall satisfaction ratings, but they do not react differently to either type of pay inequality than the middle experience group. The results suggest that less experienced employees have fewer concerns regarding pay equity and are more motivated by the prospect of significant pay advancement later in their career stages, consistent with the Tournament Theory of compensation.

3.4 Wage Increases and Employee Satisfaction

The results in Section 3.2 establish that high within-firm base pay inequality is associated with lower job satisfaction. Our analysis includes industry fixed effects, and the evidence that the reaction to pay inequality varies with experience and relative pay within firms helps mitigate concern that the inequality effect is driven by firm characteristics. However, we address endogeneity concerns more carefully by exploring the morale effects induced by plausibly exogenous shocks to firms' minimum wage. While affected employees are likely to raise their assessments of Compensation & Benefits, we hypothesize that employees who are not directly affected by this change may also positively respond to the news if they have a preference for more equal pay.

We collect announcement dates for minimum wage increase announcements following the November 2017 enactment of the Tax Cuts and Jobs Act of 2017. The tax cut significantly lowered the tax bills of most US corporations, and we obtain announcement dates (in late 2017 or early 2018) for 41 firms that increased their minimum wage in response to the reduced tax bill.[13] We

---

[13] The 41 minimum wage increase firms are a subset of the 118 Russell 1000 firms that made tax cut use announcements in late 2017 or early 2018 obtained from https://justcapital.com/reports/the-just-capital-rankings-on-corporate-tax-reform/.

implement a difference-in-difference test as follows. First, we assign the firms that announced minimum wage increases as our treatment group, and other firms are placed in the control group. For the treatment group, we define the 180 days prior to the announcement as the pre-announcement period and days 0 to 180 as the post-announcement period.

For each firm in the treatment group, we use a propensity score matching procedure to generate three distinct control firms for each firm in the treatment group. Our propensity score matching procedure is similar to that of Fang, Tian, Tice (2014). We match based treated firms and control firms using a logistic regression with the firms' median pay, number of employees, and the change in Overall rating and Compensation & Benefits in the 6-month period preceding the tax law change. We include changes in Overall rating and Compensation & Benefits in the matching procedure in order to satisfy the parallel trend assumption.

The results of the propensity score matching procedure are reported in Panel A of Table 7. We observe that four out of the five characteristics load up as statistically significant in the pre-matched sample. In particular, the treated firms tend to have higher pay and a larger number of employees. Additionally, these firms tend to experience declines in their overall rating in the 6-month period prior to the minimum wage increase. These results justify the use of the PSM procedure. We note that the coefficients are no longer significant in the post-matched sample, consistent with a successful characteristic match. Similarly, we also compare the pre- and post-matched samples using means t-tests and the comparisons are reported in Panel B of Table 7. We find that both the economic and statistical significance of the characteristic differences between the treated and control firms disappear after the propensity-score matching procedure.

For each matched firm, we focus on employee reviews submitted in the 180 days before and after the minimum wage increase. We then conduct a difference-in-difference analysis using

treated and control firms. For this analysis, we merge the employee compensation information with employee review database. In particular, we conduct tests on two sets of employees. First, we examine the response by hourly wage workers, who are the direct beneficiaries of the wage increase. We are primarily interested in changes in the employer's Overall rating and the change in Compensation & Benefits rating. We consider the following specification:

$$Rating_{i,j,t} = \alpha + \beta_1 Treat_{i,t} + \beta_2 Post_{i,t} + \beta_3 Treat_{i,t} \times Post_{i,t} + \gamma NumEmp_{i,t} + \epsilon_{i,t}. \quad (7)$$

Employee Rating is for employee j employed by firm i in year t. Treat is an indicator variable that equals one if the firm belongs to the treatment group. Post is an indicator variable that equals one if the review is submitted during the post-announcement period. The emphasis is on β_3, which captures the change in rating following the wage hike announcement relative to matched firms.

The regression results are reported in Table 8. We first consider hourly workers, which are directly impacted by the wage increase, and we expect that their satisfaction should directly respond to this raise. Signaling an economically important wage increase, hourly workers significantly increase their assessments of Compensation & Benefits following the wage hike (0.14 stars). On the other hand, we do not find evidence that the wage hike leads to significant increases in hourly worker's Overall assessments of their firms. While the point estimate is positive (0.03 stars), it is statistically insignificant.

Although high (above median) salaried workers are not directly affected by the wage hike, we conjecture that their job satisfaction may increase as a result of the increased pay of their lower-paid coworkers. Consistent with no direct effect, high-salaried workers exhibit no increase in Compensation & Benefits ratings. On the other hand, we do observe that high-salaried workers increase their Overall levels of job satisfaction following the minimum wage high increase by

0.178 stars relative to the control group, and the estimate is statistically significant. The results support the view that highly paid salaried workers value pay equity within their firms.[14]

4. Pay Inequality and Firm Culture

We next analyze the relation between pay inequality and firm culture. Our measure of firm culture is based on the nine cultural dimensions in Guiso, Sapienza, and Zingales (2015) (GSZ), which they obtain through textual classification of S&P500 corporate mission statements. After performing an aggregation strategy for the 50 most recurring mission values, they propose nine broad categories or units of meaning: Integrity, Teamwork, Innovation, Respect, Quality, Safety, Community, Communication, and Hard Work.

We take each Pros and Cons section of an employer review and search for words that GSZ associate with each cultural dimension. We subtract the total number of cultural words across reviews in the cons category from the pros category, and we scale by the number of reviews for a firm in a given year. For each cultural dimension, we regress the Pros and Cons textual measure on base or total pay inequality using the following panel regression:

$$Culture_{c,i,t} = \alpha + \beta Gini_{i,t-1} + \gamma X_{i,t-1} + \epsilon_{i,t} \tag{8}$$

where Culture stands for the culture dimension *c* for firm *i* in year *t*.

The results are presented in Table 9. We observe that base pay inequality is significantly negatively related to the *Integrity* cultural dimension, which includes the cultural words "Fairness," "Honesty," and "Do the right thing." To get a sense of scale, the net usage of the culture words from the *Integrity* category is -0.022 per review, which suggests that on average roughly

---

[14] In Table IA.2 in the internet appendix, we report the results for the other job satisfaction categories. The results are generally consistent with the evidence in Table 8. For example, there is some evidence that hourly workers increase their assessments of Career Opportunities following the wage hike (the coefficient on Treat × Post is 0.092 and significant at the 10% level) but none of the other categories show a significant increase. High-salaried workers, on the other hand, show significant increases in all of the remaining categories except for Career Opportunities.

one out of every 45 reviews has one more *Integrity* word in the Cons section of the review than in the Pros section. A one standard deviation increase in base pay Gini leads to a decrease of 0.0019 *Integrity* words per review, roughly 8.6% relative to the mean. Base pay inequality is also negatively associated with the *Quality* dimension, which includes "Meet needs," "Make a difference," and "Exceed Expectations." A one standard deviation increase in base pay Gini is associated with a reduction of 0.0112 net words in the *Quality* category, a change that is roughly 46% of the mean for the Quality category (-0.0243).

In contrast, total pay inequality is positively associated with the *Innovation* cultural dimension, which includes "Excellence," "Performance," and "Results," with a one standard deviation increase in total pay Gini leading to an increase in scaled net culture words that is 17.8% of the magnitude of the mean (-0.0428). Total pay inequality is also positively related to *Respect*, which includes "Development," and "Talent," as well as the *Hard Work* dimension, which includes "Reward," with similar economic magnitudes. Taken together, the culture evidence provides support for both Equity and Tournament theories, with base pay inequality tending to be interpreted as unfair and total pay inequality being judged as warranted due to "hard work."

5. Pay Inequality and Firm Performance

Edmans (2011, 2012) and Edmans, Li, and Zhang (2017) argue that employee morale is an important intangible asset that can foster employee productivity, and they find evidence that strong employee morale, proxied by best place to work rankings, is associated with better firm performance. Our results suggest that pay inequality is an important determinant of job satisfaction. In this section, we explore the effects of job satisfaction in general and pay inequality more specifically on measures of firm performance.

5.1 Employer Reviews and Firm Performance

We test the link between employee satisfaction and firm performance using the following panel regression specification:

$$Performance_{i,t} = \alpha + \beta Employee\ Rating_{i,t-1} + \gamma X_{i,t-1} + \epsilon_{i,t}. \tag{9}$$

We consider two measures of firm performance: return on assets (ROA) and Tobin's Q. Accounting variables are constructed using Compustat. ROA is defined as net income over total assets. Tobin's Q is defined as market equities plus book debt over total assets. The ROA ranges from 1.1% in quartile 1 to 8.1% in quartile 3, with a mean (standard deviation) of 4.5% (8.4%). Tobin's Q ranges from 1.15 in quartile 1 to 2.25 in quartile 3, with a mean (standard deviation) of 1.96 (1.28). We include time (year) and industry fixed effects as control variables in the regression, and standard errors are clustered at the year and firm level.

The results are reported in Table 10. Employee ratings are highly significantly positively related with both ROA and Tobin's Q, consistent with high employee morale being associated with better firm performance. The results are similar for each of the employer rating categories, with the exception being that Work/Life Balance is not significantly related to ROA and exhibits the smallest coefficient for Tobin's Q.

5.2 Pay Inequality and Firm Performance

The evidence presented in Section 3 indicates that high base pay inequality is associated with lower job satisfaction, consistent with the Equity Theory notion that pay inequality generates feeling of unfairness which could harm productivity. On the other hand, we observe that total pay Gini tends to be positively associated with employee morale, consistent with Tournament Theory and suggesting that the prospect of a lucrative promotion could lead to greater effort and higher firm productivity. We test these hypotheses using the following panel regression:

$$Performance_{i,t} = \alpha + \beta Gini_{i,t-1} + \gamma X_{i,t-1} + \epsilon_{i,t}. \tag{10}$$

As above, we consider both ROA and Tobin's Q as proxies for firm performance. The results from the performance regressions are reported in Table 11. We observe that base pay Gini coefficients are negatively associated with firm performance. Column 1 reports the result of univariate regressions with time fixed effects as a control. A one standard deviation increase in the base pay Gini coefficient is associated with a 0.8% lower ROA. Controlling for Fama-French 12 industry fixed effects yields similar results. The results are slightly stronger after including controls for median pay and the number of employees, with a one standard deviation increase in Gini coefficient being associated with 1% decrease in firm ROA. Moreover, a one standard deviation increase in pay inequality is associated with 26 bps decrease in firm's Tobin's Q, and the relation is highly statistically significant. Controlling for both time and industry fixed effects does not materially affect the results. On the other hand, we observe no significant relation between total pay inequality and measures of firm performance. The coefficients on total pay Gini are insignificantly different from zero in all of the specifications for both performance measures.[15]

The evidence that base pay inequality is negatively related to firm performance is in contrast to the positive relation documented by Mueller, Ouimet, and Simintzi (2017b) for their sample of UK firms. Mueller, Ouimet, and Simintzi (2017b) obtain data from a compensation consultant and construct firm-level base pay ratios by comparing pay for employees in top job hierarchies to those in lower hierarchies (and translate ratios into percentile ranks). Their evidence indicates a positive relation between base pay inequality and ROA and Tobin's Q. We conjecture that sample differences may help explain the different effects of pay inequality. Our sample is from the United States, which exhibits greater income inequality than the UK. In particular, the Gini

---

[15] The insignificant relation between total pay inequality and performance is consistent with the evidence in Friedrich and Tello-Trillo (2015) that the dispersion of worker incentive pay is insignificant or even negatively related to productivity among a sample of Danish manufacturing workers.

coefficient for the UK was 34.1 in 2014 vs 41.5 for the US in 2016.[16] Our sample is also comprised

of large US firms. For example, the median number of employees in the UK sample of Mueler,

Ouimet, and Simintzi (2017b) is 1,705 employees, compared 15,000 employees in our US sample.

We explore the role of size in our setting by splitting the Glassdoor/Compustat/CRSP

merged sample into two groups based on the NYSE median market value of equity. We report the

results for both large and small firms separately in internet appendix Table IA.3. Supporting a size

effect, for small firms we observe positive although insignificant coefficients on base pay Gini for

each ROA and Tobin's Q regression specification. For large firms on the other hand, which

comprise the considerable majority of the sample, we find a strong negative relation between base

pay inequality and the performance measures across all specifications.

As with Mueller, Ouimet, and Simintzi (2017b), our performance analysis does not permit

causal inferences due to the lack of cleanly identified shocks to pay inequality. However, the

findings are generally supportive of the Equity Theory notion that pay inequality, particularly

within large firms, can have a negative influence on performance. More generally, our findings are

in line with the experimental evidence in Breza, Kaur, and Shamdasani (2018) and support the

interpretation that employees view base pay as compensation for unobservable effort, with

disparity harming morale and productivity. While incentive-based pay disparity may positively

signal the value of job promotions, we find no evidence that it is associated with greater overall

productivity.

6. Conclusion

Using over 900 thousand salaries reported on the largest employee review cite, our study

examines the relation between within-firm pay inequality and measures of employee satisfaction,

---

[16] https://data.worldbank.org/indicator/si.pov.gini

firm culture, and firm performance. Using standard Gini coefficients as a measure of pay inequality, we find that pay inequality is strongly associated with job satisfaction. For example, a one standard deviation increase in base pay Gini is associated with a 0.19 standard deviation decrease in the Overall employer rating. The negative relation between base pay inequality and employee morale is strongest for evaluations of Career Opportunities and Compensation & Benefits but also holds for assessments of the firm's Senior Management and Culture & Values. Meanwhile, total pay Gini, which considers both base pay and incentive pay, is significantly positively related to employer ratings, with the economic effect being roughly one half as large as the negative effect of base pay inequality. The positive relation between total pay inequality and employee morale is strong for evaluations of Career Opportunities but insignificant for Compensation & Benefits, consistent with a disparity in incentive pay signaling the value of future promotions.

We find that the job satisfaction of low and high-paid employees is significantly more negatively related to base pay inequality and less positively associated with total pay inequality than mid-level employees. Inexperienced employees are also less (more) sensitive to base (total) pay inequality. Taken together, the findings are consistent with employees regarding base pay as compensation for effort that is hard to observe and justify, with high base pay inequality harming employee morale (e.g., Breza, Kaur, and Shamdasani, 2018). In contrast, pay disparity that includes incentive pay appears to play a positive signaling role, especially among inexperienced, mid-level employees.

To alleviate endogeneity concerns, we analyze employer ratings change following firm-level increases in the minimum wage following the Tax Cuts and Jobs Act of 2017. We document that hourly workers at minimum wage hike firms significantly raise their assessments of

27

Compensation & Benefits in the 180 days following the announcement. At the same time, high salary employees raise their Overall ratings for their firm, consistent with reduced base pay inequality improving overall employee morale.

An analysis of the response Pros and Cons section of company reviews reveals a relation between pay inequality and aspects of firm culture. For example, base pay inequality is negatively related to the "Integrity" dimension, which includes the cultural words "Fairness," "Honesty," and "Do the right thing," whereas total pay inequality is positively associated with the "Respect" dimension, which includes "Development," and "Talent," and the "Hard Work" dimension which includes "Reward."

Finally, we document a negative relation between base pay inequality and firm performance, consistent with the harmful effects of lower job satisfaction on firm performance (e.g. Edmans, 2011; Edmans, Li, Zhang, 2017). In contrast, we observe no significant relation between total pay inequality and firm performance. We interpret these results as prima facie evidence in support of the Equity Theory notion that pay inequality within a firm can have a negative influence on performance. The findings support the experimental evidence in Breza, Kaur, and Shamdasani (2018) and are consistent with the interpretation that employees view base pay as compensation for unobservable effort, with disparity harming morale and productivity. While incentive-based pay disparity may play a positive signaling role, we find no evidence that it is associated with greater overall productivity.

Appendix

Table A.1 Variable definitions

Variable	Description
Compensation Observations	Number compensation observations used to calculate Gini coefficient for a given firm in a given year.
Base Pay	Annual base pay amount reported in Glassdoor. For hourly workers, we annualize hourly wage by a factor of 2,080 (40 hours per week $\times$ 52 weeks).
Total Pay	The sum of annual base pay and annual incentive pay. Incentive pay includes cash bonus, stock bonus, sales commission, profit sharing, and tips.
Median Base Pay	Median base pay based on base pay reported to Glassdoor in year t and t-1.
Median Total Pay	Median total pay based on total pay reported to Glassdoor in year t and t-1.
Base Pay Inequality	Gini coefficient calculated based on base pay reported to Glassdoor in year t and t-1. We use the following formula to calculate the Gini coefficient: $$G_j = \frac{1}{n_j}\left(n_j + 1 - 2\left(\frac{\sum_{i=1}^{n}\left(n_j + 1 - i\right) y_{i,j}}{\sum_{i=1}^{n} y_{i,j}} \right) \right).$$ Where y is the annual base pay for employee i working for firm j. We require at least 30 observations for an observation to be included in our analyses. We only consider annual salaried workers in our main analyses. In robustness, we also consider hourly waged workers.
Total Pay Inequality	Gini coefficient calculated using total pay reported to Glassdoor in year t and t-1.
CEO Base Pay	CEO salary reported in ExecuComp.
CEO Total Pay	CEO total pay is the data item TDC1 in ExecuComp.
CEO Base Pay Ratio	The ratio of CEO base pay and median base pay of employees. We require 30 salaries for an observation to be included. We use the logarithmic transformation of CEO Base Pay Ratio in our regression analyses.
CEO Total Pay Ratio	The ratio of CEO total pay and median total pay of employees. We require 30 salaries for an observation to be included. We use the logarithmic transformation of CEO Total Pay Ratio in our regression analyses.
Number of Employees	The number of employees for each firm from Bloomberg. If a value is not provided in Bloomberg, we replace it with the number reported in Glassdoor.
Overall Rating	The overall one-to-five star employer rating from the Glassdoor database. Glassdoor also provides subcategories of ratings, including Career Opportunities, Compensation & Benefits, Work/Life Balance, Culture & Values, and Senior Management. For firm-level analyses, we aggregate these ratings by taking the average of the rating for a firm in a given year. We require at least 30 reviews for a firm to be included in our analyses.
High Income / Low Income	High Income (Low Income) is an indicator variable that equals one if an employee is in the top (bottom) quartile in the salary distribution of a firm.
High Experience / Low Experience	High Experience (Low Experience) is an indicator variable that equals ones if an employee is in the top (bottom) quartile in the years of experience of a firm.
Cultural Dimensions	Net scaled cultural words using the nine dimensions in Guiso, Sapienza, and Zingales (2015). We count the number of words from each culture category in GSZ in the Pros and Cons section of reviews (subtracting Cons from Pros and scaling by the number of reviews for a firm in a given year). The list of words included in each cultural dimension is displayed in Table 8.

ROA	ROA is defined as net income divided by total assets (from Compustat).
Tobin's Q	Tobin's Q is defined as (Market Equity + Total Assets – Book Equity) / Total Assets (from Compustat).
MVE	Market value of equity is defined as price times number of shares outstanding.

References

Aghion, P., Akcigit, U., Bergeaud, A., Blundell, R., and Hemous, D., 2019. Innovation and top income inequality. *The Review of Economic Studies* 86, 1-45.

Akerlof, G., and Yellen, J. 1990. The fair wage-effort hypothesis and unemployment, *Quarterly Journal of Economics* 105, 255-83.

Atkinson, A., Piketty, T., and Saez, E. 2011. Top incomes in the long run of history, *Journal of Economic Literature*,

Bebchuck, L., Cremers, K., and Peyer, U. 2011. The CEO pay slice. *Journal of Financial Economics* 102, 199-221.

Breza, E., Kaur, S., and Shamdasani, Y. 2018. The morale effects of pay inequality. *Quarterly Journal of Economics* 133, 611-663.

Card, D., Mas, A., Moretti, E., and Saez, E. 2012. Inequality at work: The effect of peer salaries on job satisfaction. *American Economic Review* 102, 2981-3003.

Clark, A., Kristensen, N., and Westergard-Nielsen, N. 2009. Job satisfaction and co-worker wages: Status or signal? *The Economic Journal* 119, 430-447.

Clark, A., and Oswald, A. 1996. Satisfaction and comparison income. *Journal of Public Economics* 61, 359-381.

Clark, A., Frijters, P. and Shields, M. 2008. Relative income, happiness and utility: an explanation for the Easterlin paradox and other puzzles. *Journal of Economic Literature* 46, 95-144.

Cohn, A. Fehr, E., Herrmann, B., and Schneider, F. Social comparison in the workplace: Evidence from a Field Experiment. *Journal of the European Economic Association* 12, 877-898.

Cook, K., Hegtvedt, K. 1983. Distributive justice, equity, and equality. *Annual Review of Sociology* 9, 217–241.

Deininger, K., and Squire, L. 1996. A new data set measuring income inequality. *The World Bank Economic Review* 10, 565-591.

Edmans, A., 2011. Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics* 101, 621–640.

Edmans, A., Li, L., Zhang, C. 2017. Employee satisfaction, labor market flexibility, and stock returns around the world. Unpublished working paper, London Business School, London School of Economics, and University of Warwick.

Friedrich, B., and Tello-Trillo, C. 2015. Workers performance-pay and firm productivity. Working Paper, Yale University.

Green, T., Huang, R., Wen, Q., and Zhou, D., 2019. Crowdsourced employer reviews and stock returns. *Journal of Financial Economics*, forthcoming.

Guiso, L., Sapienza, P., and Zingales, L. 2015. The value of corporate culture. *Journal of Financial Economics* 117, 60-76.

Gupta, N., Conroy, S., and Delery, J. 2012. The many faces of pay variation. *Human Resource Management Review* 22, 100-115.

Kale, J., Reis, E., and Venkateswaran, A. 2009. Rank-order tournaments and incentive alignment: The effect on firm performance. *Journal of Finance* 64, 1479-1512.

Kube, S., Marechal, M., and Puppe, C. 2013. Do wage cuts damage work morale? Evidence from a natural field experiment. *Journal of the European Economic Association* 11, 853-870.

Lazear, E., and Rosen, S. 1981. Rank-order tournaments as optimum contracts. *Journal of Political Economy* 89, 841-864.

Lerner, J., Tirole, J., 2002. Some simple economics of open source. *Journal of Industrial Economics* 50, 197–234.

Liu, T., Makridis, C., Ouimet, P., and Simintzi, E. 2017. Is cash still king? Why firms offer non-wage compensation and the implications for shareholder value. Working Paper, University of North Carolina.

Ma, W., Ouimet, P., and Simintzi, E. 2019. Mergers and acquisitions, technological change, and inequality. Working Paper, University of North Carolina.

Mehran, F., 1976. Linear measures of income inequality. *Econometrica* 44, 805-809.

Mueller, H., Ouimet, P., and Simintzi, E., 2017a. Wage inequality and firm growth. *American Economic Review: Papers & Proceedings* 107, 379-383.

Mueller, H., Ouimet, P., and Simintzi, E., 2017b. Within-firm pay inequality. *Review of Financial Studies* 30, 3605-3635.

Rouen, E. 2018. Rethinking measurement of pay disparity and its relation to firm performance. *The Accounting Review*, forthcoming.

Sandvik, J., Saouma, R., Seegert, N., and Stanton, C. 2018. Analyzing the aftermath of a compensation reduction. Working Paper, University of Utah.

Shaw, J. 2014. Pay dispersion. *Annual Review of Organizational Psychology and Organizational Behavior* 1, 521–544.

Song, J., Price, D., Guvenen, F., Bloom, N., and Wachter, T., 2019. Firming up Inequality. *Quarterly Journal of Economics* 134, 1-50.

Veblen, T. 1899. *The Theory of the Leisure Class*. New York: Macmillan Company.

Table 1: Summary Statistics

The table reports sample summary statistics. Panel A reports the mean, standard deviation, and quartile information for our variables of interest. Panel B reports variable correlations, with the top triangle reporting Pearson correlations and the bottom triangle reporting Spearman rank correlations. Compensation Observations is the average number of Glassdoor compensation data points per firm used in calculating the inequality measures and median pay. Base (Total) Pay Inequality is the Gini coefficient calculated based on the base (total) pay for a company in a rolling two-year window. CEO Base (Total) Pay Ratio is the ratio of CEO base (total) compensation to median base or total employee compensation, where CEO compensation is taken from Execucomp (TDC1) and the median compensation is the median base (total) pay derived from Glassdoor. Median Base (Total) Pay is the median base (total) pay in a two-year rolling window. The Number of Employees is the number of people a firm employs obtained from Bloomberg and Glassdoor. Overall Rating is the average employer star rating from the Glassdoor review database in a given year (one star indicates lowest satisfaction; five stars indicate highest satisfaction). Subcategory ratings are reported similarly.

Panel A: Moments and Quantiles

Variable	Mean	Standard Deviation	Q1	Median	Q3
Compensation Observations	243	411	58	113	248
Base Pay Inequality	0.21	0.05	0.18	0.21	0.24
Total Pay Inequality	0.34	0.17	0.22	0.27	0.41
CEO Base Pay Ratio	16.29	8.85	11	15.36	19.69
CEO Total Pay Ratio	138.1	130.4	68.6	111.4	170.3
Median Base Pay	73,637	22,146	56,610	71,120	87,655
Median Total Pay	80,425	25,139	62,000	76,827	94,010
Number of Employees	36,628	106,561	6,947	15,000	28,344
Overall Rating	3.27	0.42	2.99	3.28	3.56
Career Opportunities	3.06	0.39	2.79	3.05	3.32
Compensation & Benefits	3.33	0.47	3.00	3.35	3.66
Senior Management	2.87	0.43	2.58	2.85	3.14
Work/Life Balance	3.27	0.44	2.97	3.29	3.58
Culture & Values	3.24	0.49	2.90	3.24	3.58

Panel B: Correlation Matrix

	Base Pay Inequality	Total Pay Inequality	CEO Base Ratio	CEO Total Ratio	Median Base Pay	Median Total Pay	Number of Employees	Overall Rating	Career Opp	Comp & Benefits	Senior Leadership	Work/Life Balance	Culture & Values
Base Inequality		0.27	0.18	0.27	-0.28	-0.22	0.08	-0.10	-0.10	-0.12	-0.07	-0.05	-0.06
Total Inequality	0.47		0.03	0.03	-0.06	0.03	-0.04	0.12	0.10	0.06	0.09	0.01	0.08
CEO Base Ratio	0.27	0.11		0.49	-0.47	-0.45	0.28	-0.12	-0.07	-0.17	-0.10	-0.20	-0.10
CEO Total Ratio	0.21	0.09	0.58		-0.47	-0.45	0.28	-0.12	-0.07	-0.17	-0.10	-0.20	-0.10
Median Base Pay	-0.30	-0.14	-0.56	-0.18		0.97	-0.04	0.32	0.23	0.52	0.21	0.38	0.24
Median Total Pay	-0.23	-0.06	-0.54	-0.18	0.97		-0.08	0.34	0.26	0.56	0.24	0.40	0.26
Employees	0.07	-0.02	0.37	0.45	-0.05	-0.09		0.01	0.07	0.03	-0.02	-0.12	-0.02
Overall Rating	-0.12	0.09	-0.14	0.04	0.31	0.33	0.00		0.89	0.74	0.91	0.72	0.92
Career Opp.	-0.11	0.07	-0.07	0.10	0.23	0.25	0.09	0.88		0.68	0.87	0.57	0.83
Comp & Benefits	-0.15	0.01	-0.20	0.06	0.51	0.54	0.04	0.72	0.66		0.63	0.56	0.63
Sen. Management	-0.07	0.07	-0.10	0.04	0.19	0.21	-0.01	0.90	0.85	0.60		0.71	0.91
Work/Life Bal	-0.07	-0.01	-0.25	-0.05	0.38	0.39	-0.12	0.70	0.55	0.54	0.69		0.77
Culture & Values	-0.08	0.06	-0.11	0.04	0.21	0.24	-0.03	0.91	0.81	0.60	0.91	0.75	

Table 2: Pay Inequality and Employee Satisfaction
The table reports the results of panel regressions with the average Overall Rating as the dependent variable. The key independent variable is Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company in a rolling two-year window. Panel A (B) reports the results for Base (Total) Pay Inequality. Control variables include the log of median employee salary and the log of the number of employees. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported *t*-statistics based on time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Panel A: Base Pay Inequality

	Overall Employer Rating		
Variables	(1)	(2)	(3)
Base Pay Inequality	-0.078***	-0.055***	-0.043***
	(-6.32)	(-4.38)	(-3.68)
Median Pay			0.134***
			(8.71)
Number of Employees			0.033**
			(3.24)
Fixed Effects	Time	Time, Industry	Time, Industry
Observations	5,515	5,515	5,513
R-squared	0.082	0.116	0.189

Panel B: Total Pay Inequality

	Overall Employer Rating		
Variables	(1)	(2)	(3)
Total Pay Inequality	0.036**	0.043**	0.021**
	(2.41)	(3.26)	(2.42)
Median Pay			0.152***
			(10.27)
Number of Employees			0.024**
			(2.35)
Fixed Effects	Time	Time, Industry	Time, Industry
Observations	5,515	5,515	5,513
R-squared	0.057	0.166	0.198

Table 3: Pay Inequality and Components of Employee Satisfaction

The table reports the results of panel regressions with components of employer ratings as the dependent variables, including Career Opportunities, Compensation & Benefits, Senior Management, Work/Life Balance, and Culture & Values. The key independent variable is Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company over a rolling two-year window. Panel A (B) reports the results for Base (Total) Pay Inequality. Control variables include the log of median employee salary and the log of the number of employees. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported *t*-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Panel A: Base Pay Inequality

VARIABLES	Career Opportunities		Compensation & Benefits		Senior Management		Work/Life Balance		Culture & Values	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Pay Inequality	-0.053***	-0.054***	-0.072***	-0.048**	-0.050***	-0.040***	-0.044***	-0.017	-0.045**	-0.031*
	(-4.75)	(-4.81)	(-4.46)	(-3.33)	(-4.02)	(-3.43)	(-3.572)	(-1.39)	(-3.03)	(-2.19)
Median Pay		0.077***		0.228***		0.083***		0.143***		0.116***
		(5.91)		(15.83)		(5.52)		(9.09)		(6.57)
Employees		0.059***		0.036**		0.010		-0.041***		0.006
		(6.03)		(3.12)		(0.91)		(-3.76)		(0.43)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	5,515	5,513	5,515	5,513	5,515	5,513	5,515	5,513	5,076	5,074
R-squared	0.091	0.138	0.232	0.389	0.068	0.093	0.152	0.223	0.044	0.081

Table 3: Pay Inequality and Components of Employee Satisfaction (continued)
Panel B: Total Pay Inequality

VARIABLES	Career Opportunities		Compensation & Benefits		Senior Management		Work/Life Balance		Culture & Values	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Pay Inequality	0.054***	0.035**	0.052**	0.013	0.049**	0.035**	0.022	0.007	0.052**	0.033**
	(4.07)	(3.03)	(3.216)	(1.58)	(3.29)	(2.73)	(1.55)	(0.59)	(3.17)	(2.54)
Median Pay		0.100***		0.253***		0.104***		0.147***		0.135***
		(8.19)		(18.29)		(7.32)		(9.82)		(8.26)
Employees		0.050***		0.034**		0.003		-0.040***		0.001
		(5.10)		(2.93)		(0.29)		(-3.74)		(0.07)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	5,515	5,513	5,515	5,513	5,515	5,513	5,515	5,513	5,076	5,074
R-squared	0.089	0.144	0.222	0.415	0.066	0.104	0.147	0.227	0.045	0.095

Table 4: CEO Pay Ratio and Employee Satisfaction

The table reports the results of panel regressions with components of employer ratings as the dependent variables, including Overall Rating, Career Opportunities, Compensation & Benefits, Senior Management, Work/Life Balance, and Culture & Values. The key independent variable is the log of CEO Pay Ratio, which measures the disparity between top executive pay and median employee pay. In Panel A (B), the CEO Pay Ratio is constructed using base (total) pay for the CEO and employees. Control variables include the log of median employee salary and the log of the number of employees. Time (year) and Industry (Fama-French 12 industries) fixed effects are also included. Below each coefficient estimate are reported t-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Panel A: Base Pay Ratio

VARIABLES	Overall Rating (1)	Overall Rating (2)	Career Opportunities (3)	Career Opportunities (4)	Compensation & Benefits (5)	Compensation & Benefits (6)	Senior Management (7)	Senior Management (8)	Work/Life Balance (9)	Work/Life Balance (10)	Culture & Values (11)	Culture & Values (12)
CEO Pay Ratio	-0.040*		-0.036*		-0.036		-0.045*		-0.031*		-0.042	
	(-1.95)		(-2.02)		(-1.68)		(-2.08)		(-2.22)		(-1.66)	
CEO Pay		-0.020		-0.024		-0.002		-0.032		-0.009		-0.024
		(-1.01)		(-1.45)		(-0.14)		(-1.51)		(-0.65)		(-0.98)
Median Pay		0.486***		0.285***		0.851***		0.333***		0.541***		0.444***
		(9.33)		(6.29)		(16.73)		(6.33)		(8.72)		(7.42)
Employees	0.046***	0.040**	0.074***	0.071***	0.047**	0.038**	0.024	0.020	-0.019	-0.025*	0.024	0.019
	(3.69)	(3.28)	(6.31)	(6.11)	(3.22)	(2.96)	(1.82)	(1.53)	(-1.58)	(-2.14)	(1.46)	(1.17)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	4,589	4,587	4,572	4,570	4,572	4,570	4,572	4,570	4,572	4,570	4,192	4,190
R-squared	0.124	0.191	0.122	0.147	0.253	0.413	0.071	0.100	0.165	0.243	0.044	0.086

Table 4: CEO Pay Ratio and Employee Satisfaction (continued)

Panel B: Total Pay Ratio

VARIABLES	Overall Rating		Career Opportunities		Compensation & Benefits		Senior Management		Work/Life Balance		Culture & Values	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
CEO Pay Ratio	-0.021		-0.015		-0.032		-0.028*		-0.036		-0.021	
	(-1.21)		(-0.64)		(-1.60)		(-1.99)		(-1.50)		(-1.21)	
CEO Pay		-0.010		0.012		-0.020		-0.012		-0.021		-0.010
		(-0.61)		(0.67)		(-1.03)		(-0.80)		(-0.87)		(-0.61)
Median Pay		0.103***		0.265***		0.116***		0.160***		0.147***		0.103***
		(7.51)		(17.17)		(7.35)		(9.01)		(8.25)		(7.51)
Employees	0.076***	0.074***	0.049**	0.041**	0.027*	0.024	-0.016	-0.020	0.029	0.024	0.076***	0.074***
	(6.253)	(6.152)	(3.168)	(3.17)	(1.92)	(1.66)	(-1.28)	(-1.74)	(1.66)	(1.43)	(6.25)	(6.15)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	4,589	4,587	4,572	4,570	4,572	4,570	4,572	4,570	4,572	4,570	4,192	4,190
R-squared	0.119	0.161	0.249	0.441	0.067	0.111	0.166	0.248	0.043	0.099	0.119	0.161

Table 5: Employee Income and Attitude towards Pay Inequality

The table reports the results of panel regressions with the average Overall Rating as the dependent variable. The key independent variables are related to Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company in a rolling two-year window. The emphasis is on how the relation between job satisfaction and firm-level pay inequality is influenced by their income level. Low (High) Income is an indicator variable that equals 1 if an employee's income is in the firm's quartile 1 (quartile 4). Control variables include the log of Own pay and the log of the number of Employees. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported *t*-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Variables	Base Pay Inequality		Total Pay Inequality	
	(1)	(2)	(3)	(4)
Pay Inequality	-0.050**	-0.033	0.036**	0.037**
	(-2.55)	(-1.80)	(2.24)	(2.38)
Low Income		0.024		0.007
		(1.49)		(0.28)
Low Income × Pay Inequality		-0.023**		-0.007*
		(-2.24)		(-2.15)
High Income		-0.085***		-0.095**
		(-4.47)		(-2.71)
High Income × Pay Inequality		-0.022*		-0.027**
		(-2.22)		(-3.11)
Own Pay	0.070***	0.102***	0.100***	0.119***
	(7.12)	(5.54)	(9.48)	(3.61)
Employees	0.064***	0.062***	0.059**	0.059**
	(3.27)	(3.22)	(2.95)	(3.01)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	399,167	399,167	399,167	399,167
R-squared	0.018	0.019	0.020	0.020

Table 6: Work Experience and Attitude towards Pay Inequality

The table reports the results of panel regressions with the average Overall Rating as the dependent variable. The key independent variables are related to Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company in a rolling two-year window. The emphasis is on how the relation between job satisfaction and firm-level pay inequality is influenced by work experience. Low (High) experience is an indicator variable that equals 1 if an employee's work experience is in the firm's quartile 1 (quartile 4). Control variables include the log of Own pay and the log of the number of Employees. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported t-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Variables	Base Pay Inequality	Total Pay Inequality
	(1)	(2)
Pay Inequality	-0.052**	0.023
	(-2.76)	(1.47)
Low Experience	0.158***	0.153***
	(17.06)	(14.58)
Low Experience × Pay Inequality	0.025***	0.012***
	(3.66)	(3.33)
High Experience	-0.127***	-0.125***
	(-8.64)	(-7.84)
High Experience × Pay Inequality	-0.002	0.009
	(-0.26)	(1.50)
Own Pay	0.111***	0.121***
	(10.09)	(5.39)
Employees	0.066***	0.065***
	(3.45)	(3.26)
Fixed Effects	Time, Industry	Time, Industry
Observations	399,167	399,167
R-squared	0.018	0.019

Table 7: Propensity Score Match Diagnostics for Hourly Wage Increase Firms

We table presents diagnostic results from propensity score matching hourly wage increase firms with control firms. Treated is an indicator variable that equals one if the company announced an hourly wage increase following the 2017 tax cut. For the treatment group, we consider reviews submitted in a window 120 days before and after the announcement. Post is an indicator variable that equals one if the review is submitted after the wage increase announcement. For the control group (firms without a wage hike announcement), the pre and post periods are measured relative to January 1, 2018 (announcements are concentrated at the end 2017 and the beginning of 2018). In Panel A, the Pre-Match Treatment Regression is a logit regression on Treated including all available Glassdoor firms. The Post-Match Treatment Regression only includes Treated and Propensity-Score Matched Firms. t-statistics based on standard errors clustered by firm are reported in parentheses. Panel B reports sample means and tests of differences in means. *, **, and ***, indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Pre-match Propensity Score Regression and Post-match Diagnostic Regression

	Regression Coefficients					
Sample	Median Pay	Number of Employees	Change in Overall Rating	Change in Compensation Benefits	Observations	Pseudo R-squared
Pre-Match Treatment Regression	-3.401***	1.100***	-0.905**	0.282	830	0.243
	(-3.99)	(6.44)	(-2.06)	(0.67)		
Post-Match Treatment Regression	-0.322	0.226	-0.482	0.384	109	0.015
	(-0.32)	(1.11)	(-0.90)	(0.78)		

Panel B: Firm characteristics before and after propensity score matching

	Pre-Match Sample				Post-Match Sample			
	Treated	Control	Treated-Control	t-value	Treated	Control	Treated-Control	t-value
Median Pay	10.97	11.15	-0.17***	4.52	10.97	10.98	0.00	0.05
Employees	11.01	9.50	1.51***	-6.42	11.01	10.93	0.08	-0.31
Change in Overall Rating	-0.12	0.06	-0.18***	3.15	-0.12	-0.15	0.03	-0.39
Change in Comp & Benefits	-0.01	0.02	-0.03	0.51	-0.01	-0.07	0.05	-0.62

Table 8: The Effect of Hourly Wage Increases on Job Satisfaction

We table presents difference-in-difference analysis of employer ratings for Hourly Wage Increase firms relative to propensity-score matched control firms. Treated is an indicator variable that equals one if the company announced an hourly wage increase following the 2017 tax cut. For the treatment group, we consider all reviews submitted in a window 120 days before and after the announcement. Post is an indicator variable that equals one if the review is submitted after the wage increase announcement. For the control group (firms without a wage hike announcement), the pre and post periods are measured relative to January 1, 2018 (announcements are concentrated at the end 2017 and the beginning of 2018). Each review-level regression includes Industry (Fama-French 12 industries) fixed effects, and *t*-statistics based on standard errors clustered by firm are reported in parentheses below each coefficient. *, **, and ***, indicate significance at the 10%, 5%, and 1% levels, respectively.

| Variables | Hourly Wage Employees | | Salaried Employees (Annual Pay > Median) | |
	Overall Rating	Compensation & Benefits	Overall Rating	Compensation & Benefits
Treat	-0.079	-0.205	-0.191	-0.072
	(-0.55)	(-1.08)	(-1.51)	(-0.69)
Post	-0.028	-0.166**	-0.008	0.040
	(-0.51)	(-2.58)	(-0.11)	(0.78)
Treat * Post	0.030	0.141**	0.178**	0.071
	(0.50)	(2.39)	(2.58)	(0.79)
Fixed Effects	Industry	Industry	Industry	Industry
Observations	17,214	15,139	12,094	11,006
R-squared	0.004	0.016	0.005	0.005

Table 9: Pay Inequality within Firms and Corporate Culture
The table reports the results of regressions of measures of culture on pay inequality. Nine categories of representative corporate culture words are taken from Guiso, Sapienza, and Zingales (2015). Each year for each firm, we calculate the difference in the number of culture words in the Pros and Cons sections of employer reviews and scale by the number of reviews. The key independent variable is Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company over a rolling two-year window. Panel A (B) reports the results for Base (Total) Pay Inequality. Control variables include the log of median employee salary and the log of the number of employees, and Time (year) and Industry (Fama-French 12 industries) effects are included. Below each coefficient estimate are reported t-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Panel A: Base Pay Inequality

Dependent Variable: Cultural Dimension		Pay Inequality	Median Pay	Employees	Fixed Effects	Obs.	Adj-R^2
Integrity / Ethics / Accountability / Trust / Honesty / Responsibility / Fairness / Do the right thing / Transparency / Ownership	(1)	-0.191** (-2.67)			Time, Industry	5,515	0.011
	(2)	-0.164* (-2.03)	0.467*** (3.78)	0.349*** (3.65)	Time, Industry	5,513	0.024
Teamwork / Collaboration / Cooperation	(3)	-0.022 (-0.628)			Time, Industry	5,515	0.019
	(4)	-0.008 (-0.24)	0.204*** (4.26)	-0.134** (-2.74)	Time, Industry	5,513	0.039
Innovation / Creativity / Excellence / Improvement / Passion / Pride / Leadership / Growth / Performance / Efficiency / Results	(5)	0.175 (0.87)			Time, Industry	5,515	0.043
	(6)	0.133 (0.69)	-0.404 (-1.80)	-0.057 (-0.26)	Time, Industry	5,513	0.044
Respect / Diversity / Inclusion / Development / Talent / Employees / Dignity / Empowerment	(7)	-0.384 (-1.84)			Time, Industry	5,515	0.025
	(8)	-0.150 (-0.66)	2.517*** (7.07)	0.484* (1.88)	Time, Industry	5,513	0.055
Quality / Customer / Meet needs / Commitment / Make a difference / Dedication / Value / Exceed expectations	(9)	-1.127*** (-6.65)			Time, Industry	5,515	0.092
	(10)	-0.970*** (-6.21)	1.330*** (5.56)	-0.326* (-2.09)	Time, Industry	5,513	0.111
Safety / Health / Work-Life balance / Flexibility	(11)	-0.273 (-1.345)			Time, Industry	5,515	0.059
	(12)	-0.125 (-0.62)	1.300*** (5.77)	-0.169 (-0.88)	Time, Industry	5,513	0.074
Community / Environment / Caring / Citizenship	(13)	-0.294 (-1.40)			Time, Industry	5,515	0.028
	(14)	-0.183 (-0.85)	0.569 (1.85)	-0.776*** (-3.52)	Time, Industry	5,513	0.035
Communication / Openness	(15)	-0.121 (-1.393)			Time, Industry	5,515	0.025
	(16)	-0.027 (-0.33)	0.645*** (7.09)	0.173 (1.82)	Time, Industry	5,513	0.042
Hard work / Reward / Fun / Energy	(17)	0.015 (0.11)			Time, Industry	5,515	0.068
	(18)	0.012 (0.09)	-0.489*** (-3.39)	-0.890*** (-6.03)	Time, Industry	5,510	0.091

Table 9: Pay Inequality within Firms and Corporate Culture (continued)
Panel B: Total Pay Inequality

Dependent Variable: Cultural Dimension		Independent Variables			Fixed Effects	Obs.	Adj-R^2
		Pay Inequality	Median Pay	Employees			
Integrity / Ethics / Accountability / Trust / Honesty / Responsibility / Fairness / Do the right thing / Transparency / Ownership	(1)	0.201** (2.56)			Time, Industry	5,515	0.011
	(2)	0.121 (1.69)	0.477** (2.40)	0.332*** (4.18)	Time, Industry	5,513	0.024
Teamwork / Collaboration / Cooperation	(3)	0.023 (0.57)			Time, Industry	5,515	0.019
	(4)	0.017 (-0.39)	0.198*** (3.55)	-0.145** (-2.97)	Time, Industry	5,513	0.039
Innovation / Creativity / Excellence / Improvement / Passion / Pride / Leadership / Growth / Performance / Efficiency / Results	(5)	0.764*** (5.63)			Time, Industry	5,515	0.043
	(6)	0.824*** (5.94)	-0.496* (-2.22)	-0.103 (-0.49)	Time, Industry	5,513	0.044
Respect / Diversity / Inclusion / Development / Talent / Employees / Dignity / Empowerment	(7)	1.011*** (5.07)			Time, Industry	5,515	0.025
	(8)	0.721*** (4.50)	2.470*** (7.06)	0.429 (1.65)	Time, Industry	5,513	0.055
Quality / Customer / Meet needs / Commitment / Make a difference / Dedication / Value / Exceed expectations	(9)	-0.400 (-1.32)			Time, Industry	5,515	0.092
	(10)	-0.523* (-2.03)	1.502*** (5.97)	-0.346* (-2.23)	Time, Industry	5,513	0.111
Safety / Health / Work-Life balance / Flexibility	(11)	-0.135 (-0.64)			Time, Industry	5,515	0.059
	(12)	-0.252 (-1.40)	1.339*** (5.77)	-0.159 (-0.83)	Time, Industry	5,513	0.074
Community / Environment / Caring / Citizenship	(13)	0.431* (2.19)			Time, Industry	5,515	0.028
	(14)	0.457** (2.64)	0.550* (1.92)	-0.816*** (-3.80)	Time, Industry	5,513	0.035
Communication / Openness	(15)	0.196** (2.39)			Time, Industry	5,515	0.025
	(16)	0.107 (1.78)	0.726*** (7.63)	0.180* (1.91)	Time, Industry	5,513	0.042
Hard work / Reward / Fun / Energy	(17)	0.383** (2.64)			Time, Industry	5,515	0.068
	(18)	0.525*** (3.90)	-0.539*** (-3.87)	-0.923*** (-6.57)	Time, Industry	5,510	0.091

Table 10 Employee Satisfaction and Firm Performance

The table reports the results from firm-year panel regressions of firm performance on employer reviews. The dependent variable is firm performance, measured using return on assets (ROA) and Tobin's Q. The independent variables are the Glassdoor employer ratings averaged over the previous two years. Each regression includes time (year) and industry (Fama-French 12 Industries) fixed effects, and t-statistics based on firm and time-clustered standard errors are reported in the parentheses below the coefficients. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

VARIABLES	Overall Rating		Career Opportunities		Compensation & Benefits		Senior Management		Work Life Balance		Culture & Values	
	ROA	Tobin's Q	ROA	Tobin's Q	ROA	Tobin's Q	ROA	Tobin's Q	ROA	Tobin's Q	ROA	Tobin's Q
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Rating	0.011***	0.328***	0.011***	0.354***	0.005**	0.278***	0.010***	0.344***	0.000	0.194***	0.009***	0.351***
	(4.96)	(7.75)	(5.45)	(7.85)	(2.39)	(6.03)	(4.67)	(8.42)	(0.17)	(5.17)	(3.97)	(8.22)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	5,515	5,443	5,515	5,443	5,515	5,443	5,515	5,443	5,515	5,443	5,076	5,006
R-squared	0.091	0.242	0.091	0.256	0.079	0.217	0.089	0.254	0.007	0.200	0.090	0.250

Table 11: Pay Inequality and Firm Performance

The table reports the results from firm-year panel regressions of firm performance on measures of pay inequality. The dependent variable is firm performance, measured using return on assets (ROA) and Tobin's Q. The key independent variable is Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company over a rolling two-year window. Panel A (B) reports the results for Base (Total) Pay Inequality. Control variables include log median employee salary and log number of employees. We also include time (year) and industry fixed (Fama-French 12 industries) effects. t-statistics based on firm and time-clustered standard errors are reported in the parentheses below the coefficients. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Panel A: Base pay inequality

	ROA			Tobin's Q		
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Pay Inequality	-0.008***	-0.008***	-0.011***	-0.259***	-0.234***	-0.206***
	(-4.15)	(-3.78)	(-5.98)	(-7.92)	(-6.57)	(-5.38)
Median Pay			-0.005			0.069
			(-1.45)			(1.10)
Employees			0.016***			-0.069*
			(5.07)			(-1.96)
Fixed Effects	Time	Time, Industry	Time, Industry	Time	Time, Industry	Time, Industry
Observations	5,357	5,356	5,309	5,295	5,294	5,248
R-squared	0.019	0.089	0.115	0.063	0.201	0.206

Panel B: Total Pay Inequality

	ROA			Tobin's Q		
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Pay Inequality	-0.001	-0.001	-0.002	-0.003	-0.009	-0.055
	(-0.81)	(-0.57)	(-1.29)	(-0.07)	(-0.27)	(-1.60)
Median Pay			-0.006**			0.120**
			(-2.52)			(3.30)
Employees			0.021***			-0.094***
			(7.49)			(-3.42)
Fixed Effects	Time	Time, Industry	Time, Industry	Time	Time, Industry	Time, Industry
Observations	5,357	5,356	5,309	5,295	5,294	5,248
R-squared	0.007	0.045	0.079	0.063	0.201	0.206

Figure IA1. Pay inequality by industry. The figures plot the average firm-level Gini coefficients for each industry using the Fama-French 12 industry classification.

Base Pay Gini by Industry
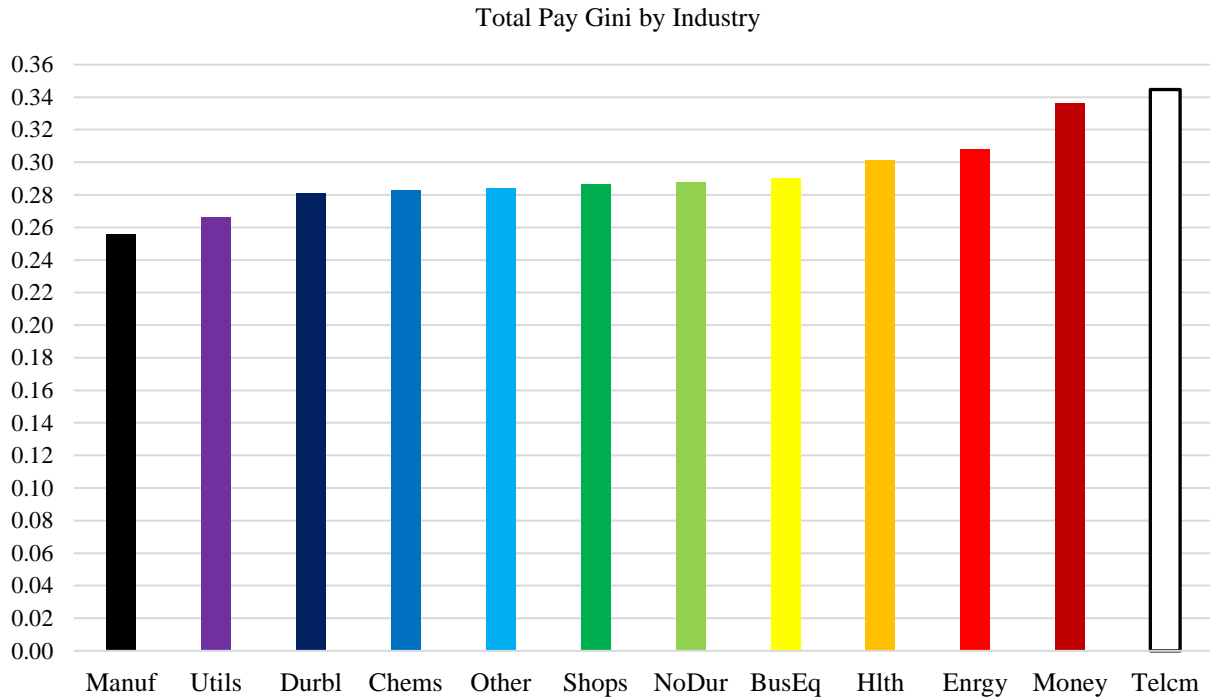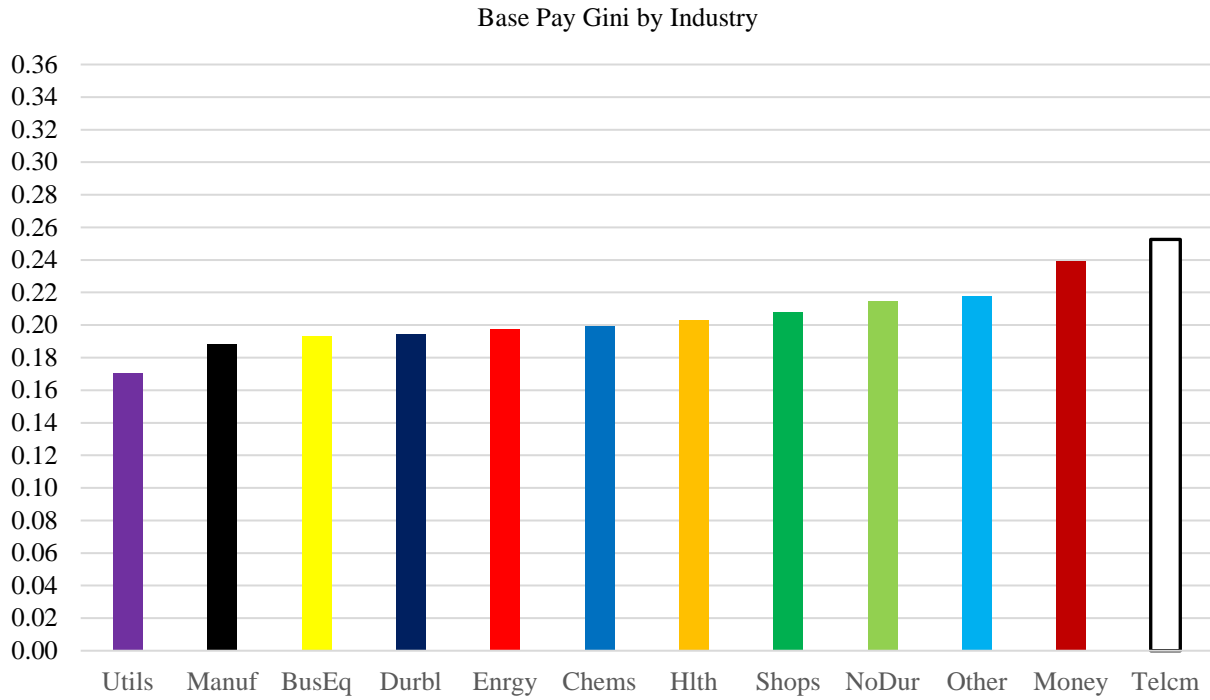

Total Pay Gini by Industry

Table IA.1 Pay Inequality and Employee Satisfaction

The table replicates Tables 2 and 3 using market value of equity as a control for firm size instead of number of employees. The table reports the results of panel regressions with components of employer ratings as the dependent variables, including Overall Rating, Career Opportunities, Compensation & Benefits, Senior Management, Work/Life Balance, and Culture & Values. The key independent variable is Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company over a rolling two-year window. Panel A (B) reports the results for Base (Total) Pay Inequality. Control variables include the log of median employee salary and the market value of equity, measured at the end of the previous year. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported *t*-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Panel A: Base Pay Inequality

VARIABLES	Overall	Career Opportunities	Compensation & Benefits	Senior Management	Work/Life Balance	Culture & Values
	(1)	(2)	(3)	(4)	(5)	(6)
Pay Inequality	-0.037**	-0.043***	-0.042**	-0.039**	-0.025*	-0.030*
	(-3.23)	(-4.06)	(-3.18)	(-3.33)	(-2.06)	(-2.10)
Median Pay	0.110***	0.051***	0.199***	0.062***	0.132***	0.091***
	(7.43)	(3.71)	(13.82)	(4.04)	(8.35)	(5.09)
MVE	0.053***	0.058***	0.062***	0.043***	0.015**	0.050***
	(7.83)	(8.51)	(9.51)	(6.18)	(2.45)	(6.78)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	5,515	5,515	5,515	5,515	5,515	5,076
R-squared	0.231	0.184	0.436	0.122	0.219	0.113
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Overall	Career Opportunities	Compensation & Benefits	Senior Management	Work life Balance	Culture and Value
Pay Inequality	0.022**	0.036**	0.029***	0.031**	0.011	0.032**
	(2.57)	(3.21)	(3.66)	(2.71)	(1.23)	(2.89)
Median Pay	0.119***	0.060***	0.207***	0.070***	0.137***	0.097***
	(7.97)	(4.41)	(15.24)	(4.58)	(8.71)	(5.56)
MVE	0.052***	0.056***	0.060***	0.041***	0.014*	0.048***
	(8.47)	(8.53)	(9.24)	(6.22)	(2.30)	(6.88)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	5,515	5,515	5,515	5,515	5,515	5,076
R-squared	0.276	0.180	0.432	0.119	0.217	0.113

Table IA.2: Employee Gender and Attitude towards Pay Inequality

The table reports the results of panel regressions with the average overall employer rating as the dependent variable. The key independent variables are related to Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company in a rolling two-year window. The emphasis is on how the relation between job satisfaction and firm-level pay inequality is influenced by their genders. Female is an indicator variable that equals one if an employee is self-identified as a female. Control variables include the log of Own pay and the log of the number of Employees. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported t-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Variables	Base Pay Inequality (1)	Total Pay Inequality (2)
Pay Inequality	-0.049**	0.033
	(-2.436)	(1.695)
Female	-0.060***	-0.055***
	(-5.413)	(-4.636)
Female × Pay Inequality	0.014	-0.009
	(1.274)	(-0.602)
Own Pay	0.066***	0.088***
	(5.722)	(5.823)
Employees	0.062**	0.059**
	(2.962)	(2.739)
Fixed Effects	Time, Industry	Time, Industry
Observations	259,914	259,914
R-squared	0.019	0.020

Table IA.3: Employee Income and Attitude towards Pay Inequality

The table reports the results of panel regressions with five dimensions of employer rating as the dependent variable. The key independent variables are related to Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company in a rolling two-year window. The emphasis is on how the relation between job satisfaction and firm-level pay inequality is influenced by their income level. Low (High) Income is an indicator variable that equals 1 if an employee's income is in the firm's quartile 1 (quartile 4). Control variables include the log of Own pay and the log of the number of Employees. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported t-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance at the 10%, 5%, and 1% levels, respectively.

	Base Pay Inequality					Total Pay Inequality				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Career	Comp. &	Senior	Work/Life	Culture &	Career	Comp. &	Senior	Work/Life	Culture &
Variable	Opp.	Benefits	Mgmnt	Balance	Values	Opp.	Benefits	Mgmnt	Balance	Values
Pay Inequality	-0.052**	-0.038	-0.032	0.019	-0.036	0.052***	0.042*	0.053***	0.014	0.053**
	(-2.704)	(-1.735)	(-1.681)	(1.112)	(-1.686)	(3.758)	(2.133)	(3.369)	(0.742)	(2.802)
Low Income	-0.039*	0.048**	0.017	0.063**	0.025	0.007	0.124***	0.068**	0.104***	0.075**
	(-2.056)	(2.371)	(1.028)	(2.536)	(1.452)	(0.239)	(5.411)	(2.980)	(3.176)	(2.881)
Low Inc. × Pay Ineq.	-0.056*	-0.055**	-0.061**	-0.088***	-0.075***	-0.010	0.010	-0.020***	-0.012***	-0.008
	(-2.161)	(-2.300)	(-2.614)	(-3.851)	(-3.176)	(-1.658)	(1.599)	(-5.323)	(-3.873)	(-1.275)
High Income	-0.020**	0.002	-0.033**	-0.023	-0.018*	-0.096**	-0.132***	-0.103***	-0.148***	-0.120***
	(-2.336)	(0.173)	(-2.849)	(-1.700)	(-1.982)	(-2.850)	(-6.057)	(-3.924)	(-5.096)	(-4.388)
High Inc. × Pay Ineq.	-0.011	-0.039***	-0.011	0.010	-0.021	-0.009	-0.033***	-0.004	-0.025***	-0.009
	(-1.063)	(-3.237)	(-0.744)	(0.597)	(-1.273)	(-1.193)	(-4.695)	(-0.614)	(-5.591)	(-0.909)
Own Pay	0.055**	0.166***	0.067**	0.132***	0.060**	0.120***	0.250***	0.125***	0.168***	0.119***
	(2.392)	(7.871)	(2.959)	(6.092)	(2.741)	(4.001)	(11.698)	(4.797)	(6.011)	(4.399)
Employees	0.108***	0.059**	0.024	-0.058***	0.018	0.100***	0.052**	0.017	-0.058***	0.011
	(5.494)	(2.571)	(1.171)	(-4.235)	(0.821)	(5.135)	(2.337)	(0.838)	(-4.336)	(0.496)
	Time,	Time,	Time,	Time,	Time,	Time,	Time,	Time,	Time,	Time,
Fixed Effects	Industry	Industry	Industry	Industry	Industry	Industry	Industry	Industry	Industry	Industry
Observations	369,407	370,032	367,792	369,879	324,907	369,407	370,032	367,792	369,879	324,907
R-squared	0.019	0.033	0.007	0.047	0.008	0.021	0.042	0.009	0.048	0.010

Table IA.4: Employee Experience and Attitude towards Pay Inequality

The table reports the results of panel regressions with five dimensions of employer rating as the dependent variable. The key independent variables are related to Base (Total) Pay Inequality measured using the Gini coefficient calculated from base (total) pay observations for a company in a rolling two-year window. The emphasis is on how the relation between job satisfaction and firm-level pay inequality is influenced by their experience level. Low (High) Experience is an indicator variable that equals 1 if an employee's experience is in the firm's quartile 1 (quartile 4). Control variables include the log of Own pay and the log of the number of Employees. Time (year) and Industry (Fama-French 12 industries) effects are also included. Below each coefficient estimate are reported t-statistics based on firm and time-clustered standard errors. *, **, and ***, indicate significance of the difference in returns and alphas at the 10%, 5%, and 1% levels, respectively.

Variable	Base Pay Inequality					Total Pay Inequality				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Career Opp.	Comp. & Benefits	Senior Mgmnt	Work/Life Balance	Culture & Values	Career Opp.	Comp. & Benefits	Senior Mgmnt	Work/Life Balance	Culture & Values
Pay Inequality	-0.064**	-0.054**	-0.044**	0.012	-0.050**	0.035**	0.031	0.033*	-0.004	0.042**
	(-3.16)	(-2.39)	(-2.36)	(0.73)	(-2.34)	(2.75)	(1.43)	(2.13)	(-0.20)	(2.32)
Low Experience	0.215***	0.120***	0.242***	0.190***	0.164***	0.216***	0.115***	0.241***	0.169***	0.164***
	(21.35)	(9.81)	(22.24)	(13.45)	(14.66)	(15.37)	(6.31)	(19.51)	(10.40)	(17.49)
Low Exp × Pay Ineq.	0.030***	0.024**	0.021**	0.005	0.023**	0.019***	0.016*	0.019**	0.006	0.013***
	(3.41)	(2.71)	(2.39)	(0.73)	(2.44)	(4.46)	(2.09)	(2.85)	(0.78)	(3.98)
High Experience	-0.142***	-0.005	-0.133***	-0.159***	-0.121***	-0.147***	-0.003	-0.135***	-0.138***	-0.126***
	(-11.13)	(-0.39)	(-8.78)	(-12.73)	(-9.52)	(-8.77)	(-0.19)	(-9.29)	(-10.01)	(-9.41)
High Exp × Pay Ineq.	-0.000	-0.018	-0.011	0.017	-0.009	0.002	-0.012**	0.016*	0.021**	0.008
	(-0.02)	(-1.77)	(-1.34)	(1.55)	(-0.76)	(0.24)	(-2.44)	(2.11)	(2.82)	(1.09)
Own Pay	0.102***	0.154***	0.099***	0.138***	0.070***	0.125***	0.170***	0.114***	0.111***	0.088***
	(7.62)	(11.52)	(7.04)	(10.07)	(5.18)	(5.19)	(6.60)	(5.05)	(5.19)	(4.96)
Employees	0.112***	0.063**	0.029	-0.052***	0.023	0.109***	0.062**	0.027	-0.047***	0.020
	(5.67)	(2.70)	(1.42)	(-3.75)	(1.03)	(5.43)	(2.65)	(1.28)	(-3.50)	(0.87)
Fixed Effects	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry	Time, Industry
Observations	369,407	370,032	367,792	369,879	324,907	369,407	370,032	367,792	369,879	324,907
R-squared	0.028	0.035	0.017	0.054	0.012	0.031	0.038	0.019	0.052	0.014

Table IA.5 The Effect of Hourly Wage Increases on Dimensions of Job Satisfaction

The table presents difference-in-difference analysis of employer ratings for Hourly Wage Increase firms relative to propensity-score matched control firms. Treated is an indicator variable that equals one if the company announced an hourly wage increase following the 2017 tax cut. For the treatment group, we consider all reviews submitted in a window 180 days before and after the announcement. Post is an indicator variable that equals one if the review is submitted after the wage increase announcement. For the control group (firms without a wage hike announcement), the pre and post periods are measured relative to the announcement date of the corresponding firm in the treatment group. Each review-level regression includes Industry (Fama-French 12 industries) fixed effects, and *t*-statistics based on standard errors clustered by firm are reported in parentheses below each coefficient. *, **, and ***, indicate significance at the 10%, 5%, and 1% levels, respectively.

Variables	Hourly Wage Employees				High Salaried Employees (Annual Pay > Median)			
	(1) Career Opportunities	(2) Senior Management	(3) Work Life Balance	(4) Culture & Values	(5) Career Opportunities	(6) Senior Management	(7) Work Life Balance	(8) Culture & Values
Treat	-0.124	-0.121	-0.017	-0.036	-0.166	-0.155	-0.048	-0.196
	(-1.36)	(-1.05)	(-0.14)	(-0.19)	(-1.35)	(-1.25)	(-0.42)	(-1.25)
Post	-0.071	-0.057	-0.003	0.006	-0.004	0.084	0.063	-0.011
	(-1.65)	(-0.98)	(-0.07)	(0.10)	(-0.05)	(1.02)	(0.90)	(-0.13)
Treat × Post	0.092*	0.055	0.066	0.059	0.092	0.163*	0.301**	0.251**
	(1.80)	(0.94)	(1.13)	(0.86)	(1.26)	(1.75)	(2.66)	(2.56)
Fixed Effects	Industry	Industry	Industry	Industry	Industry	Industry	Industry	Industry
Observations	15,180	14,791	15,172	14,955	11,001	10,950	11,000	10,725
R-squared	0.005	0.004	0.008	0.002	0.009	0.005	0.021	0.006

Table IA.6 Base Pay Inequality and Firm Performance: Firm Size Subsamples

We investigate the relation between employee income inequality and firm performance in high and low market capitalization firms. We first split the sample merged by CRSP, Compustat, and Glassdoor, by sample median. We then require the sample to have 30 observations in calculating income disparity statistics. The dependent variable is firm performance, measured using return on assets (ROA) and Tobin's Q (TOBINQ). The key independent variable is Base pay GINI coefficient, which measures the disparity of employee income. Control variables include log median employee salary and log number of employees. We also include time (year) and industry fixed (Fama-French 12 industries) effects. T-statistics based on time-clustered standard errors are reported in the parentheses below the coefficients. *, **, and ***, indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Small Firms

Variables	ROA			Tobin's Q		
	(1)	(2)	(3)	(4)	(5)	(6)
Pay Inequality	0.003	0.006	0.001	0.006	0.023	0.034
	(0.89)	(1.38)	(0.20)	(0.21)	(0.75)	(1.05)
Median Pay			0.032**			-0.102**
			(3.32)			(-2.39)
Employees			-0.012**			-0.036
			(-2.48)			(-1.22)
Fixed Effects	Time	Time, Industry	Time, Industry	Time	Time, Industry	Time, Industry
Observations	806	801	782	800	795	776
R-squared	0.020	0.090	0.146	0.014	0.137	0.148

Panel B: Large Firms

Variables	ROA			Tobin's Q		
	(1)	(2)	(3)	(4)	(5)	(6)
Pay Inequality	-0.011***	-0.011***	-0.012***	-0.295***	-0.289***	-0.264***
	(-4.46)	(-4.75)	(-5.64)	(-8.95)	(-8.05)	(-6.84)
Median Pay			0.006***			-0.130***
			(3.52)			(-3.50)
Employees			-0.005*			0.031
			(-1.88)			(0.46)
Fixed Effects	Time	Time, Industry	Time, Industry	Time	Time, Industry	Time, Industry
Observations	4,551	4,550	4,497	4,495	4,494	4,442
R-squared	0.029	0.119	0.130	0.075	0.253	0.261

Table IA.7 Total Pay Inequality and Firm Performance: Firm Size Subsamples

We investigate the relation between employee income inequality and firm performance in high and low market capitalization firms. We first split the sample merged by CRSP, Compustat, and Glassdoor, by sample median. We then require the sample to have 30 observations in calculating income disparity statistics. The dependent variable is firm performance, measured using return on assets (ROA) and Tobin's Q (TOBINQ). The key independent variable is total pay GINI coefficient, which measures the disparity of employee income. Control variables include log median employee salary and log number of employees. We also include time (year) and industry fixed (Fama-French 12 industries) effects. T-statistics based on time-clustered standard errors are reported in the parentheses below the coefficients. *, **, and ***, indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Small Firms

Variables	ROA			Tobin's Q		
	(1)	(2)	(3)	(4)	(5)	(6)
Pay Inequality	-0.005	-0.005	-0.006	-0.047	-0.038	-0.032
	(-1.300)	(-1.509)	(-1.629)	(-1.378)	(-1.184)	(-0.997)
Median Pay			0.024***			-0.075
			(3.382)			(-1.103)
Employees			-0.009			-0.071
			(-1.353)			(-1.236)
Fixed Effects	Time	Time, Industry	Time, Industry	Time	Time, Industry	Time, Industry
Observations	806	801	782	800	795	776
R-squared	0.020	0.067	0.100	0.016	0.091	0.100

Panel B: Large Firms

Variables	ROA			Tobin's Q		
	(1)	(2)	(3)	(4)	(5)	(6)
Pay Inequality	-0.010*	-0.002*	-0.008*	-0.024	0.036	0.049
	(-2.261)	(-2.259)	(-2.159)	(-0.314)	(0.789)	(1.179)
Median Pay			0.004			-0.142***
			(1.623)			(-3.699)
Employees			-0.001			0.061
			(-0.418)			(0.939)
Fixed Effects	Time	Time, Industry	Time, Industry	Time	Time, Industry	Time, Industry
Observations	4,551	4,550	4,497	4,495	4,494	4,442
R-squared	0.029	0.119	0.130	0.075	0.253	0.261