

© 2018

Dan Andrei Marian Weltmann

ALL RIGHTS RESERVED

DOES EMPLOYEE STOCK OWNERSHIP MODERATE THE OUTCOMES OF PAY
DISPERSION?

By

DAN ANDREI MARIAN WELTMANN

A dissertation submitted to the

School of Graduate Studies

Rutgers, The State University of New Jersey

In partial fulfillment of the requirements

For the degree of

Doctor of Philosophy

Graduate Program in Industrial Relations and Human Resources

Written under the direction of

Douglas Lynn Kruse

And approved by

New Brunswick, New Jersey

January, 2018

ABSTRACT OF THE DISSERTATION

Does Employee Stock Ownership Moderate the Outcomes of Pay Dispersion?

by DAN ANDREI MARIAN WELTMANN

Dissertation Director:

Douglas Lynn Kruse

Pay dispersion within firms and workplaces has been linked to a range of employee attitudes and employee behaviors, and thus to diverse individual and group outcomes. The outcomes of pay dispersion are highly contingent: the contingency explored in this study is employee stock ownership, which is both a form of compensation and of broad profit-sharing of future capital gains in the firm, and which has been shown to influence attitudes and behaviors. Employee ownership was considered as a moderator because its support for cooperative attitudes may enhance the motivational aspects of higher pay dispersion while countering the feelings of inequity that higher pay dispersion may foster. Interactions between pay dispersion and individual-level employee stock ownership as well as group-level stock ownership were hypothesized and tested. While most of the relationships that were hypothesized were not supported, there were a number of interesting results in this exploratory study, which suggest several takeaways. One type of result that stood out was that certain outcomes were associated with certain

professions, such as job satisfaction for sales employees and absenteeism for production employees, suggesting different mechanisms for future study. Another interesting result was the consistent association between higher pay dispersion and improved attitudes. Lastly, the negative interaction between employee ownership and pay dispersion, when each individually had a positive association with improved attitudes, suggests a substitutive relationship between the two aspects of compensation, meaning organizations may wish to choose between higher pay differentials or higher employee stock ownership, with the choice contingent on the industry or job type involved.

Keywords: employee ownership, pay dispersion, compensation

ACKNOWLEDGEMENTS

I would like to thank my committee for their help and support: Joe Blasi, Doug Kruse, Tobias Schulze-Cleven, and Richard Freeman. I would also like to thank Scott Bentley for his help and advice, as well as my other classmates who were there for me: Emily Rosado-Solomon, Sasha Pustovit, Jung ook Kim, Yan Chen, Eugene Son, Hao Do, Saehee Kang, Hao Gong, and Phela Townsend. My thanks go to the professors who helped shape me: Ingrid Fulmer, Chris Mackin, Stan Gully, David Lepak, Patrick MacKay, Susan Jackson, Joo Hun Han, Sanghee Park, Adrienne Eaton, Mingwei Liu, Meredith Turshen, Marc Weiner, Anne-Laure Winkler, Kyongji Han, and Kaifeng Jiang. Lastly, I thank my favorite physicist: my wife Diu Nghiem, who helped, pushed, and otherwise put up with me throughout this challenging time.

TABLE OF CONTENTS

ABSTRACT OF THE DISSERTATION	ii
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	vi
LIST OF ILLUSTRATIONS	viii
INTRODUCTION	1
LITERATURE REVIEW	2
THEORY	10
DATA AND METHODS	20
RESULTS	26
DISCUSSION	47
CONCLUSION	61
REFERENCES.....	63
APPENDIX 1	73
APPENDIX 2	115

LIST OF TABLES

Table 1	33
Table 2	36
Table 3	38
Table 4	39
Table 5	41
Table 6	43
Table 7	45
Table 8	47
Table 9a.....	49
Table 9b	50
Table 10	73
Table 11	74
Table 12	75
Table 13	76
Table 14	77
Table 15	78
Table 16	79
Table 17	80

Table 18	81
Table 19	82
Table 20	83
Table 21	84
Table 22	85
Table 23	86
Table 24	87
Table 25	88
Table 26	89
Table 27	90
Table 28	91
Table 29	92
Table 30	93
Table 31	94
Table 32	95
Table 33	96
Table 34	97
Table 35	98
Table 36	99

Table 37	100
Table 38	101
Table 39	102
Table 40	103
Table 41	104
Table 42	105
Table 43	106
Table 44	107
Table 45	108
Table 46	109
Table 47	110
Table 48	111
Table 49	112
Table 50	113
Table 51	114

LIST OF ILLUSTRATIONS

Figure 1	13
Figure 2	15
Figure 3	55

INTRODUCTION

“Income inequality constrains the achievement of human well-being because it translates into unequal political and social power” (Berik, van der Meulen Rodgers, Yana, & Seguino, 2011). While extreme income inequality can have negative social and economic effects, some level of inequality is useful to motivate workers (Freeman, 2012), as well as to attract and retain them. Financial incentives, in the context of pay-for-performance (PFP), have been linked to improved performance in a wide range of studies, as reviewed for example in a meta-analysis of 39 studies by Jenkins, Mitra, Gupta, and Shaw (1998). When PFP is used to attract, retain, motivate, or reward employees, the result is pay dispersion which has been linked to a range of individual and group outcomes.

Individuals compare their pay to that of their peers (Clark, Masclet, & Villeval, 2010), and these comparisons matter (Card, Mas, Moretti, & Saez, 2012). The outcomes of pay variation are not a given in the sense that a given pay variation will always yield a given set of outcomes; the outcomes depend on a variety of contingencies, such as the type of pay variation (vertical or horizontal), why the variation exists or antecedents (merit, tenure, cronyism, unions, etc.), whether the pay variation is well-explained by management, and whether the explanation is accepted by the employees.

One possible contingency that has not been explored is when the employees are owners. Employee stock ownership has been shown to affect employee attitudes and behaviors in a wide range of studies, e.g. Kruse, Freeman, and Blasi (2010). There are theoretical reasons for considering how employee ownership alters (or moderates) the effect of pay dispersion on individual and group outcomes. Employee stock ownership is

important to consider because it is wide-spread: as of 2012 there were over 9,000 employee stock ownership plans (ESOPs) in the U.S. covering nearly 15 million employees and holding over \$1 trillion in assets (Rosen, 2015). Also, employee ownership makes a difference to firm outcomes: studies generally indicate a positive relationship between employee stock ownership and company performance, with an average increase in productivity of 4.5% in companies with ESOPs after the adoption of ESOPs (Blasi, Freeman, & Kruse, 2015; Kruse, Blasi, & Park, 2008). While the effects of employee stock ownership on individual and firm outcomes have been well established, this study aims to examine the extent to which the effects of pay inequality among employees are contingent on the employees owning stock in the company they work for.

LITERATURE REVIEW

In this section pay dispersion and employee stock ownership are introduced, as well as the theory and research behind them, with the aim of discussing the outcomes with which they are associated. Subsequently, a theoretical framework is used to explore the moderation of the outcomes of pay differentials by employee stock ownership, and to generate hypotheses.

Pay Dispersion

Gupta, Conroy, and Delery's (2012) study entitled "The many faces of pay variation" reviewed the major themes of the extant literature. There are different types of pay dispersion (horizontal and vertical), a variety of relevant theories (tournament, goal-setting, expectancy, and equity), and studies which support positive effects of either pay compression or pay dispersion. Pay dispersion is used in the literature interchangeably with spread, range, variation, and inequality; in this study the term "pay dispersion" is

used for clarity and consistency. Pay dispersion is defined as “differences in pay levels between individuals within (i.e., horizontal or lateral dispersion) and across (i.e., vertical dispersion) jobs or organizational levels” (Shaw, 2014). That means that vertical pay variation refers to differences in pay across different types of jobs, or differences in pay across different levels of an organization, whereas horizontal pay variation refers to differences in pay within the same type of job.

Theories of pay dispersion. There are a range of theories that bear upon the issue of pay dispersion and performance, with most of them supporting the idea that larger pay differentials can be motivating under the appropriate circumstances. *Tournament theory* states that workers compete for higher positions when salary differences are large enough (Lazear Edward, 1998; Lazear & Rosen, 1981). The greater effort they expend competing leads to increased productivity. The theory suggests that pay differentials should work well in environments where monitoring is costly or unreliable (Bartol & Locke, 2000), but not so well in environments where cooperation is important. *Goal-setting theory* also supports the idea of larger pay differentials having beneficial outcomes with the argument that financial incentives increase acceptance of difficult performance goals, thus enhancing performance (Locke, Latham, & Erez, 1988). Similarly, according to *expectancy theory* higher pay will motivate people to work harder if they expect pay to be contingent on their performance (Lawler III, 1973; Vroom, 1964). Another perspective comes from *equity theory*, which states that employees are motivated to reduce pay inequity (e.g., (Adams, 1963; Adams, 1965)), but the theory does not have much to say about the relationship of financial incentives such as employee ownership to performance. Therefore, theory leans towards the notion that pay variation is important to

motivate individual effort, with the insights of equity theory suggesting that financial incentives that better reflect the contribution of employees to performance might play a role in employee attitudes about equity. While workers may lower their performance if they think they are underpaid compared to their peers, they can also improve their performance so as to get rewarded with higher pay (Bartol & Locke, 2000), thus making equity theory compatible with tournament, goal-setting, and expectancy theories.

According to Shaw (2014) the theoretical disagreements may have been overstated, and pay dispersion as deliberate compensation policy can be effective in improving individual outcomes as long as: a) it is perceived as legitimate; b) people understand the connection between effort, performance, and outcomes; and c) the pay differentials are large enough to matter. Gupta et al. (2012) explain that the empirical studies report different outcomes for pay variation because those studies often do not take into account the causes, or antecedents of pay variation. The effects are also difficult to detect “because performance varies, because markets vary, because the organization’s strategy or structure varies, and so on” (2012: 1). Another important antecedent is the employees’ perceptions of pay variation, since workers often do not know what others are making, and they tend to overestimate what their coworkers make and thus exaggerate the pay differentials (Lawler, 1971); this tendency to overestimate pay differentials with one’s coworkers, especially if it means the employee thinks everybody else is making much more than him or her, might exacerbate feelings of inequity that may not be warranted by the actual pay differentials.

Empirical research into pay dispersion. A study by Bloom (1999) looked at horizontal pay dispersion among baseball players (1,644 players on 29 teams over the

years 1985-1993) as a driver of individual and team performance and found both outcomes to be negatively related to pay dispersion as measured by the Gini coefficients and coefficients of variation (both are standard measures of dispersion or inequality). These results make sense in the context of equity theory, where workers' comparisons with their peers may lead to feelings of inequity, thus undermining individual and team performance (J. N. Baron & Pfeffer, 1994). This presents a dilemma: pay compression through raising the pay of lower paid workers would be costly, while pay compression by lowering the pay of higher paid workers may result in higher turnover, especially among employees with better performance, who may find it easier to find work elsewhere.

Experimental evidence supports the view that unexplained, unearned inequality is harmful. Fehr (2015) looked at the relationship between inequality and antisocial behavior and found that when the growth of inequality is either due to causes which are not transparent or due to unethical behavior, people will be motivated to reduce particularly high inequality (in the case of this laboratory experiment, by burning other people's money). Breza, Kaur, and Shamdasani (2015) found similarly that when workers do not understand why their peers are paid more, they will reduce output and increase absenteeism; conversely, when the inequality is understood to be due to higher effort, the negative outcomes are reduced. The broadest claim regarding the harmful effects of inequality comes perhaps from Ku and Salmon (2012), who found that inequality can cause a discouragement effect among workers at the bottom of the income distribution, which can entrench that inequality, with negative consequences both for the individuals affected and the economy as a whole.

Other research found pay dispersion to be positively linked to individual and team performance. For example, Shaw and Gupta's (2007) study of truck drivers found that pay dispersion was negatively related to turnover as long as the rationale for it was communicated well. The importance of communication may be generalizable to other policies that can be divisive. On the other hand, contrasting the Bloom (1999) and the Shaw and Gupta (2007) studies illustrates the difficulties of attempting to generalize. The first study found a negative link between pay variation and individual and group outcomes, possibly because of extreme bidding competition for some players which drove high variation in an environment that is highly cooperative; the latter study found the opposite in an environment where such bidding for stars is highly unlikely, thus resulting in lower pay variation in an environment where there is not much need for team cooperation.

Both of the above studies looked at horizontal pay variation. As an example of vertical pay variation across organizational levels, the Bloom and Michel (2002) study looked at a sample of managers and found pay dispersion to be negatively related to tenure; this was surprising even to the authors, who were guided in their hypothesizing by tournament theory. And yet, it is difficult to interpret these results, because managerial turnover was also influenced by the external labor market—they may have sought better opportunities elsewhere. Heyman (2005) did find a positive association between managerial pay dispersion and firm profits, albeit in the potentially different labor market of Sweden. This suggests rather strongly the importance of considering the larger labor market when analyzing the outcomes of pay variation; it may be that tournament theory does apply to vertical pay variation once the employees' employment options outside the

company are taken into account. Assuming a good employee is well paid, he or she may be able to use the higher pay as a selling point at his or her next job, since high compensation may be interpreted as a signal of ability; in such a situation, high pay dispersion may be good for the employees, but not for the company which is now faced with the turnover costs of replacing a good employee.

Another possibility is that high pay dispersion will be instrumental in retaining employees: why go elsewhere when one's own company pays well above market? Lastly, to illustrate the complexities of managing pay variation, if high pay dispersion were used to retain high performers, and other companies did that, would that not lead to ratcheting? This is a familiar phenomenon in Silicon Valley, where companies regularly poach each other's employees with signing bonuses in the six figures.

The lack of consistency in outcomes in the studies described above is not surprising since, as Gupta et al. (2012, p. 1) put it: "Vertical pay differences *across* jobs are fundamentally different from horizontal differences among employees *within* the same job—they have different etiology and different dynamics. It is hardly surprising, then, that pay variation research yields inconsistent results."

The differences in the outcomes of pay dispersion underline the importance of the antecedents involved. It is important to understand why the pay variation exists, the workers' perceptions of it, and how their acceptance or rejection of it shapes the outcomes in question. As Gupta and Shaw (2014) put it: "At this point, it is quite clear that pay dispersion per se is neither good nor bad. Rather, it is the factors that dispersion is based on (performance, seniority, politics, etc.), the proper communication of pay information to employees, the workplace structures, etc., that determine whether pay

dispersion is beneficial or harmful” (2014: 3). This dispersion in outcomes also suggests the importance of considering moderators, such as employee stock ownership.

Employee Stock Ownership

Employee stock ownership is a form of profit sharing that can be used as part of high-performance work systems (HPWSs) (Becker & Huselid, 1998). Its likely effectiveness has been questioned through the theoretical free-rider or 1/N problem, as discussed by Weitzman and Kruse (1990). The 1/N problem states that if an employee works harder, or undertakes anti-shirking activities, this worker will have to divide the reward with the number (“N”) of employees in his or her group, so will receive only 1/N of the full benefit of the activity; thus, it makes sense for the employee to do nothing and simply enjoy the benefits of somebody else’s effort. In practice, this problem may be nullified by feelings of reciprocity and a culture of cooperation fostered by employee ownership, leading employees to punish shirkers (Kruse et al., 2010).

Two theories that take a more positive view of the likely effects of employee ownership are the agency and efficiency wage theories. Jensen and Meckling (1979) described the principal/agent or agency problem as a situation where the principals (shareholders) have different interests than their agents (members of the board of directors, executives, or employees); in fact, every layer further down the corporate hierarchy is an agent for the principals above, in a chain of principal/agent relationships. The agents, as insiders, have better information than the principals, who are often outsiders. The agents may try to enrich themselves at the expense of the principals, and can do so thanks to information asymmetries inherent in their relationship (e.g., employees understand their work better than their bosses, or managers understand the

company better than the shareholders). Employee ownership can be an effective way to lessen this moral hazard problem because when employees become owners their incentives become aligned with those of the owners. While it takes time and effort to build the right culture, the impact of these cultural efforts has been shown to work (see Blasi, Freeman, and Kruse, 2015: chapter 5).

Efficiency wage theory (Akerlof & Yellen, 1986; Katz, 1986; Stiglitz, 1984; Yellen, 1984) is another theoretical argument for how employee ownership can help improve performance. Though the theory does not specify that employee ownership must be involved, stock can be used as a form of above-market compensation, yielding improved employee attitudes and behaviors, and thus improved firm performance and shareholder value. Efficiency wage theory proposes that improvement in firm performance can more than pay for the increased labor costs, thus making the higher wages more “efficient” than the market wage. For example, the efficiencies can include increased anti-shirking behavior (Freeman, Kruse, & Blasi, 2008) which can reduce monitoring costs (Craig, Pencavel, Farber, & Krueger, 1995).

And yet, employee ownership is more than just another form of payment, it is qualitatively different. Kruse, Freeman, and Blasi (2010) found status (namely, the fact of simply being an employee owner) to be important in predicting turnover intention (attitude), suggestion frequency (behavior), and anti-shirking activity (behavior). Weltmann, Kruse, and Blasi (2015) found that the size of the ownership stake had a positive association with employee attitudes; aside from how much stock an employee owned, the status of ownership itself also had a positive association with employee attitudes.

THEORY

As reviewed above, the link between higher pay differentials and improved outcomes is mostly supported in theory (Bartol & Locke, 2000; Lawler III, 1973; Lazear & Rosen, 1981; Locke et al., 1988; Vroom, 1964). Alternatively, compressing pay differentials by paying employees at the low end of the income distribution an efficiency wage has been theorized to enhance cohesiveness (Levine, 1991). Empirical results have been mixed, with some studies lending support to the benefits of higher pay dispersion (e.g., Shaw & Gupta, 2007), and others supporting pay compression (e.g., Bloom & Michel, 2002), with the variation likely due to the different types of pay dispersion investigated and the different dynamics involved in generating outcomes (Gupta et al., 2012). An agency theory framework is used in this study to investigate the moderating effect of employee stock ownership, because both pay differentials and the granting of stock to employees are intended to incentivize employees to improved behaviors, thus aligning the interests of the employees (the agents) with those of the owners (the principals). Pay differentials are meant to elicit improved employee behaviors through higher financial rewards, thus mitigating the agency problem. How that effect might change under conditions of employee ownership is explored below. The research question is: Do pay differentials and the granting of stock to employees work together to align the interests of the agents with those of the principals; alternatively, do pay dispersion and stock ownership undermine each other; or, do they have nothing to do with each other?

Employee Ownership as Moderator

Employee ownership may foster a cooperative environment through various mechanisms, such as anti-shirking behaviors (Kruse et al., 2010). While pay dispersion may increase productivity through increased motivation to obtain that higher pay, feelings of inequity may undermine cooperation; as Levine and Tyson (1990) noted, “Numerous laboratory experiments have found that narrow wage dispersion increases worker cohesiveness and increases productivity”. Such feelings may be counter-productive under conditions of employee stock ownership, which tends to foster cooperation.

A framework for integrating theory and research on employee ownership was offered by Klein (1987), who introduced and tested three models meant to explain the effect of employee ownership on employee attitudes: the intrinsic satisfaction model, the instrumental satisfaction model, and the extrinsic satisfaction model.

The intrinsic satisfaction model suggests that simply being an owner improves attitudes such as job satisfaction and company loyalty. While Klein (1987) did not find evidence to support this model, more recent research (Weltmann et al., 2015) did find a link between the status of employees as owners and improved employee attitudes, possibly through the mechanism of psychological ownership (Pierce, Rubenfeld, & Morgan, 1991; Pierce, Kostova, & Dirks, 2001).

The instrumental satisfaction model was supported; it suggests that employee ownership improves employee commitment as long as the company offers employees opportunities to participate in decision making. This view fits with the literature on High Performance Work Systems (HPWS), which shows how employee involvement and

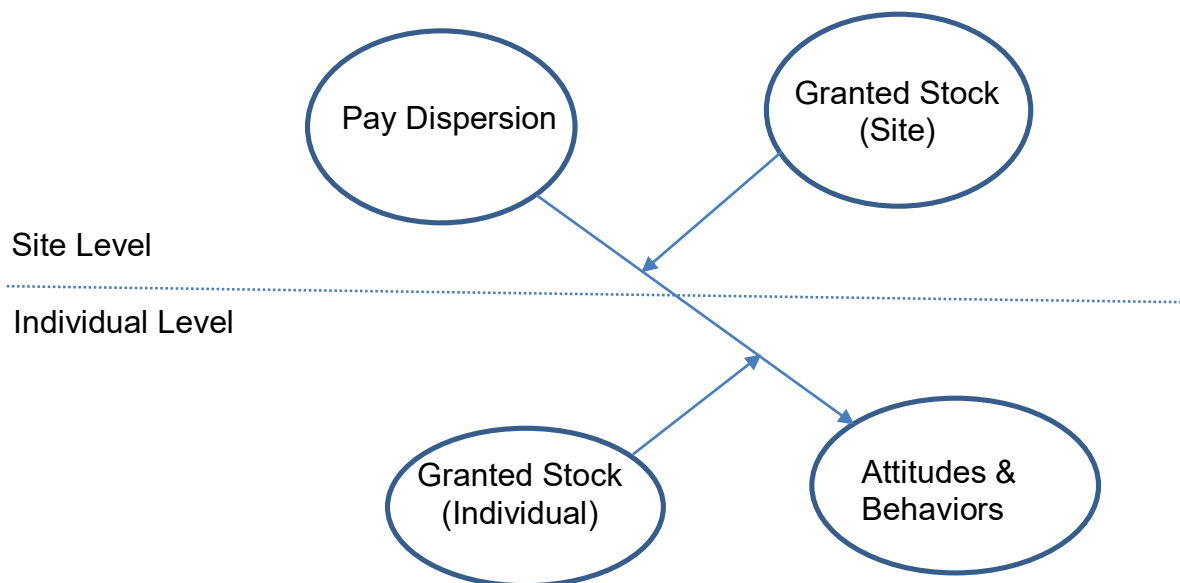
decision making make employee ownership more effective for individuals and firms (Kruse et al., 2010).

The extrinsic satisfaction model was also supported; it suggests that financial rewards motivate employees, increasing organizational commitment. This is supported by research linking the size of employees' financial stakes to their attitudes (Kruse et al., 2010; Weltmann et al., 2015). It is also consistent with agency theory (Eisenhardt, 1989; Jensen & Meckling, 1976), which explains how stock ownership aligns the interests of the employees with those of the owners by having a common purpose: firm performance as reflected in the price of the stock both groups own. This is achieved through the employees' improved behaviors. Whether an employee owns a little or a lot, that incentive is there, though more is better

Similarly, the opportunity for higher financial rewards in the context of higher pay dispersion can be motivational, as suggested by tournament theory, expectancy theory, and goal-setting theory. The difference is that, while both higher pay and higher stock ownership can be motivational, and being at the low end of the compensation distribution can be demotivating, employee stock ownership is likely to instill a sense of psychological ownership whose effect is theorized here to be stronger than the effect of higher pay. Therefore, while stock ownership may reinforce the behaviors of employees motivated by the opportunity of higher pay, it may counter the negative motivational effects of feeling underpaid relative to one's peers. That is, if an employee is working hard to get a higher salary, that employee may work even harder when granted stock, whereas an employee demotivated by a sense of inequity may yet apply oneself at the thought that he/she owns stock whose value may improve thanks to hard work. Employee

ownership can affect the strength (reinforce the effort towards higher pay) and direction (motivate workers who may otherwise be demotivated by feelings of inequity) of the relationship between pay dispersion and outcomes, which means that employee ownership moderates that relationship according to the definition provided by Baron and Kenny (1986). Furthermore, a group-level effect is hypothesized, because employee owners working together with their fellow employee owners may create a sense of common purpose and help instill a sense of equity, fairness, and cooperation (Kruse et al., 2010); alternatively, if only a small fraction of a group own stock, the positive effects associated with stock ownership may suffer if most of the employees do not own stock. The group-level effect is hypothesized to be a size-of-stake effect, measured by average level of stock ownership in the group. The status effect, how many members of the group own stock as measured by percent of group that own stock, is used as a robustness check for the size-of-stake effect. Figure 1 illustrates the proposed model:

Figure 1.



Outcomes

Both pay dispersion and employee ownership affect employee attitudes and behaviors. Separate studies on employee ownership and pay dispersion have in fact looked at the same outcome, namely employee turnover: Shaw and Gupta (2007) studied turnover among truck drivers, while Kruse et al. (2010) studied a wide range of individual and firm outcomes, such as turnover, at a set of companies in a number of industries, namely manufacturing, service, hitech, and finance.

A key area where pay variation and employee ownership overlap and interact is cooperation. Employee ownership, implemented as part of high-performance policies, encourages a cooperative environment, as evidenced by research into the effect of employee ownership on outcomes such as anti-shirking activity (Kruse et al., 2010). The effects of pay variation are more nuanced: depending on a range of factors, such as an employee's pay relative to one's peers, the outcomes may be positive or negative, due to feelings of inequity undermining cooperation. While both higher pay and higher stock ownership have been associated with improved outcomes, the demotivating aspects of perceived inequity may be countered by the motivating aspects of owning stock in the company.

The outcomes investigated in this study have been linked to firm performance and have been explored in the employee ownership literature (Kruse et al., 2010). Those outcomes are: job satisfaction, loyalty to the company, company fairness, willingness to work hard (not shirking), intention to quit, absenteeism, and anti-shirking behavior. The pay dispersion literature has also studied: job satisfaction (Card et al., 2012; Pfeffer & Langton, 1993), loyalty (Lee & Whitford, 2008), company fairness (Greenberg, 2003),

shirking behavior (Berri & Krautmann, 2006), turnover (Bloom & Michel, 2002; Shaw & Gupta, 2007) turnover intention (Card et al., 2012), absenteeism (Torre, Pelagatti, & Solari, 2015), and anti-shirking behavior (Drago & Garvey, 1998).

Hypotheses

Hypothesizing was guided by the theorized effects that pay variation and employee ownership can have on cooperation within the framework of agency theory. The hypotheses have a common structure. Hypotheses 1x cover horizontal pay dispersion, hypotheses 2x cover vertical pay dispersion across job types, and hypotheses 3x cover vertical pay dispersion for managers. For each type of pay dispersion hypotheses xA cover the status effect of employee stock ownership and hypotheses xB cover the size-of-stake effect of employee stock ownership at the individual level, whereas hypotheses xC cover the status effect of employee ownership and xD cover the size-of-stake effect at the group level. That is, the moderating effects of status and size-of-stake on the outcomes of three types of dispersion were investigated at the individual and group level. Figure 2 illustrates the structure of the hypotheses:

Figure 2.

Level	Hypotheses	1. Horizontal Pay Dispersion	2. Vertical Pay Dispersion	3. Managerial Pay Dispersion
Individual	A. Status Effect	1A	2A	3A
	B. Size-of-Stake Effect	1B	2B	3B
Site	C. Status Effect	1C	2C	3C
	D. Size-of-Stake Effect	1D	2D	3D

Horizontal pay dispersion (within job types). Theory and empirical studies have had mixed results regarding whether pay dispersion is better than pay compression. Pay differentials may be intended by the company to incentivize, but they can also demotivate through feelings of inequity. Several studies that found positive associations between higher pay dispersion and outcomes were based on individual pay-for-performance systems. Lazear's (2000) findings that pay-for-performance (and the associated pay differentials) increase performance were in the context of piece rate work, which created a strong link between higher pay and higher *individual* performance; none of the professions studied here, including sales people and managers, are likely to work in such isolation. Shaw and Gupta's (2007) findings of a negative association between pay dispersion and quit patterns of good performers was in the context of truck drivers, who also tend to work by themselves.

Equity theory is more likely to be relevant in groups or teams with similar job types in which employees can more easily observe the performance and rewards of their fellow workers; in such work environments, pay compression should improve employee attitudes through improved cohesiveness (Levine & Tyson, 1990). Agency theory and psychological ownership theory suggest that attitudes should improve as employee efforts become linked to rewards. Employee ownership would be expected to increase the sense of equity by recognizing and rewarding employees based on their common efforts. Thus, the interaction between lower pay dispersion and employee stock ownership should be a positive one.

Hypothesis 1A: Lower horizontal pay dispersion within job types improves attitudes and behaviors more when individual employee stock ownership is present than when it is not present.

Hypothesis 1B: Lower horizontal pay dispersion within job types improves attitudes and behaviors more when individuals have a larger employee stock ownership stake.

Hypothesis 1C: Lower horizontal pay dispersion within job types improves attitudes and behaviors more when a higher percentage of the group own stock.

Hypothesis 1D: Lower horizontal pay dispersion within job types improves attitudes and behaviors more when the average group employee stock ownership stake is larger.

Vertical pay dispersion across job types. For this type of pay dispersion, pay inequality may be more acceptable than in the case of similar job types (e.g., a nurse may accept a doctor's higher pay as legitimate). Whether pay differentials are accepted as legitimate by employees may depend on whether they can see the work of others and deem it worthy of the compensation; if the efforts of others are observable, significant levels of pay dispersion may be accepted as legitimate even when the work is quite interdependent (Shaw, 2014). And yet, accepting such pay differentials is not the same as being motivated by them; therefore, it is likely that inequity would still be present, but perhaps not as much as in the case of job types being similar. The same mechanisms that apply to horizontal pay dispersion are theorized to apply to vertical pay dispersion across job types, but the effects may be attenuated; if, for example, significant results were to be

found for production employees, when analyses are done for all employees, the effects should be attenuated because production employees are more likely to compare their salaries to their peers who are other production employees rather than to employees involved in administrative support or managers. That is, whatever effects are found within a group should become smaller when analyses are done across groups, but those effects should still be there: improved attitudes and behaviors when pay dispersion is lower. Employee ownership should further improve attitudes and behaviors.

Hypothesis 2A: Lower vertical pay dispersion across job types improves attitudes and behaviors more when individual employee stock ownership is present than when it is not present.

Hypothesis 2B: Lower vertical pay dispersion across job types improves attitudes and behaviors more when individuals have a larger employee stock ownership stake.

Hypothesis 2C: Lower horizontal pay dispersion across job types improves attitudes and behaviors more when a higher percentage of the group own stock.

Hypothesis 2D: Lower vertical pay dispersion across job types improves attitudes and behaviors more when the average group employee stock ownership stake is larger.

Pay dispersion across organizational hierarchies (managers). Tournament theory suggests that managers will be motivated by pay differentials. When pay dispersion is vertical for organizational hierarchies, namely, referring only to managers at

different levels who have different pay, tournament theory, goal-setting theory, and expectancy theory suggest that greater pay dispersion will be motivational for them. When managerial employees move into a more hierarchical work environment, such as that of a corporate hierarchy, the attitudes of inequity common in a more “horizontal” environment may be replaced by more competitive attitudes, the kind that would justify and even welcome greater dispersion in rewards. The types of personalities that would seek, survive, and even prosper in such an environment may play a role as well. To the extent that opportunities for stock ownership are tied to pay and organizational level, employee stock ownership should reinforce this effect as managers may be more likely to tolerate and even welcome inequity given a chance to share in the benefits of the firm’s performance. Stock ownership should increase the size of the tournament prize by increasing the value of stock ownership on top of fixed pay, thus incentivizing managers to be more tolerant of dispersion in fixed pay.

Hypothesis 3A: Higher vertical pay dispersion among managers improves attitudes and behaviors more when stock ownership is present than when it is not present.

Hypothesis 3B: Higher vertical pay dispersion among managers improves attitudes and behaviors more when individuals have a higher stock ownership stake.

Hypothesis 3C: Higher vertical pay dispersion among managers improves attitudes and behaviors more when a higher percentage of the group own stock.

Hypothesis 3D: Higher vertical pay dispersion among managers improves attitudes and behaviors more when the average group employee stock ownership stake is larger.

To summarize the interactions hypothesized above, lower pay dispersion will interact positively with employee stock ownership for both horizontal pay dispersion (H1A, H1B, H1C, and H1D) and vertical pay dispersion by job type (H2A, H2B, H1C, and H2D), while higher pay dispersion by organizational hierarchy should interact positively with employee stock ownership (H3A, H3B, H3C, and H3D).

DATA AND METHODS

The data came from the National Bureau of Economic Research (NBER) dataset and were collected over the years 2002-2006 (Kruse et al., 2010) from companies that used some type of broad-based shared capitalism program. The data consist of survey responses from online and paper surveys at fourteen companies with over 40,000 employees at over 300 work sites. The data were edited in the following manner: a) some companies had locations outside the U.S., so to control for cultural effects, only sites in the U.S. were analyzed; b) to ensure statistical significance, data were used only from sites in which at least ten employees in each facility responded for each category analyzed (e.g., production employees, managers, etc.); c) three job types, customer service employees, engineers, and scientists, were omitted because there were too few employees within each job type at particular sites to calculate pay dispersion; d) employees without salary data were omitted, since pay dispersion could not be calculated; e) employees who have been at their current company less than a year are not

likely to be particularly well-aware of their colleagues' compensation and thus be affected by that, so they were omitted as well.

This left 21,953 employees at 255 work sites at eleven companies (three companies had too few employees to contribute to the final sample after the data cleaning detailed in the previous paragraph). The employees were grouped into eight occupations, with the number in each shown: production (9,353), administrative support (1,349), professional/technical (6,781), sales (1,186), customer service (477), engineering (462), scientists (42), and management (3,060). As mentioned before, customer service, engineering, and scientist employees were omitted. Therefore, production, administrative support, professional/technical, and sales employees were used to calculate pay dispersion horizontally within each occupation and vertically across the four occupations. Managers were analyzed according to vertical pay dispersion.

Of those 21,953 employees, 6,638 were female, 14,337 were male, and 978 did not provide that information; 17,659 were Caucasian, 917 were African American, 771 were Hispanic, 1,188 were Asian, 223 were Native Americans, and 930 did not provide that information. Also, 1,197 employees were disabled, while 389 did not provide that information. Regarding education, 5,770 employees had a high school education or less, 5,252 employees had some college education but no degree, 1,980 had an associate degree in college, 5,545 had a bachelor's degree, 2,626 had a master's degree, 156 had a professional school degree, and 158 had a doctorate degree, while 466 employees did not provide information regarding their education.

Employees answered a survey with nearly eighty questions, which covered areas such as job and demographic information, income questions which covered wages,

bonuses, and profit sharing, as well as attitudes and behaviors towards their co-workers and the company.

Pay dispersion is a form of disparity, which is one of three forms of diversity, with the other two being separation (e.g., differences in opinion) and variety (e.g., differences in kind or category) (Harrison & Klein, 2007). The appropriate measures for disparity, and consequently for pay dispersion, are the Gini coefficient and the coefficient of variation (CV). One aspect of the CV is its sensitivity to sample size; given that the groups analyzed varied in size from a few to over 1,800, with many groups containing in the hundreds of employees, it is a relevant limitation. While preference for either the Gini or the CV varies with the social science considered (e.g., the Gini is used more in organizational theory, while the CV is used more in organizational behavior), here the Gini was used for measuring pay dispersion due to its lower sensitivity to sample size, and the CV was used as a robustness check. The Gini ranges in value from 0 to 1; the CV ranges in value from 0 to 2, and was therefore standardized to a range of 0 to 1, with the measure for standardized dispersion $SD = CV/[2(1-1/n)]$, as recommended by Martin and Gray (1971).

The dependent variables (attitudes and behaviors) were regressed on the independent variables (the Gini coefficient for pay dispersion and stock-ownership related variables), the moderator variables, the interaction terms, and the controls (demographic variables). Since position on the distribution of pay within a group may matter (lower paid employees may feel inequity), a dummy was used to control for whether an employee's pay is above or below the mean for the group in which the pay dispersion is calculated.

Some of the variables, such as the controls, were at the individual level, while other variables, such as the Gini coefficient or the coefficient of variation, were at the group level; therefore, multilevel regression analysis was used. Since the model had both random effects (shared errors within the site) as well as fixed effects (the fixed means for each site), a mixed effects model was used. The Stata commands used were “mixed” (multilevel mixed-effects linear regression) for the continuous dependent variables representing days absent and anti-shirking behavior, while “meoprobit” (multilevel mixed-effects ordered probit regression) was used for the discrete dependent variables representing job satisfaction, loyalty, company fairness, willingness to work hard, and turnover intention.

Dependent Variables

Job satisfaction. Job satisfaction was assessed with the item “How satisfied are you in your job?” (reverse scored) (1 = *Completely satisfied*, 2 = *Very satisfied*, 3 = *Fairly satisfied*, 4 = *Neither satisfied nor dissatisfied*, 5 = *Fairly dissatisfied*, 6 = *Very dissatisfied*, 7 = *Completely dissatisfied*).

Loyalty to the company. Loyalty was assessed with the item “How much loyalty would you say you feel toward the company you work for as a whole?” (reverse scored) (1 = *A lot*, 2 = *Some*, 3 = *Only a little*, 4 = *No loyalty at all*).

Company fairness. Company fairness was assessed with the item “Overall, this company is fair to its employees.” (1 = *Strongly disagree*, 7 = *Strongly agree*).

Willingness to work hard (not shirking). Shirking was assessed with the item “To what extent do you agree or disagree with this statement? ‘I am willing to work

harder than I have to in order to help the company I work for succeed.” (reverse scored)
(1 = *Strongly agree*, 2 = *Agree*, 3 = *Neither agree nor disagree*, 4 = *Disagree*, and 5 = *Strongly disagree*).

Intention to quit. Turnover intention was assessed with the item “How likely is it that you will decide to look hard for a job with another organization within the next twelve months?” (1 = *Not at all likely*, 2 = *Somewhat likely*, 3 = *Very likely*, and 4 = *Already looking*).

Absenteeism. The number of days the employee was absent was assessed with the item “About how many days have you been absent from work in the last 6 months (not counting vacation)?”

Anti-shirking behavior. Anti-shirking behavior was assessed using 4-item measure which consisted of answers to the question “If you were to see a fellow employee not working as hard or well as he or she should, how likely would you be to:”; the items were “Talk directly to the employee”, “Speak to your supervisor or manager”, “Talk about it in a work group or team”, and “Do nothing” (1 = *Not at all likely*, 2 = *Not very likely*, 3 = *Somewhat likely*, 4 = *Very likely*) (The Cronbach’s alpha for the scale was .71).

Independent Variables

Pay dispersion. The Gini coefficient (and the coefficient of variation used for robustness checks) by facility was calculated using the question: “Approximately, what was your annual base pay [last year] (excluding any bonuses and commissions) BEFORE taxes and deductions? (Feel free to round off the number or make a close estimate.)”

Individual employee ownership dummy. The moderation effect of any individual employee stock ownership (the “status” effect) was measured with a dummy variable which was coded as “1” for any stock granted and “0” for no stock granted.

Individual employee ownership stake. The moderation effect of the level of individual employee stock ownership (the “size-of-stake” effect) was calculated as the total stock granted by the company to the employee divided by the employee’s tenure to obtain an estimate of the value of stock granted to the employee each year.

Site employee ownership stake. The moderation effect of group employee stock ownership was calculated as the average of all the individual yearly stock grants for that work site; i.e., the individual “size-of-stake” moderators were averaged for that site.

Above average pay dummy. A dummy was generated to reflect whether an employee’s annual wages were above (1) or below (0) the mean of the group for which the pay dispersion was calculated (e.g., calculating horizontal pay dispersion for production people at a particular facility).

To test interactions with pay dispersion, interaction terms were created by multiplying the above variables by the Gini coefficient for that site or the coefficient of variation for the robustness check.

Control Variables

The large sample size allows the use of a wide range of demographic and job variables as controls. The following controls were used: gender, age, age squared, tenure, tenure squared, weekly hours worked, annual wage including overtime, and dummies for education (some college but no degree, associate degree, bachelor degree, and graduate

degree), race and ethnicity (Hispanic, Black, Asian, and Native), disability status, supervisory role, paid hourly, receipt of individual performance bonus, income above site mean, employee involvement, and training. A dummy was used to account for whether the income was below or above the group mean, because position of income on the distribution matters to feelings of inequity and consequent outcomes (Zenger, 1992).

RESULTS

The analysis was done for seven attitudinal and behavioral outcomes: five attitudinal outcomes (job satisfaction, company loyalty, company fairness, willingness to work hard, and turnover intention) and two behavioral outcomes (absenteeism and anti-shirking activity). The analysis was done for horizontal dispersion (each of four professions: production, administrative support, professional/technical, and sales), vertical dispersion across job types, and vertical dispersion across organizational hierarchies.

Eight models were analyzed. Model 1 examined the direct effect of pay dispersion on outcomes; Model 2 examined the direct effect of individual stock ownership (status) on outcomes with pay dispersion as a control; Model 3 examined the moderation effect of status on the outcomes of pay dispersion; Model 4 examined the direct effect of the amount of individual stock ownership (size-of-stake) on outcomes with pay dispersion as a control; Model 5 examined the moderation effect of the level of stock ownership on outcomes; Model 6 examined the direct effect of the average level of stock ownership in a group on outcomes with pay dispersion as a control; Model 7 examined the moderation effect of the average level of stock ownership in a group on outcomes; and Model 8 was

the full model. The models were tested with the following regression equations, all run as OLS models:

Model 1: $Y_i = b_0 + b_1 * \text{Gini} + b_{i...j} * (\text{controls})$

Model 2: $Y_i = b_0 + b_1 * \text{Gini} + b_2 * (\text{EO dummy}) + b_{i...j} * (\text{controls})$

Model 3: $Y_i = b_0 + b_1 * \text{Gini} + b_2 * (\text{EO dummy}) + b_3 * \text{Gini} * (\text{EO dummy}) + b_{i...j} * (\text{controls})$

Model 4: $Y_i = b_0 + b_1 * \text{Gini} + b_2 * (\text{EO stake}) + b_{i...j} * (\text{controls})$

Model 5: $Y_i = b_0 + b_1 * \text{Gini} + b_2 * (\text{EO stake}) + b_3 * \text{Gini} * (\text{EO stake}) + b_{i...j} * (\text{controls})$

Model 6: $Y_i = b_0 + b_1 * \text{Gini} + b_2 * (\text{site EO stake}) + b_{i...j} * (\text{controls})$

Model 7: $Y_i = b_0 + b_1 * \text{Gini} + b_2 * (\text{site EO stake}) + b_3 * \text{Gini} * (\text{site EO stake}) + b_{i...j} * (\text{controls})$

Model 8: $Y_i = b_0 + b_1 * \text{Gini} + b_2 * (\text{EO dummy}) + b_3 * \text{Gini} * (\text{EO dummy}) + b_4 * (\text{EO stake}) + b_5 * \text{Gini} * (\text{EO stake}) + b_6 * (\text{site EO stake}) + b_7 * \text{Gini} * (\text{site EO stake}) + b_{i...j} * (\text{controls})$

“ Y_i ” denotes each one of seven outcome variables: job satisfaction, loyalty, company fairness, willingness to work hard, turnover intention, days absent, and anti-shirking behavior. The regressions were run for the whole sample and separately by four job types: production, administrative support, professional/technical, and sales. They were also run for managers only. All the regressions were run separately with the coefficient of variation instead of the Gini for robustness checks.

Table 1 displays descriptive statistics and correlations. Tables 2 to 8 display only the full models for each outcome variable. Table 9 displays all the significant results. Tables 10 to 51 in Appendix 1 display all the models for each type of dispersion. Some models showed moderately significant results, which disappeared in the fully-controlled model; therefore, the results will be reported from the tables with the full models.

Table 1: Descriptive Statistics and Correlations

All Job Types	Mean	Std. Dev.	Min	Max	1	2	3	4	5	6	7
Dependent Variables											
1. Job satisfaction	4.90	1.31	1.00	7.00	–						
2. Loyalty	3.23	0.83	1.00	4.00	0.52	–					
3. Company fairness	4.55	1.66	1.00	7.00	0.45	0.47	–				
4. Willingness to work hard	3.91	0.89	1.00	5.00	0.35	0.43	0.33	–			
5. Turnover intention	1.57	0.85	1.00	4.00	-0.50	-0.45	-0.36	-0.23	–		
6. Days absent	1.99	8.57	0.00	180.00	-0.04	-0.04	0.00	-0.02	0.02	–	
7. Anti-shirking behavior	1.12	1.06	-4.00	4.00	0.15	0.19	0.13	0.21	-0.08	-0.02	–
Independent Variables											
8. Gini coefficient for wage dispersion	0.18	0.04	0.06	0.38	0.05	0.05	0.05	0.10	-0.01	-0.03	0.06
9. Coefficient of variation for wage dispersion	0.22	0.15	0.06	1.99	0.00	-0.03	-0.02	0.02	0.01	-0.03	0.01
10. Individual status dummy	0.69	0.46	0.00	1.00	0.02	0.10	0.11	0.05	-0.09	-0.01	0.03
11. Individual status interaction with dispersion	0.12	0.09	0.00	0.38	0.04	0.11	0.12	0.08	-0.09	-0.02	0.05
12. Individual size-of-stake	864.56	3020.10	0.00	190000.00	0.02	0.06	0.06	0.04	-0.01	-0.02	0.00
13. Individual size-of-stake interacted with dispersion	162.88	668.92	0.00	43888.24	0.02	0.05	0.06	0.05	-0.01	-0.02	0.00
14. Site status percent owners	9526.84	10051.64	226.49	70190.00	-0.02	-0.01	-0.02	0.03	0.03	-0.01	0.01
15. Site status interacted with dispersion	1653.24	1793.97	52.32	17124.34	-0.01	-0.01	-0.01	0.05	0.03	-0.01	0.02
16. Site size-of-stake average	882.45	713.14	0.00	2796.61	0.05	0.13	0.14	0.09	-0.07	-0.03	-0.02
17. Site size-of-stake average interacted with dispersion	167.25	163.01	0.00	645.99	0.06	0.13	0.13	0.10	-0.06	-0.04	0.00
Control Variables											
18. Wages above or below mean dummy	0.08	0.27	0.00	1.00	0.04	0.06	0.07	0.05	-0.04	-0.03	0.02
19. Gender	0.08	0.27	0.00	1.00	0.04	0.06	0.07	0.05	-0.04	-0.03	0.02
20. Age	0.29	0.45	0.00	1.00	0.08	0.09	0.01	0.08	-0.08	0.06	0.02
21. Age squared	43.44	10.52	17.00	80.00	0.09	0.16	0.06	0.02	-0.18	-0.01	0.00
22. Education: associate degree	1997.49	917.29	289.00	6400.00	0.09	0.15	0.06	0.02	-0.19	-0.01	-0.01
23. Education: bachelor or graduate degree	0.11	0.31	0.00	1.00	-0.02	0.00	-0.01	0.00	0.03	-0.03	-0.01
24. Race: not white	0.22	0.41	0.00	1.00	-0.01	0.08	0.12	0.10	0.02	-0.05	0.00
25. Disabled	0.14	0.35	0.00	1.00	0.03	-0.02	-0.02	0.06	0.06	-0.01	0.03
26. Hourly pay category	0.07	0.25	0.00	1.00	-0.05	-0.05	-0.06	-0.05	0.03	0.16	-0.02
27. Supervisor role	0.70	0.46	0.00	1.00	-0.05	-0.18	-0.18	-0.17	0.05	0.05	-0.04
28. Tenure in years	0.17	0.37	0.00	1.00	0.05	0.09	0.08	0.09	-0.04	-0.03	0.20
29. Tenure squared	12.25	9.08	1.00	49.50	0.02	0.08	-0.04	-0.03	-0.14	-0.03	0.00
30. Weekly hours worked	232.46	310.70	1.00	2450.25	0.03	0.08	-0.02	-0.02	-0.14	-0.03	0.00
31. Wages including overtime	44.31	6.53	0.00	100.00	0.02	0.08	0.05	0.09	-0.01	-0.06	0.10
32. Performance-related pay	10.65	0.42	8.52	13.20	0.04	0.11	0.11	0.09	-0.05	-0.05	0.03
33. Employee involvement	0.01	0.06	0.00	1.11	0.07	0.10	0.10	0.09	-0.05	-0.02	0.03
34. Employee training dummy	0.33	0.47	0.00	1.00	0.09	0.12	0.12	0.11	-0.07	-0.04	0.13

Table 1 (continued): Descriptive Statistics and Correlations

All Job Types	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Dependent Variables														
1. Job satisfaction														
2. Loyalty														
3. Company fairness														
4. Willingness to work hard														
5. Turnover intention														
6. Days absent														
7. Anti-shirking behavior														
Independent Variables														
8. Gini coefficient for wage dispersion	–													
9. Coefficient of variation for wage dispersion	0.70	–												
10. Individual status dummy	-0.09	-0.19												
11. Individual status interaction with dispersion	0.22	-0.02	0.92	–										
12. Individual size-of-stake	0.03	-0.03	0.19	0.20	–									
13. Individual size-of-stake interacted with dispersion	0.08	-0.01	0.16	0.20	0.99	–								
14. Site status percent owners	-0.21	-0.15	0.05	-0.02	-0.01	-0.03	–							
15. Site status interacted with dispersion	0.09	0.02	0.04	0.08	-0.01	-0.01	0.91	–						
16. Site size-of-stake average	0.18	-0.15	0.31	0.38	0.21	0.21	-0.08	-0.09	–					
17. Site size-of-stake average interacted with dispersion	0.38	-0.02	0.25	0.39	0.20	0.22	-0.15	-0.09	0.97	–				
Control Variables														
18. Wages above or below mean dummy	0.12	-0.01	0.08	0.12	0.15	0.15	-0.02	0.01	0.27	0.28	–			
19. Gender	0.07	0.07	-0.05	-0.03	-0.07	-0.06	-0.02	0.00	-0.10	-0.07	-0.11	–		
20. Age	-0.07	-0.06	0.11	0.09	0.06	0.05	-0.01	-0.01	0.05	0.04	0.12	0.00	–	
21. Age squared	-0.06	-0.06	0.10	0.09	0.05	0.05	-0.01	-0.01	0.05	0.04	0.12	0.00	0.99	–
22. Education: associate degree	-0.01	-0.01	0.03	0.03	-0.01	-0.01	0.02	0.02	0.01	0.00	-0.03	-0.04	0.02	0.02
23. Education: bachelor or graduate degree	0.14	-0.01	0.15	0.19	0.15	0.14	0.04	0.06	0.35	0.35	0.27	-0.10	-0.05	-0.05
24. Race: not white	0.13	0.08	-0.05	-0.01	-0.03	-0.02	0.00	0.03	-0.01	0.01	0.00	0.05	-0.08	-0.08
25. Disabled	-0.04	-0.01	-0.03	-0.04	0.01	0.01	0.00	-0.01	-0.06	-0.06	-0.03	0.04	0.09	0.09
26. Hourly pay category	-0.12	0.04	-0.20	-0.23	-0.17	-0.16	-0.09	-0.09	-0.37	-0.37	-0.25	0.02	0.00	0.00
27. Supervisor role	0.06	0.00	0.10	0.12	0.07	0.06	0.03	0.05	0.06	0.06	0.15	-0.08	0.04	0.03
28. Tenure in years	-0.14	-0.09	0.16	0.11	0.02	0.01	-0.01	-0.04	0.05	0.01	0.12	-0.06	0.50	0.48
29. Tenure squared	-0.12	-0.07	0.11	0.07	0.01	0.01	-0.01	-0.03	0.04	0.01	0.11	-0.06	0.47	0.47
30. Weekly hours worked	0.08	-0.03	0.10	0.13	0.09	0.09	-0.04	-0.03	0.24	0.24	0.00	-0.17	-0.03	-0.03
31. Wages including overtime	0.03	-0.11	0.26	0.28	0.20	0.19	-0.01	-0.01	0.44	0.41	0.51	-0.33	0.16	0.14
32. Performance-related pay	0.10	-0.01	0.04	0.06	0.12	0.12	-0.02	-0.02	0.28	0.29	0.13	-0.07	0.03	0.03
33. Employee involvement	-0.04	-0.04	0.09	0.07	0.04	0.04	0.05	0.04	0.01	-0.01	0.04	-0.04	0.01	0.01
34. Employee training dummy	0.10	0.02	0.06	0.09	0.06	0.06	-0.03	-0.01	0.15	0.17	0.08	-0.06	-0.04	-0.04

Table 1 (continued): Descriptive Statistics and Correlations

All Job Types	22	23	24	25	26	27	28	29	30	31	32	33	34
Dependent Variables													
1. Job satisfaction													
2. Loyalty													
3. Company fairness													
4. Willingness to work hard													
5. Turnover intention													
6. Days absent													
7. Anti-shirking behavior													
Independent Variables													
8. Gini coefficient for wage dispersion													
9. Coefficient of variation for wage dispersion													
10. Individual status dummy													
11. Individual status interaction with dispersion													
12. Individual size-of-stake													
13. Individual size-of-stake interacted with dispersion													
14. Site status percent owners													
15. Site status interacted with dispersion													
16. Site size-of-stake average													
17. Site size-of-stake average interacted with dispersion													
Control Variables													
18. Wages above or below mean dummy													
19. Gender													
20. Age													
21. Age squared													
22. Education: associate degree	–												
23. Education: bachelor or graduate degree	-0.19	–											
24. Race: not white	0.00	-0.06	–										
25. Disabled	0.01	-0.08	0.01	–									
26. Hourly pay category	-0.01	-0.61	0.08	0.10	–								
27. Supervisor role	0.00	0.16	-0.03	-0.04	-0.20	–							
28. Tenure in years	-0.01	-0.09	-0.07	0.04	-0.03	0.10	–						
29. Tenure squared	-0.01	-0.08	-0.07	0.03	-0.03	0.08	0.96	–					
30. Weekly hours worked	0.02	0.19	-0.03	-0.04	-0.25	0.15	0.01	0.01	–				
31. Wages including overtime	0.03	0.40	-0.05	-0.07	-0.46	0.24	0.24	0.20	0.41	–			
32. Performance-related pay	-0.03	0.24	-0.02	-0.03	-0.25	0.03	0.01	0.00	0.19	0.22	–		
33. Employee involvement	0.02	0.05	-0.02	-0.03	-0.10	0.17	0.07	0.06	0.09	0.13	0.01	–	
34. Employee training dummy	0.01	0.19	0.01	-0.04	-0.21	0.12	-0.02	0.00	0.13	0.14	0.11	0.13	–

Table 2: Job Satisfaction

Job Satisfaction	Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
	Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
Pay Dispersion	-0.0968	6.255	3.855	12.50	-0.331	2.189
	(0.883)	(8.28)	(3.252)	(8.545)	(0.848)	(2.341)
Individual Status Dummy	-0.146	1.123	0.0655	2.481*	-0.123	-0.270
	(0.141)	(0.744)	(0.347)	(1.264)	(0.138)	(0.422)
Individual Status Interaction	0.798	-8.56	-0.792	-11.04	0.568	0.761
	(0.804)	(4.964)	(1.857)	(6.219)	(0.736)	(2.024)
Individual Size-of-Stake	0.0000276	-0.000334	-0.0000556	0.000562*	0.0000280	0.0000324
	(0.0000265)	(0.000378)	(0.0000683)	(0.000279)	(0.0000299)	(0.0000688)
Individual Size-of-Stake Interaction	-0.000122	0.00208	0.000236	-0.00274*	-0.000135	-0.000147
	(0.000112)	(0.00226)	(0.000333)	(0.00135)	(0.000135)	(0.000316)
Site Status Percent Owners	0.000247	-0.0123	0.00359	-0.0238	-0.000337	0.00229
	(0.000969)	(0.0571)	(0.00409)	(0.112)	(0.000543)	(0.00625)
Site Status Interaction	-0.00497	0.211	-0.0214	-0.326	0.00170	-0.0256
	(0.00559)	(0.337)	(0.0251)	(0.487)	(0.00306)	(0.0323)
Site Size-of-Stake Average	-0.0000334	0.0013	0.0000320	0.0000891	-0.0000558	-0.00000858
	(0.000158)	(0.000957)	(0.000256)	(0.000714)	(0.000154)	(0.000157)
Site Size-of-Stake Interaction	0.000308	-0.00565	-0.000390	-0.00363	0.000352	-0.0000398
	(0.000839)	(0.00586)	(0.00144)	(0.00452)	(0.000783)	(0.000726)
N	5357	204	1675	234	8280	1040
Chi-Square	307.2	33.28	139.7	49.33	494.8	92.15
Model Degrees of Freedom	26	26	26	26	26	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Horizontal pay dispersion. Out of four job types, significant results occurred only for sales. The status of ownership was associated with higher job satisfaction as expected, but there was no interaction with pay dispersion. The level of employee stock ownership was also associated with higher job satisfaction, whereas the interaction with higher pay dispersion was negative, thus supporting H1B. Hypotheses H1A, H1C, and H1D were not supported.

Vertical pay dispersion by job type. There were no significant results to report; thus, H2A, H2B, and H2C were not supported.

Vertical pay dispersion by organizational hierarchy. There were no significant results to report for managers; thus, H3A, H3B, and H3C were not supported.

Table 3: Loyalty

Loyalty	Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
	Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
Pay Dispersion	0.744	-3.446	3.450	56.49	1.299	0.778
	(1.125)	(10.45)	(3.154)	(45.43)	(1.064)	(3.451)
Individual Status Dummy	-0.13	0.955	-0.0875	0.942	-0.0720	-0.159
	(0.158)	(0.975)	(0.381)	(1.753)	(0.155)	(0.549)
Individual Status Interaction	1.134	-5.408	0.1000	-7.683	0.749	0.850
	(0.898)	(6.433)	(2.031)	(8.906)	(0.829)	(2.693)
Individual Size-of-Stake	0.0000337	-0.0000842	0.0000418	0.00104	0.0000568	0.0000172
	(0.000037)	(0.000487)	(0.0000799)	(0.000569)	(0.0000388)	(0.0000856)
Individual Size-of-Stake Interaction	-0.000127	0.00106	-0.000173	-0.00488	-0.000239	-0.0000926
	(0.000161)	(0.00309)	(0.000398)	(0.00277)	(0.000177)	(0.000393)
Site Status Percent Owners	0.000232	-0.0966	0.00120	0.0891	-0.000152	-0.00255
	(0.0012)	(0.07)	(0.00393)	(0.170)	(0.000666)	(0.00908)
Site Status Interaction	-0.000971	0.747	-0.0152	-1.127	0.000547	-0.00949
	(0.00693)	(0.418)	(0.0241)	(1.156)	(0.00374)	(0.0464)
Site Size-of-Stake Average	0.00034	0.000298	0.000359	0.00263	0.000339	0.0000579
	(0.000199)	(0.0012)	(0.000257)	(0.00285)	(0.000190)	(0.000211)
Site Size-of-Stake Interaction	-0.00149	-0.000485	-0.00183	-0.0200	-0.00155	-0.000289
	(0.00107)	(0.00753)	(0.00143)	(0.0211)	(0.000970)	(0.000991)
N	5280	192	1605	229	8095	1011
Chi-Square	407	34.17	135.7	27.37	745.4	110.2
Model Degrees of Freedom	26	26	26	26	26	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

There were no significant results to report; thus, none of the hypotheses were supported for any form of dispersion.

Table 4: Company Fairness

Company Fairness	Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
	Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
Pay Dispersion	1.18	20.49*	-1.788	7.790	0.678	7.774***
	(1.224)	(8.116)	(3.263)	(8.533)	(1.133)	(2.357)
Individual Status Dummy	0.0578	0.462	0.326	3.163*	0.0621	0.107
	(0.148)	(0.727)	(0.347)	(1.309)	(0.144)	(0.418)
Individual Status Interaction	-0.0592	-1.444	-2.913	-15.42*	-0.0321	-1.661
	(0.843)	(4.846)	(1.876)	(6.441)	(0.765)	(2.019)
Individual Size-of-Stake	0.0000175	0.000392	-0.0000642	0.000199	0.0000370	0.0000864
	(0.0000263)	(0.00038)	(0.0000735)	(0.000271)	(0.0000299)	(0.0000684)
Individual Size-of-Stake Interaction	-0.0000879	-0.00288	0.000577	-0.000884	-0.000157	-0.000373
	(0.000111)	(0.00226)	(0.000391)	(0.00131)	(0.000135)	(0.000316)
Site Status Percent Owners	0.000379	0.133*	-0.00541	-0.195	-0.000847	0.0144*
	(0.00126)	(0.0567)	(0.00410)	(0.113)	(0.000686)	(0.00622)
Site Status Interaction	-0.00263	-0.659*	0.0274	0.566	0.00361	-0.0776*
	(0.00725)	(0.333)	(0.0252)	(0.489)	(0.00387)	(0.0322)
Site Size-of-Stake Average	0.000378	0.00219*	-0.0000842	0.00111	0.000364	-0.000138
	(0.000209)	(0.000933)	(0.000257)	(0.000716)	(0.000196)	(0.000155)
Site Size-of-Stake Interaction	-0.0013	-0.0135*	0.000393	-0.00815	-0.00159	0.000607
	(0.00115)	(0.00572)	(0.00145)	(0.00453)	(0.00101)	(0.000716)
N	5333	204	1671	233	8249	1039
Chi-Square	284.8	43.95	118.8	53.98	550.9	122.6
Model Degrees of Freedom	26	26	26	26	26	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Horizontal pay dispersion. For administrative support employees, pay dispersion was associated with higher perception of company fairness; also, the status of ownership at the site level was associated with higher perception of company fairness, while the interaction with higher pay dispersion lowered perception of company fairness, thus supporting H1C. Similar results were found at the site level for the size-of-stake effect, thus supporting H1D. For sales employees, the interaction between ownership status and pay dispersion was negative, supporting H1A. Hypothesis H1B was not supported.

Vertical pay dispersion by job type. There were no significant results to report; thus, H2A, H2B, and H2C were not supported.

Vertical pay dispersion by organizational hierarchy. For managers, higher pay dispersion was associated with higher perception of company fairness, as theorized. At the site level, a higher percentage of ownership (the status effect) was associated with a higher perception of company fairness, as theorized, but the interaction with higher pay dispersion was associated with lower perception of company fairness, which ran counter to H3C.

Table 5: Willingness to Work Hard

Willingness to Work Hard	Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
	Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
Pay Dispersion	1.417	24.75**	3.962	10.67	2.147*	6.321*
	(0.874)	(8.971)	(3.085)	(10.06)	(0.853)	(2.559)
Individual Status Dummy	0.0383	1.848*	-0.0619	0.769	-0.119	0.528
	(0.147)	(0.806)	(0.352)	(1.429)	(0.144)	(0.446)
Individual Status Interaction	0.185	-16.95**	0.618	-5.803	0.947	-2.258
	(0.839)	(5.523)	(1.885)	(7.045)	(0.766)	(2.146)
Individual Size-of-Stake	0.0000101	0.00014	0.0000153	-0.0000881	0.0000253	0.0000103
	(0.0000366)	(0.000403)	(0.0000720)	(0.000293)	(0.0000333)	(0.0000726)
Individual Size-of-Stake Interaction	0.0000135	-0.0012	-0.0000910	0.000451	-0.0000999	-0.0000304
	(0.000201)	(0.00241)	(0.000355)	(0.00142)	(0.000151)	(0.000335)
Site Status Percent Owners	0.000718	0.0814	0.00178	-0.0690	0.000207	0.0136*
	(0.000974)	(0.0607)	(0.00378)	(0.121)	(0.000554)	(0.00671)
Site Status Interaction	-0.000555	-0.392	-0.00976	0.115	0.000886	-0.0734*
	(0.00563)	(0.361)	(0.0231)	(0.530)	(0.00312)	(0.0347)
Site Size-of-Stake Average	0.000107	0.00106	0.000236	0.00112	0.000270	-0.000125
	(0.000158)	(0.00101)	(0.000244)	(0.000785)	(0.000156)	(0.000167)
Site Size-of-Stake Interaction	-0.000718	-0.0034	-0.00164	-0.00737	-0.00156*	0.000502
	(0.000837)	(0.00637)	(0.00137)	(0.00504)	(0.000793)	(0.000774)
N	5339	204	1673	234	8263	1044
Chi-Square	271.1	41.82	82.72	29.38	495.4	60.82
Model Degrees of Freedom	26	26	26	26	26	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Horizontal pay dispersion. Significant results occurred for administrative support employees. Higher pay dispersion was associated with higher willingness to work hard, which was the opposite of the effect theorized. However, ownership status had a positive effect on willingness to work hard, as theorized. Furthermore, the interaction between pay dispersion and ownership status had a negative association with willingness to work hard, thus supporting H1A. With no other significant results, hypotheses H1B, H1C, and H1D were not supported.

Vertical pay dispersion by job type. Higher pay dispersion was associated with higher willingness to work hard, which was not as theorized. The interaction of group average stock ownership with pay dispersion was negative, thus supporting H1D. Hypotheses H1A, H1B, and H1C were not supported.

Vertical pay dispersion by organizational hierarchy. For managers, higher pay dispersion was associated with higher willingness to work hard, as theorized. Also, at the site level, a higher percentage of ownership was associated with higher willingness to work hard, but the interaction with pay dispersion was negative, which ran counter to hypothesis H3C. Hypotheses H3A, H3B, and H3D were not supported.

Table 6: Turnover Intention

Turnover Intention	Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
	Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
Pay Dispersion	-2.316	-0.75	-0.559	-35.08	-1.157	-4.383
	(1.326)	(4.337)	(2.421)	(41.47)	(1.208)	(2.840)
Individual Status Dummy	-0.193	-0.596	0.0672	-0.182	-0.223	0.125
	(0.17)	(0.39)	(0.259)	(1.842)	(0.165)	(0.488)
Individual Status Interaction	0.596	3.046	-0.559	-0.0726	0.484	-0.286
	(0.972)	(2.597)	(1.384)	(8.995)	(0.879)	(2.334)
Individual Size-of-Stake	-0.0000264	0.000192	0.000000652	0.0000828	-0.0000218	-0.0000303
	(0.0000376)	(0.000202)	(0.0000514)	(0.000446)	(0.0000382)	(0.0000797)
Individual Size-of-Stake Interaction	0.000133	-0.00108	-0.00000820	-0.000279	0.000134	0.000150
	(0.000155)	(0.0012)	(0.000251)	(0.00216)	(0.000170)	(0.000366)
Site Status Percent Owners	-0.00114	0.0168	0.000977	0.157	0.0000216	-0.0125
	(0.00139)	(0.0303)	(0.00305)	(0.184)	(0.000745)	(0.00744)
Site Status Interaction	0.00954	-0.131	-0.00295	0.0709	0.000711	0.0722
	(0.00796)	(0.178)	(0.0187)	(1.162)	(0.00420)	(0.0385)
Site Size-of-Stake Average	-0.00017	-0.00112*	-0.0000418	-0.00411	-0.000102	0.000164
	(0.00023)	(0.000497)	(0.000190)	(0.00273)	(0.000212)	(0.000186)
Site Size-of-Stake Interaction	0.000513	0.00475	0.000428	0.0293	0.000319	-0.000663
	(0.00125)	(0.00305)	(0.00107)	(0.0201)	(0.00109)	(0.000862)
N	5333	204	1670	233	8249	1040
Chi-Square	379.6	73.87	158.3	31.25	654.2	94.80
Model Degrees of Freedom	26	26	26	26	26	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Horizontal pay dispersion. There was only one significant result to report, which was for administrative support employees.

Higher average stock ownership was associated with lower turnover intention, as theorized. However, due to a lack of any other significant results, none of the hypotheses were supported.

Vertical pay dispersion by job type. There were no significant results to report; thus, H2A, H2B, and H2C were not supported.

Vertical pay dispersion by organizational hierarchy. There were no significant results to report for managers; thus, H3A, H3B, and H3C were not supported.

Table 7: Days Absent

Days Absent	Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
	Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
Pay Dispersion	-15.08**	41.55	-19.76	-9.318	-12.74*	-7.661
	(5.217)	(21.95)	(18.75)	(5.308)	(5.005)	(7.917)
Individual Status Dummy	0.341	1.657	-7.154***	0.576	-0.946	2.786
	(1.118)	(1.967)	(1.912)	(0.879)	(1.038)	(1.451)
Individual Status Interaction	0.18	-16.63	33.40**	-4.757	5.513	-12.66
	(6.249)	(13.13)	(10.27)	(4.269)	(5.471)	(6.957)
Individual Size-of-Stake	0.0000899	0.00111	-0.000174	0.0000483	0.0000253	-0.000364
	(0.000233)	(0.00102)	(0.000380)	(0.000182)	(0.000243)	(0.000239)
Individual Size-of-Stake Interaction	-0.000544	-0.00614	0.000600	-0.000234	-0.000259	0.00166
	(0.000987)	(0.00606)	(0.00185)	(0.000881)	(0.00109)	(0.00110)
Site Status Percent Owners	-0.0181**	0.0115	-0.00642	-0.0430	-0.00961**	-0.00140
	(0.00654)	(0.154)	(0.0239)	(0.0734)	(0.00352)	(0.0213)
Site Status Interaction	0.0860*	-0.378	0.0191	0.560	0.0480*	-0.0145
	(0.0373)	(0.91)	(0.146)	(0.319)	(0.0195)	(0.110)
Site Size-of-Stake Average	-0.000378	0.00245	0.000533	-0.000958*	0.000490	-0.00126*
	(0.00105)	(0.00252)	(0.00148)	(0.000450)	(0.000975)	(0.000545)
Site Size-of-Stake Interaction	0.00294	-0.0201	-0.00527	0.00805**	-0.00222	0.00567*
	(0.00517)	(0.0154)	(0.00831)	(0.00280)	(0.00473)	(0.00252)
N	5298	198	1591	226	8091	1010
Chi-Square	187.4	46.52	113.8	77.91	309.4	59.81
Model Degrees of Freedom	26	26	26	26	26	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Horizontal pay dispersion. For administrative support employees, higher pay dispersion was associated with higher absenteeism, as expected; group ownership status was associated with lower absenteeism, while the interaction with pay dispersion was associated with higher pay dispersion, thus supporting H1C. Hypothesis H1A was supported for professional/technical employees, for whom individual ownership status lowered absenteeism, while the interaction with pay dispersion was associated with higher absenteeism. Hypothesis H1D was supported for sales employees, where group average ownership of stock was associated with

lower absenteeism, while the interaction with higher pay dispersion was associated higher absenteeism. Hypothesis H1B was not supported.

Vertical pay dispersion by job type. Higher pay dispersion was associated with lower absenteeism, which was not as theorized. Site-level ownership status was associated with lower absenteeism, as theorized, while the interaction with higher pay dispersion was associated with higher absenteeism, thus supporting hypothesis H2C. This result is likely due to the results of production employees, which are by far the largest group, being diluted by the other three professions being lumped in with them for the purpose analyzing vertical pay dispersion. Hypotheses H2A, H2B, and H2D were not supported.

Vertical pay dispersion by organizational hierarchy. Higher average stock ownership was associated with lower absenteeism, as theorized, but the interaction with higher pay dispersion was associated with increased absenteeism, which did not support H3D. Hypotheses H3A, H3B, and H3C were not supported.

Table 8: Anti-Shirking Behavior

Anti-Shirking Behavior	Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
	Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
Pay Dispersion	2.125**	4.622	-2.197	5.052	1.443	1.735
	(0.823)	(7.772)	(1.987)	(5.234)	(0.756)	(1.716)
Individual Status Dummy	0.071	0.691	-0.484*	-0.286	0.150	-0.145
	(0.144)	(0.52)	(0.244)	(0.807)	(0.132)	(0.311)
Individual Status Interaction	-0.0438	-6.78	3.246*	1.743	-0.416	1.727
	(0.821)	(3.461)	(1.290)	(3.965)	(0.701)	(1.490)
Individual Size-of-Stake	0.000016	0.000254	0.0000453	0.000179	0.0000217	0.00000683
	(0.0000278)	(0.000263)	(0.0000511)	(0.000170)	(0.0000289)	(0.0000507)
Individual Size-of-Stake Interaction	-0.0000886	-0.000828	-0.000315	-0.000848	-0.000121	-0.0000258
	(0.000118)	(0.00157)	(0.000250)	(0.000823)	(0.000130)	(0.000233)
Site Status Percent Owners	0.00165	-0.00373	0.000245	-0.0206	0.000838	0.00959*
	(0.000932)	(0.0614)	(0.00243)	(0.0696)	(0.000494)	(0.00459)
Site Status Interaction	-0.00838	0.151	0.00421	0.0662	-0.00339	-0.0434
	(0.00537)	(0.384)	(0.0148)	(0.302)	(0.00277)	(0.0237)
Site Size-of-Stake Average	-0.00000947	-0.00032	-0.00000769	0.000603	-0.000228	-0.0000618
	(0.00015)	(0.000829)	(0.000157)	(0.000438)	(0.000140)	(0.000116)
Site Size-of-Stake Interaction	-0.000421	0.00181	0.0000232	-0.00315	0.000768	0.000223
	(0.000782)	(0.00508)	(0.000846)	(0.00275)	(0.000704)	(0.000536)
N	5349	204	1675	233	8273	1039
Chi-Square	382.6	53.99	184.3	33.62	574.0	167.7
Model Degrees of Freedom	26	26	26	26	26	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Horizontal pay dispersion. For production employees, higher pay dispersion was associated with increased anti-shirking behavior, which went against expectations. Due to a lack of other significant results, none of the hypotheses were supported for this job type.

For professional/technical employees, ownership status was associated with lower anti-shirking behavior, which ran counter to theory, while the interaction of ownership status and higher pay dispersion was associated with higher anti-shirking behavior, which was counter to H1A. There were no other significant results for this job type. Thus, H1B, H1C, and H1D were not supported.

Vertical pay dispersion by job type. There were no significant results to report; thus, H2A, H2B, and H2C were not supported.

Vertical pay dispersion by organizational hierarchy. For managers, higher ownership percent at the site level was associated with higher anti-shirking behavior, as theorized. Otherwise, none of the hypotheses were supported.

Table 9a: Combined Results		Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
		H1	H1	H1	H1	H2	H3
		Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
	Pay Dispersion	6. Negative relation to days absent 7. Positive relation to anti-shirking	3. Positive relation to company fairness 4. Positive relation to willingness to work hard			4. Positive relation to willingness to work hard 6. Negative relation to days absent	3. Positive relation to company fairness 4. Positive relation willingness to work hard
	Individual Status Dummy		4. Positive relation to willingness to work hard	6. Negative relation to days absent 7. Negative relation to anti-shirking	1. Positive relation to job satisfaction 3. Positive relation to company fairness		
HA	Individual Status Interaction		4. Negative relation to willingness to work hard	6. Positive relation to days absent 7. Positive relation to anti-shirking	3. Negative relation to company fairness		
	Individual Size-of-Stake				1. Positive relation to job satisfaction		
HB	Individual Size-of-Stake Interaction				1. Negative relation to job satisfaction		
	Site Status Percent Owners	6. Negative relation to days absent	3. Positive relation to company fairness			6. Negative relation to days absent	3. Positive relation to company fairness 4. Positive relation to willingness to work hard 7. Positive relation to anti-shirking
HC	Site Status Interaction	6. Positive relation to days absent	3. Negative relation to company fairness.			6. Positive relation to days absent	3. Negative relation to company fairness 4. Negative relation to willingness to work hard
	Site Size-of-Stake Average		3. Positive relation to company fairness 5. Negative relation to turnover intention		6. Negative relation to days absent	4. Positive relation to willingness to work hard	6. Negative relation to days absent
HD	Site Size-of-Stake Interaction		3. Negative relation to company fairness		1. Positive relation to job satisfaction 6. Positive relation to days absent	4. Negative relation to willingness to work hard	6. Positive relation to days absent

Table 9b: Combined Results		Horizontal Pay Dispersion				Vertical Pay Dispersion	Vertical Pay Dispersion
		H1	H1	H1	H1	H2	H3
		Production	Administrative Support	Professional/ Technical	Sales	Across Job Types	Managers
	Pay Dispersion	6. -15.08** (5.217) 7. 2.125** (0.823)	3. 20.49* (8.116) 4. 24.75** (8.971)			4. 2.147* (0.853) 6. -12.74* (5.005)	3. 7.774*** (2.357) 4. 6.321* (2.559)
	Individual Status Dummy		4. 1.848* (0.806)	6. -7.154*** (1.912) 7. -0.484* (0.244)	1. 2.481* (1.264) 3. 3.163* (1.309)		
HA	Individual Status Interaction		4. -16.95** (5.523)	6. 33.40** (10.27) 7. 3.246* (1.290)	3. -15.42* (6.441)		
	Individual Size-of-Stake				1. 0.000562* (0.000279)		
HB	Individual Size-of-Stake Interaction				1. -0.00274* (0.00135)		
	Site Status Percent Owners	6. -0.0181** (0.00654)	3. 0.133* (0.0567)			6. -0.00961** (0.00352)	3. 0.0144* (0.00622) 4. 0.0136* (0.00671) 7. 0.00959* (0.00459)
HC	Site Status Interaction	6. 0.0860* (0.0373)	3. -0.659* (0.333)			6. 0.0480* (0.0195)	3. -0.0776* (0.0322) 4. -0.0734* (0.0347)
	Site Size-of-Stake Average		3. 0.00219* (0.000933) 5. -0.00112* (0.000497)		6. -0.000958* (0.000450)		6. -0.00126* (0.000545)
HD	Site Size-of-Stake Interaction		3. -0.0135* (0.00572)		6. 0.00805** (0.00280)	4. -0.00156* (0.000793)	6. 0.00567* (0.00252)

Dependent Variables:

(1) Job Satisfaction, (2) Loyalty, (3) Company Fairness, (4) Willingness to Work Hard, (5) Turnover Intention, (6) Days Absent, (7) Anti-Shirking Behavior

Green: As theorized or hypothesized, Red: Counter to theory or hypotheses

DISCUSSION

The discussion will proceed according to the hypotheses, and within each hypothesis the outcome variables will be considered. Table 9 was used for the most convenient reference. One general pattern was that out of 54 cells, about half, only 28, had any significant results. Furthermore, there were seven outcome variables that could be represented in each cell, and yet only one cell had three entries, while the rest had only one or two entries. Out of 378 analyses, 40 significant results amount to 10.6% of all the outcomes theorized or hypothesized. Therefore, most analyses did not yield statistically significant results. Out of the 40 statistically significant results, 30 supported the theory and hypotheses, while 10 did not.

Horizontal Pay Dispersion (Hypothesis 1)

Lower horizontal pay dispersion was hypothesized to yield improved attitudes and behaviors thanks to enhanced cohesiveness. However, all eight results for pay dispersion were associated with positive effects; all six for horizontal pay dispersion and vertical by job type were counter to theory, while the two results for vertical pay dispersion by organizational hierarchy supported what was theorized. The results were surprisingly consistent in their support of the beneficial effects of pay dispersion of various types.

H1A (individual status effect interaction). The effect of owning stock in one's company was associated with improved attitudes as theorized. Administrative support personnel were more willing to work had, professional/technical employees were absent fewer days, and sales people reported greater job satisfaction as well as a more favorable perception of company fairness. However, ownership status was associated with lower anti-shirking behavior. The interaction with pay dispersion was also mostly as

hypothesized. Administrative support employees were less likely to work hard, professional/technical people were likely to be more absent, and sales people had a worse perception of company fairness, all according to the hypotheses. The one result that stood out was again anti-shirking behavior, where the interaction of stock ownership and pay dispersion increased such behavior, counter to the hypothesis.

H1B (individual size-of-stake interaction). The only significant outcomes were for sales personnel. Granting them more stock was associated with improved job satisfaction, as theorized, while the interaction of higher stock ownership with higher pay differentials lowered job satisfaction, as hypothesized.

H1C (groups status effect interaction). Having a higher percent of the group own stock was associated with lower absenteeism for production employees and a better perception of company fairness for administrative support employees, both as theorized; the relationships held for the respective interactions, with pay dispersion increasing absenteeism for production employees, and worsening the perception of company fairness among administrative support employees, as hypothesized.

H1D (group size-of-stake interaction). Higher average stock ownership for administrative support personnel was associated with lower turnover intention, as expected, but there was no moderation to report. For the same job type, the perception of company fairness was improved when average stock ownership went up, as theorized, and it went down with higher pay dispersion, as hypothesized. For sales employees, higher average stock ownership lowered absenteeism, while the interaction with higher pay dispersion increased absenteeism. One result that stood out was for sales employees,

for whom the interaction between higher group stock ownership and higher pay dispersion was associated with higher job satisfaction.

Vertical Pay Dispersion across Job Types (Hypothesis 2)

Higher pay dispersion was associated with higher willingness to work hard and lower absenteeism, which went against theory. A higher percentage of stock ownership in the group was associated with lower absenteeism, while the interaction with higher pay dispersion was associated with higher absenteeism, both as expected. Willingness to work hard, was positively influenced by the level of stock ownership in the group, as theorized, while higher pay dispersion in the group lowered willingness to work hard, as hypothesized. Therefore, the few results that were significant for this form of pay dispersion were consistent with the hypotheses, while noting that pay dispersion did not fit what was theorized.

Vertical Pay Dispersion for Managers (Hypothesis 3)

Vertical pay dispersion across the organizational hierarchy was associated with a better perception of company fairness and a higher willingness to work hard, as theorized; this is more in line with Heyman's (2005) findings regarding the positive effect of pay dispersion on profits than with Bloom and Michel's (2002) findings regarding the negative effect of pay dispersion on managerial turnover. A higher percentage of the group owning stock was associated with a record of three outcomes: higher perception of company fairness, higher willingness to work hard, and higher anti-shirking behavior; all as theorized. However, the interaction with pay dispersion ran counter to the hypotheses for perception of company fairness and willingness to work hard. Higher levels of group stock ownership were associated with lower absenteeism, as

theorized, whereas interacting stock ownership with pay dispersion was associated with higher absenteeism, which ran counter to the hypothesis.

Outcomes

Pay dispersion. All eight statistically significant results for the outcomes of pay dispersion showed improved attitudes: production employees had lower absenteeism and higher anti-shirking behavior, administrative support employees had a better perception of company fairness and a higher willingness to work hard, vertical pay dispersion across job types was also associated with higher willingness to work hard as well as lower absenteeism, while vertical pay dispersion for managers was associated with a better perception of company fairness and a higher willingness to work hard. This goes against the theorizing in this study which associated lower pay dispersion with improved attitudes, but does fit in with some previous studies (e.g., Shaw & Gupta, 2007). Of all the seven self-reported variables, most were in fact attitudinal, including the willingness to work hard (not the same as actually working hard), turnover intention (not the same as actual turnover), and anti-shirking behavior (standing up to fellow co-workers is more easily said than done). What makes absenteeism stand out is that days absent is in fact observed behavior and perhaps more reliable than subjective attitudes; however, this absenteeism was self-reported.

Job types and outcomes. One pattern that stood out was that certain outcomes were associated with certain types of pay dispersion or certain job types in the case of horizontal pay dispersion. Absenteeism and anti-shirking behavior were associated with production employees, possibly due to the nature of the job involved. Perception of company fairness and a willingness to work hard were associated with administrative

support employees. Absenteeism and anti-shirking behavior were associated with professional/technical employees. Job satisfaction, perception of company fairness, and absenteeism were outcomes associated with sales employees. Vertical pay dispersion across job types was associated with only two outcomes, which were a willingness to work hard and absenteeism; the reason there were only two is likely because other outcomes from horizontal pay dispersion got diluted into insignificance in the larger dataset analyzed for vertical pay dispersion. Managers had the broadest range of outcomes at four: perception of company fairness, a willingness to work hard, absenteeism, and anti-shirking behavior. These differences strongly suggest that how pay differentials and stock ownership are integrated should fit the particular job type, which fits in with research into the relationship between compensation and job characteristics (MacLeod & Parent, 2000) and the effect of rewards on outcomes such as creativity (Byron & Khazanchi, 2012).

Different job types may be associated with intrinsic and extrinsic motivation to different degrees, and both forms of motivation predict performance (Cerasoli, Nicklin, & Ford, 2014). For example, production workers can be incentivized with piece work rates and sales people can be incentivized with commissions, both of which are extrinsic motivators; technical/professional employees, however, may be better incentivized intrinsically, either through non-financial incentives, or through financial incentives which are not immediately tied to performance and thus do not undermine intrinsic motivation (Deci, Koestner, & Ryan, 1999). Furthermore, Klein's (1987) three models regarding the effect of employee stock ownership on employee attitudes also invoked intrinsic and extrinsic satisfaction. This means that financial incentives, whether in wages

or in stock, can be expected to lead to different outcomes depending on the job type, because different job types may involve different types of motivation, and they may attract employees which are naturally motivated in different ways (e.g., salespeople might be more extrinsically motivated than professional/technical employees). Therefore, the combination of those two types of financial incentives will lead to a range of outcomes for different job types.

Cognitive complexity and pay satisfaction. The section above made a rather broad argument regarding why different forms of compensation will have different outcomes depending on the job type of the employees involved, an argument based on the extrinsic and intrinsic aspects of both the job types and the forms of compensation involved. In this section an attempt is made to provide an explanation for the findings that is more specific to the job type, one that is compatible with the extrinsic and intrinsic aspects of compensation.

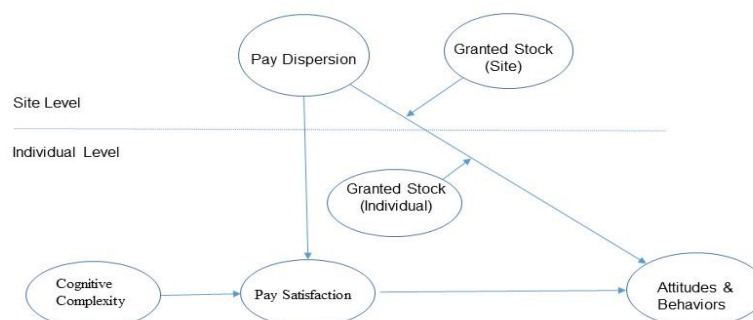
Employees do not react in the same way to compensation because there are individual differences in experiences, expectations, and abilities (Carragher & Buckley, 1996). The findings of this study, with different outcomes by job types, fit in with in with their findings, because different job types are likely to draw different people (e.g., sales people, vs engineers, vs. managers). The explanation offered by Carragher and Buckley is that pay satisfaction has several dimensions, and the cognitive complexity of the individual affects how that individual perceives the dimensionality of their pay, and consequently satisfaction with their pay. Cognitive complexity is based on Kelly's (1955) theory of personality, which states that individuals have available a certain number of personal constructs for "cognizing", or perceiving, events. According to this theory, more

cognitively complex individuals have more constructs available to themselves with which they perceive more dimensions of particular events, in this case, of their pay, as compared to individuals who are less cognitively complex (Bieri, Atkins, Briar, Learman, & Miller, 1966). Subsequent reviews of research established the validity of this construct (Goldstein & Blackman, 1978; Goodwin, 1993; Menasco & Curry, 1978; Streufert & Swezey, 1986).

Research has found pay satisfaction to have a range of dimensions, depending on the questionnaire used; those dimensions ranged from one to five, with strong support for three or four dimensions (Mulvey, Miceli, & Near, 1990). Those dimensions are most likely to consist of an individual's wage or salary; benefits, such as insurance, pensions, and other services; raises, meaning changes in the individual's pay level; and pay structure, meaning the different pay rates for different jobs within the organization (Heneman III & Schwab, 1985). The inconsistency in the number of perceived dimensions may be due to perceptions varying with the cognitive complexity of the individual (Carragher, Mulvey, Scarpello, & Ash, 2004), as individuals with higher cognitive complexity perceive more pay dimensions (Carragher, Buckley, & Carragher, 2002). What is relevant to this study is that pay satisfaction has several dimensions, that individual perceptions of those dimensions vary, and those differing perceptions of pay satisfaction are likely to be associated with different outcomes.

Cognitive complexity does not only vary with individuals, but with job types as well, in a kind of hierarchical arrangement of jobs by cognitive ability, though there is much overlap in cognitive complexity between different job classifications (Desmarais & Sackett, 1993). Cognitive complexity affects the way pay is perceived; if cognitive

complexity varies by job type, then so will the outcomes of that perceived pay. Some of the dimensions of pay mentioned above deal not only with pay level, but also with benefits, which can include the company's ESOP or 401(k) plan, as well as pay structure, which ties into pay dispersion. Stock ownership is a more complex subject than wages or bonuses because of its association with greater risk (the stock price may go down, while wages are constant); the possible perception by employees that stock is not worth much or even that the granting of stock is an attempt by management to substitute stock for wages; and the much longer time horizon involved in stock ownership, especially if it is held in a 401(k), in which case the financial rewards will be fulfilled upon retirement, as compared to the simplicity and immediacy of a bi-weekly paycheck. These more complex aspects of stock ownership likely mean that this form of compensation has even more dimensions than wages, and is likely to be associated with an even more diverse range of behavioral outcomes in the context of cognitive complexity. Therefore, the impact of cognitive complexity on issues of satisfaction with pay, pay dispersion, and employee stock ownership merits more research, so as to establish how cognitive complexity and job classifications impact the model explored herein. Furthermore, pay dispersion can impact negatively pay satisfaction (Shaw, 2014). Figure 3 displays an updated version of the model, which takes into account pay satisfaction and its antecedents of cognitive complexity and pay dispersion.

Figure 3.

More relationships are likely between the constructs, since individual and group stock ownership may impact pay satisfaction and its outcomes; alternatively, pay satisfaction could be decomposed into satisfaction with wages and satisfaction with the ESOP, the latter investigated by Rosen, Klein, and Young (1986). However, with the data available, it is not possible to explore the model proposed in Figure 3.

General takeaways. Pay dispersion was associated with positive outcomes for four types of attitudes and behaviors perception of company fairness, a willingness to work hard, lower absenteeism, and anti-shirking behavior) across all three forms of pay dispersion. There were fewer results for vertical dispersion across job types than there were for horizontal pay dispersion within job types; this makes sense, since any effects within job types (horizontal pay dispersion) are likely to be diluted when other job types are included in the sample, as illustrated by the effect of pay dispersion on willingness to work hard for administrative support personnel, an effect which got diluted for vertical

pay dispersion across job types. Only one analysis was associated with turnover intention, and that was site stock average. Ownership status had a number of outcomes, five at the individual level with four of them as theorized, and six of them at the group level, all as theorized, suggesting that ownership status is an important factor. The level of individual stock granted only had two outcomes, which was surprising, since one would expect the level of ownership to be far more important than just owning anything; however, those outcomes were as theorized, with higher stock ownership associated with higher job satisfaction, while the interaction with pay dispersion lowered job satisfaction, both for sales employees. The percentage of ownership in the group had six outcomes for four different attitudinal variables, suggesting that ownership status in the group is important. The interaction of ownership status at the group level with pay dispersion had five outcomes, three as theorized. The average level of stock ownership had four significant results, all as theorized. When levels of stock ownership were interacted with pay dispersion, there were five outcomes, three as theorized. Most of the significant interactions between pay dispersion and aspects of employee ownership, which is what this study is about, had to do with ownership status (9 significant results), and less to do with level of ownership for the individuals or the groups they belonged to (6 significant results). Also, to the extent that levels of ownership mattered, they did primarily at the group level rather than the individual level.

Some results were contradictory. For example, for professional/technical employees, the ownership status interaction with pay dispersion was associated with higher absenteeism as well as higher anti-shirking behavior, which is almost ironic; it means employees are likely to stand up to shirkers while shirking themselves. Another

odd result was for sales people; when group levels of stock ownership were interacted with pay dispersion, job satisfaction went up, but so did absenteeism; does this mean that employees were so satisfied with the job that they did not show up for work?

Another general pattern is that most significant results were associated with administrative support, sales, and managers, indicating that perhaps employees in these groups are more motivated by compensation-related aspects of their jobs, whereas professional/technical people and production people are motivated by other aspects of their jobs. Also, there were no significant results associated with loyalty, which was surprising in light of past research which found an association between employee stock ownership and loyalty in particular (e.g., Kruse et al., 2010, p. 345) as well as between pay dispersion and employee attitudes in general (e.g., Conroy, Gupta, Shaw, & Park, 2014).

The most unexpected findings were the association of different outcomes with particular job types. These results should be explored in the light of cognitive complexity in a future study.

Limitations and Directions for Future Research

The effect size of employee ownership, pay dispersion, and the interaction of the two, on attitudes and behaviors, varied widely due to the number of outcome variables analyzed, suggesting that there is little reason to expect the effect size to generalize across outcomes. Even for the same outcomes, effect sizes varied widely: the effect of pay dispersion on perception of company fairness was three times larger for administrative support personnel than it was for managers, and the effect on willingness to work hard was four times larger. This is particularly likely in this study, since one of

the main findings was that certain outcomes are associated with certain job types, suggesting a lack of generalizability across outcomes, meaning that different interactions will have different-sized effects on different outcomes. In this study, as can be seen in Table 9b, for each outcome the effect size can vary widely across job types (e.g., absenteeism for salespeople versus managers). In the particular case of employee stock ownership, the outcomes associated with it depend on human resource policies of which this form of profit sharing is a part (Kruse et al., 2010), while in the case of pay dispersion the outcomes associated with it depend both on the form of dispersion (Gupta et al., 2012) and the types of jobs considered (Bloom, 1999; Bloom & Michel, 2002; Shaw & Gupta, 2007).

The lack of support for most of the relationships hypothesized, and the mixed results for the relationships that were supported, may be due to curvilinearity in the effects of pay dispersion. Position in the distribution of pay matters to outcomes (Zenger, 1992), and there may be stronger effects at different points in the distribution. This study used a dummy to control in general for one's position in the distribution, but it is possible that the relationship is more nuanced and samples based on high and low points in the distribution should be analyzed independently. It is also possible that the magnitude of the dispersion matters; as it increases it motivates employees by linking higher performance with higher pay, while pay differentials past a certain level yields diminishing motivational returns for high performers, and demotivate those at the lower end of the pay distribution through stronger feelings of inequity. To examine the effect of position in the pay distribution, or the effect of the size of pay differentials, in future research the data could be split into sites with low, medium, or high pay dispersion to

find out if the size of the pay differentials matter. Another possibility is to break the dispersion into quintiles and see where the best attitudes are. In either case many sites would not be available for analysis because they had too few employees in the group being analyzed; some sites don't have much more than ten employees in a particular job type (e.g., administrative support). This means that the number of sites that could be analyzed in the two ways described above may not be sufficient, and a larger dataset might be necessary to obtain the required statistical power. While the 255 sites used in this analysis is good, it may not be enough to detect small or subtle effects, particularly when dividing sites into quintiles results in fewer sites being used.

Similar to the above point that the outcomes of pay dispersion may differ depending on where in the distribution of pay an employee may find herself, the effect that employee stock ownership has on attitudes may depend on the corporate culture. Stock compensation is usually part of a bundle of human resource policies, which may affect corporate culture depending on which policies are implemented, the job type involved, and the levels of stock ownership. Future research should look at measures of corporate culture to see where the moderation effect of employee stock ownership is more likely to occur; such analysis would further split the dataset, thus reinforcing the possibility that a larger dataset may be necessary.

The dataset consists of answers to a survey which used single-item measures, which are not considered to be as reliable as validated scales. However, single-item measures can be useful for self-reported facts, such as age, gender, and education, as long as the constructs measured are not more complex psychological constructs, such as personality (Wanous, Reichers, & Hudy, 1997). Single-item measures may be sufficient,

as long as the items are clear and unambiguous to the respondent (Sackett & Larson Jr., 1990). The survey questions were relatively simple, dealing with matters that were likely to be clear to the respondents, such as personal income or intention to look for work; these questions did not approach more complex psychological constructs, thus single-items should provide robust results.

Another limitation is the cross-sectional nature of the data, which does not permit the inference of causality. Future studies should use longitudinal data to put these results on firmer empirical ground. Such data would also clarify the influence of external factors, such as stock market performance or a tight labor market, on how employees respond to stock ownership or pay differentials.

The model presented here is an exploratory one. Future studies could explore other factors, such as communication by management explaining the reasons for the pay differentials and acceptance or lack thereof by employees of management's explanation (Shaw & Gupta, 2007); the effect of the external labor market on employee behavioral outcomes of pay dispersion (Bloom & Michel, 2002); while distinguishing between the various forms of pay dispersion. Future research should explore the interaction of pay dispersion and employee ownership by job types using measures for pay satisfaction and cognitive complexity, as depicted in Figure 3. Lastly, the effects examined in this study should be explored further, as explained above, by looking at issues of curvilinearity in the outcomes of pay dispersion as well as issues of other human resource policies affecting corporate culture.

CONCLUSION

This study aimed to clarify the potential role of employee stock ownership as a moderator of the link between pay dispersion and individual and group outcomes, and the findings should be useful in implementing PFP incentive plans in the context of HPWSs.

The manner in which these two aspects of compensation interact is useful to know because, while both employee ownership and pay variation may have positive effects, they may work at cross-purposes, especially in a cooperative environment. As shown in Table 9a, there were several outcomes where employee stock ownership and higher pay dispersion were associated with improved attitudes, while the interaction between them was negative. Thus, important managerial implications in a work environment consisting of employee owners might be to implement pay compression if the job requires cooperation (especially if the pay differentials are within job types), while implementing greater pay dispersion if the job requires little or no cooperation (e.g., sales) or if tournament theory is likely to apply (e.g., organizational hierarchies). Depending on the context, there are cost savings to be obtained through pay compression, if disproportionately high compensation is deemed unnecessary, or by bringing up the bottom of the pay scale to yield efficiency effects; alternatively, different cost savings might be obtainable through higher pay dispersion, which should result in the retention of star employees, and thus reduced turnover costs as well as higher productivity from those employees. Another managerial takeaway is the consistent association between higher pay dispersion and improved attitudinal outcomes; however, clarifying the exact circumstances in which those effects hold may require a larger dataset. Also, in circumstances where employee stock ownership and pay dispersion act as substitutes for

each other, a choice may need to be made between them when implementing compensation plans. How employee ownership may or may not interact with pay dispersion, under what circumstances, for which occupational classifications, and with what outcomes, offers interesting and practical new dimensions in compensation and employee ownership research.

REFERENCES

- Adams, J. S. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology*, 67(5), 422.
- Adams, J. S. (1965). Inequity in social exchange. *Advances in Experimental Social Psychology*, 2(267-299).
- Akerlof, G. A., & Yellen, J. L., eds. (1986). *Efficiency wage models of the labor market*. Cambridge; New York and Melbourne; Cambridge University Press.
- Baron, J. N., & Pfeffer, J. (1994). The social psychology of organizations and inequality. *Social Psychology Quarterly*, , 190-209.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Bartol, K. M., & Locke, E. A. (2000). Incentives and motivation. *Compensation in Organizations: Current Research and Practice*, , 104-147.
- Becker, B., & Huselid, M. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications. *Research in Personnel and Human Resource Management*.
- Berik, G., van der Meulen Rodgers, Yana, & Seguino, S. (2011). *Inequality, development, and growth*. Routledge.

- Berri, D. J., & Krautmann, A. C. (2006). Shirking on the court: Testing for the incentive effects of guaranteed pay. *Economic Inquiry*, 44(3), 536-546.
- Bieri, J., Atkins, A., Briar, S., Learman, R., & Miller, M. (1966). *Clinical and social judgement: The discrimination of behavioral information*. New York: Wiley.
- Blasi, J., Freeman, R., & Kruse, D. (2015). Do broad-based employee ownership, profit sharing and stock options help the best firms do even better? *British Journal of Industrial Relations*.
- Bloom, M. (1999). The performance effects of pay dispersion on individuals and organizations. *Academy of Management Journal*, 42(1), 25-40.
- Bloom, M., & Michel, J. G. (2002). The relationships among organizational context, pay dispersion, and among managerial turnover. *Academy of Management Journal*, 45(1), 33-42.
- Breza, E., Kaur, S., & Shamdasani, Y. (2015). *The Morale Effects of Pay Inequality*.
- Byron, K., & Khazanchi, S. (2012). Rewards and creative performance: A meta-analytic test of theoretically derived hypotheses. *Psychological Bulletin*, 138(4), 809.
- Card, D., Mas, A., Moretti, E., & Saez, E. (2012). Inequality at work: The effect of peer salaries on job satisfaction. *The American Economic Review*, 102(6), 2981-3003.
- Carraher, S. M., & Buckley, M. R. (1996). Cognitive complexity and the perceived dimensionality of pay satisfaction. *Journal of Applied Psychology*, 81(1), 102.

- Carraher, S. M., Buckley, M. R., & Carraher, C. E. (2002). Cognitive complexity with employees from entrepreneurial financial information service organizations and educational institutions: An extension and replication looking at pay, benefits, and leadership. *Academy of Strategic Management Journal*, 1, 43.
- Carraher, S. M., Mulvey, P., Scarpello, V., & Ash, R. (2004). Pay satisfaction, cognitive complexity, and global solutions: Is a single structure appropriate for everyone? *Journal of Applied Management and Entrepreneurship*, 9(2), 18.
- Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis.
- Clark, A. E., Masclet, D., & Villeval, M. C. (2010). Effort and comparison income: Experimental and survey evidence. *ILR Review*, 63(3), 407-426.
- Conroy, S., Gupta, N., Shaw, J. D., & Park, T. (2014). A multilevel approach to the effects of pay variation. *Research in Personnel and Human Resources Management*, 32, 1-64.
- Craig, B., Pencavel, J., Farber, H., & Krueger, A. (1995). Participation and productivity: A comparison of worker cooperatives and conventional firms in the plywood industry. *Brookings Papers on Economic Activity. Microeconomics*, 121-174.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627.

- Desmarais, L. B., & Sackett, P. R. (1993). Investigating a cognitive complexity hierarchy of jobs. *Journal of Vocational Behavior*, 43(3), 279-297.
- Drago, R., & Garvey, G. T. (1998). Incentives for helping on the job: Theory and evidence. *Journal of Labor Economics*, 16(1), 1-25.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Fehr, D. (2015). *Is Increasing Inequality Harmful? Experimental Evidence*.
- Freeman, R. (2012). Optimal inequality for economic growth, stability and shared prosperity: The economics behind the wall street occupiers protest? *April, Insights—Melbourne Business and Economics*, 11.
- Freeman, R., Kruse, D., & Blasi, J. (2008). Worker responses to shirking under shared capitalism.
- Goldstein, K. M., & Blackman, S. (1978). *Cognitive style: Five approaches and relevant research* John Wiley & Sons.
- Goodwin, V. L. (1993). Antecedents, consequences, and covariates of organizational cognitive complexity.
- Greenberg, J. (2003). Creating unfairness by mandating fair procedures: The hidden hazards of a pay-for-performance plan. *Human Resource Management Review*, 13(1), 41-57.

Gupta, N., Conroy, S. A., & Delery, J. E. (2012). The many faces of pay variation.

Human Resource Management Review, 22(2), 100-115.

Gupta, N., & Shaw, J. D. (2014). Employee compensation: The neglected area of HRM

research. *Human Resource Management Review*, 24(1), 1-4.

Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as

separation, variety, or disparity in organizations. *Academy of Management Review*, 32(4), 1199-1228.

Heneman III, H. G., & Schwab, D. P. (1985). Pay satisfaction: Its multidimensional

nature and measurement. *International Journal of Psychology*, 20(2), 129-141.

Heyman, F. (2005). Pay inequality and firm performance: Evidence from matched

employer–employee data. *Applied Economics*, 37(11), 1313-1327.

Jenkins Jr, G. D., Mitra, A., Gupta, N., & Shaw, J. D. (1998). Are financial incentives

related to performance? A meta-analytic review of empirical research. *Journal of Applied Psychology*, 83(5), 777.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior,

agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

Jensen, M. C., & Meckling, W. H. (1979). Rights and production functions: An

application to labor-managed firms and codetermination. *Journal of Business*, , 469-506.

Katz, L. F. (1986). Efficiency wage theories: A partial evaluation.

NBER/Macroeconomics Annual (MIT Press), 1(1), 235.

Kelly George, A. (1955). The psychology of personal constructs: A theory of personality.

Klein, K. J. (1987). Employee stock ownership and employee attitudes: A test of three models. *Journal of Applied Psychology, 72(2), 319.*

Kruse, D. L., Blasi, J. R., & Park, R. (2008). Shared capitalism in the US economy.

Shared Capitalism at Work, 41.

Kruse, D. L., Freeman, R. B., & Blasi, J. R. (2010). *Shared capitalism at work: Employee ownership, profit and gain sharing, and broad-based stock options.* University of Chicago Press.

Ku, H., & Salmon, T. C. (2012). The incentive effects of inequality: An experimental investigation. *Southern Economic Journal, 79(1), 46-70.*

Lawler III, E. E. (1973). *Motivation in work organizations.* Brooks/Cole Publishing Co.

Lawler, E. (1971). Pay and organization effectiveness: A psychological view. NY:

McGraw Hill.

Lazear Edward, P. (1998). *Personnel economics for managers.* John Wiley & Sons, Inc.

Lazear, E. P. (2000). Performance pay and productivity. *American Economic Review, 90,*
1346-1361.

- Lazear, E. P., & Rosen, S. (1981). Rank-order tournaments as optimum labor contracts. *Journal of Political Economy*, 89, 841-864.
- Lee, S., & Whitford, A. B. (2008). Exit, voice, loyalty, and pay: Evidence from the public workforce. *Journal of Public Administration Research and Theory*, 18(4), 647-671.
- Levine, D. I. (1991). Cohesiveness, productivity, and wage dispersion. *Journal of Economic Behavior & Organization*, 15(2), 237-255.
- Levine, D. I., & Tyson, L. D. (1990). Participation, productivity, and the firm's environment. *California Management Review*, 32(4), 86.
- Locke, E. A., Latham, G. P., & Erez, M. (1988). The determinants of goal commitment. *Academy of Management Review*, 13(1), 23-39.
- MacLeod, W. B., & Parent, D. (2000). Job characteristics and the form of compensation form of compensation. *Research in labor economics* (pp. 177-242). Emerald Group Publishing Limited.
- Martin, J. D., & Gray, L. N. (1971). Measurement of relative variation: Sociological examples. *American Sociological Review*, 496-502.
- Menasco, M. B., & Curry, D. J. (1978). An assessment of the role construct repertory test. *Applied Psychological Measurement*, 2(3), 361-369.
- Mulvey, P., Miceli, M., & Near, J. (1990). *The Pay Satisfaction Questionnaire: A Review and Extension*.

- Pfeffer, J., & Langton, N. (1993). The effect of wage dispersion on satisfaction, productivity, and working collaboratively: Evidence from college and university faculty. *Administrative Science Quarterly*, 382-407.
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review*, 26(2), 298-310.
- Pierce, J. L., Rubenfeld, S. A., & Morgan, S. (1991). Employee ownership: A conceptual model of process and effects. *Academy of Management Review*, 16(1), 121-144.
- Rosen, C. M., Klein, K. J., & Young, K. M. (1986). *Employee ownership in america: The equity solution*. Lexington Books/DC Heath and Com.
- Rosen, C. M. (2015). A statistical profile of employee ownership. Retrieved from <https://www.nceo.org/articles/statistical-profile-employee-ownership>
- Sackett, P. R., & Larson Jr., J. R. (1990). Research strategies and tactics in industrial and organizational psychology. in M. D. dunnette & L. M. Hough (eds.), *Handbook of industrial and organizational psychology* (2nd ed., vol. 1, pp. 419- 489). Palo Alto, CA: Consulting psychologists press.
- Shaw, J. D. (2014). Pay dispersion. *Annu.Rev.Organ.Psychol.Organ.Behav.*, 1(1), 521-544.
- Shaw, J. D., & Gupta, N. (2007). Pay system characteristics and quit patterns of good, average, and poor performers. *Personnel Psychology*, 60(4), 903-928.

Stiglitz, J. E. (1984). Theories of wage rigidity. *National Bureau of Economic Research*.

Streufert, S., & Swezey, R. W. (1986). *Complexity, managers, and organizations*.
Academic Press.

Torre, E. D., Pelagatti, M., & Solari, L. (2015). Internal and external equity in
compensation systems, organizational absenteeism and the role of explained
inequalities. *Human Relations*, 68(3), 409-440.

Vroom, V. H. (1964). Work and motivation.

Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good
are single-item measures? *Journal of Applied Psychology*, 82(2), 247.

Weitzman, M., & Kruse, D. (1990). Profit sharing and productivity. *1990*, 95-142.

Weltmann, D., Blasi, J. R., & Kruse, D. L. (2015). Does employee ownership affect
attitudes and behaviors? The role of selection, status, and size of stake. *Advances in
the economic analysis of participatory & labor-managed firms* (pp. 249-275).
Emerald Group Publishing Limited.

Yellen, J. L. (1984). Efficiency wage models of unemployment. *The American Economic
Review*, 74(2), Papers and Proceedings of the Ninety-Sixth Annual Meeting of the
American Economic Association), 200-205.

Zenger, T. R. (1992). Why do employers only reward extreme performance? Examining the relationships among performance, pay, and turnover. *Administrative Science Quarterly*, 198-219.

APPENDIX 1

Table 10: Job Satisfaction

Horizontal pay dispersion for production employees (1)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.0523	0.034	-0.299	0.0388	0.108	-0.056	0.509	0.0753	0.0432	-0.0968
	(0.409)	(0.463)	(0.639)	(0.463)	(0.469)	(0.415)	(0.669)	(0.41)	(0.556)	(0.883)
Individual Status Dummy		-0.00823	-0.101							-0.146
		(0.0369)	(0.128)							(0.141)
Individual Status Interaction			0.551							0.798
			(0.731)							(0.804)
Individual Size-of-Stake				-0.000000547	0.0000218					0.0000276
				(0.00000501)	(0.0000255)					(0.0000265)
Individual Size-of-Stake Interaction					-0.0000967					-0.000122
					(0.000109)					(0.000112)
Site Status Percent Owners						-0.000447	0.00037			0.000247
						(0.00032)	(0.000823)			(0.000969)
Site Status Interaction							-0.0051			-0.00497
							(0.00474)			(0.00559)
Site Size-of-Stake Average								0.0000234	0.0000139	-0.0000334
								(0.0000417)	(0.000118)	(0.000158)
Site Size-of-Stake Interaction									0.0000565	0.000308
									(0.000661)	(0.000839)
N	7197	5357	5357	5357	5357	7197	7197	7197	7197	5357
Chi-Square	377.9	302.2	302.8	302.2	302.9	379.9	381	378.1	378.1	307.2
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 11: Job Satisfaction

Horizontal pay dispersion for administrative support employees (2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-1.451	-0.178	5.2	-0.338	-0.153	-1.291	-5.132*	-2.12	-2.246	6.255
	(1.491)	(1.706)	(4.019)	(1.71)	(2.093)	(1.469)	(2.322)	(1.493)	(2.504)	(8.28)
Individual Status Dummy		0.0214	0.934							1.123
		(0.205)	(0.651)							(0.744)
Individual Status Interaction			-6.45							-8.56
			(4.364)							(4.964)
Individual Size-of-Stake				0.000068	0.000113					-0.000334
				(0.0000864)	(0.000303)					(0.000378)
Individual Size-of-Stake Interaction					-0.000279					0.00208
					(0.00182)					(0.00226)
Site Status Percent Owners						0.00843	-0.0461			-0.0123
						(0.0108)	(0.0315)			(0.0571)
Site Status Interaction							0.366			0.211
							(0.196)			(0.337)
Site Size-of-Stake Average								0.00015	0.000126	0.0013
								(0.000111)	(0.000412)	(0.000957)
Site Size-of-Stake Interaction									0.000165	-0.00565
									(0.00265)	(0.00586)
N	574	204	204	204	204	574	574	563	563	204
Chi-Square	41.9	24.13	26.23	24.72	24.74	42.73	47.22	45.6	45.62	33.28
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 12: Job Satisfaction

Horizontal pay dispersion for professional/technical employees (3)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.803*	1.355	1.675	1.536	1.277	1.602	3.895*	1.247	0.150	3.855
	(0.809)	(0.954)	(1.432)	(0.957)	(1.017)	(0.835)	(1.702)	(0.843)	(1.143)	(3.252)
Individual Status Dummy		-0.112	-0.0250							0.0655
		(0.0786)	(0.300)							(0.347)
Individual Status Interaction			-0.474							-0.792
			(1.580)							(1.857)
Individual Size-of-Stake				-0.0000120	-0.0000587					-0.0000556
				(0.0000109)	(0.0000625)					(0.0000683)
Individual Size-of-Stake Interaction					0.000231					0.000236
					(0.000305)					(0.000333)
Site Status Percent Owners						-0.000762	0.00402			0.00359
						(0.000882)	(0.00322)			(0.00409)
Site Status Interaction							-0.0279			-0.0214
							(0.0180)			(0.0251)
Site Size-of-Stake Average								-0.000115*	-0.000346*	0.0000320
								(0.0000457)	(0.000170)	(0.000256)
Site Size-of-Stake Interaction								0.00129	-0.000390	
								(0.000919)	(0.00144)	
N	3984	1675	1675	1675	1675	3984	3984	3760	3760	1675
Chi-Square	296.1	137.5	137.5	136.4	136.9	297.0	299.0	292.0	294.5	139.7
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 13: Job Satisfaction

Horizontal pay dispersion for sales employees (4)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.159	-2.558	7.210	-1.702	2.473	-0.939	2.014	-0.0852	0.657	12.50
	(1.361)	(2.797)	(4.516)	(1.995)	(3.382)	(1.508)	(3.194)	(1.365)	(2.016)	(8.545)
Individual Status Dummy		0.156	2.850**							2.481*
		(0.204)	(1.019)							(1.264)
Individual Status Interaction			-13.68**							-11.04
			(5.038)							(6.219)
Individual Size-of-Stake				0.000000984	0.000721**					0.000562*
				(0.0000104)	(0.000243)					(0.000279)
Individual Size-of-Stake Interaction					-0.00349**					-0.00274*
					(0.00118)					(0.00135)
Site Status Percent Owners						-0.00985	0.0331			-0.0238
						(0.00820)	(0.0417)			(0.112)
Site Status Interaction							-0.212			-0.326
							(0.202)			(0.487)
Site Size-of-Stake Average								0.0000469	0.000183	0.0000891
								(0.0000639)	(0.000279)	(0.000714)
Site Size-of-Stake Interaction								-0.000654	-0.00363	
								(0.00131)	(0.00452)	
N	635	234	234	234	234	635	635	635	635	234
Chi-Square	52.01	22.41	30.16	24.69	30.33	53.43	54.52	52.54	52.78	49.33
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 14: Job Satisfaction

Vertical pay dispersion across job types (8)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.623	0.521	0.143	0.530	0.598	0.613	0.547	0.588	0.377	-0.331
	(0.379)	(0.426)	(0.604)	(0.426)	(0.438)	(0.382)	(0.613)	(0.383)	(0.555)	(0.848)
Individual Status Dummy		-0.0142	-0.121							-0.123
		(0.0304)	(0.125)							(0.138)
Individual Status Interaction			0.583							0.568
			(0.662)							(0.736)
Individual Size-of-Stake				-0.00000174	0.0000171					0.0000280
				(0.00000404)	(0.0000286)					(0.0000299)
Individual Size-of-Stake Interaction					-0.0000862					-0.000135
					(0.000129)					(0.000135)
Site Status Percent Owners						-0.0000265	-0.0000886			-0.000337
						(0.000137)	(0.000466)			(0.000543)
Site Status Interaction							0.000360			0.00170
							(0.00259)			(0.00306)
Site Size-of-Stake Average								-0.0000300	-0.0000918	-0.0000558
								(0.0000320)	(0.000122)	(0.000154)
Site Size-of-Stake Interaction									0.000326	0.000352
									(0.000620)	(0.000783)
N	13515	8280	8280	8280	8280	13515	13515	13496	13496	8280
Chi-Square	742.8	492.2	493.0	492.1	492.6	742.9	742.9	743.2	743.5	494.8
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 15: Job Satisfaction

Vertical pay dispersion across organizational levels for managers (7)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.344*	0.879	1.030	1.011	1.146	1.176*	2.796	1.454*	1.276	2.189
	(0.599)	(0.715)	(1.349)	(0.713)	(0.840)	(0.589)	(1.946)	(0.602)	(0.851)	(2.341)
Individual Status Dummy		-0.143	-0.0998							-0.270
		(0.0979)	(0.342)							(0.422)
Individual Status Interaction			-0.210							0.761
			(1.585)							(2.024)
Individual Size-of-Stake				0.000000151	0.0000184					0.0000324
				(0.00000157)	(0.0000600)					(0.0000688)
Individual Size-of-Stake Interaction					-0.0000836					-0.000147
					(0.000275)					(0.000316)
Site Status Percent Owners						-0.00239	0.00245			0.00229
						(0.00122)	(0.00566)			(0.00625)
Site Status Interaction							-0.0241			-0.0256
							(0.0275)			(0.0323)
Site Size-of-Stake Average								-0.0000169	-0.0000484	-0.00000858
								(0.0000157)	(0.000107)	(0.000157)
Site Size-of-Stake Interaction									0.000147	-0.0000398
									(0.000496)	(0.000726)
N	3502	1040	1040	1040	1040	3502	3502	3316	3316	1040
Chi-Square	278.0	86.64	86.64	84.69	84.81	281.9	281.7	284.1	284.2	92.15
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 16: Loyalty

Horizontal pay dispersion for production employees

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.0146	0.236	-0.126	0.2	0.307	0.00783	0.344	0.0863	0.562	0.744
	(0.513)	(0.583)	(0.772)	(0.586)	(0.595)	(0.521)	(0.865)	(0.511)	(0.705)	(1.125)
Individual Status Dummy		0.0828*	-0.0175							-0.13
		(0.0411)	(0.146)							(0.158)
Individual Status Interaction			0.596							1.134
			(0.831)							(0.898)
Individual Size-of-Stake				0.0000133	0.0000462					0.0000337
				(0.000013)	(0.0000368)					(0.000037)
Individual Size-of-Stake Interaction					-0.00017					-0.000127
					(0.000164)					(0.000161)
Site Status Percent Owners						-0.0000295	0.000426			0.000232
						(0.000391)	(0.00102)			(0.0012)
Site Status Interaction							-0.00285			-0.000971
							(0.00586)			(0.00693)
Site Size-of-Stake Average								0.0000732	0.000208	0.00034
								(0.0000522)	(0.000148)	(0.000199)
Site Size-of-Stake Interaction									-0.000819	-0.00149
									(0.00084)	(0.00107)
N	7096	5280	5280	5280	5280	7096	7096	7096	7096	5280
Chi-Square	499.4	402.7	403	398.9	400.3	499.5	499.7	501.2	502.4	407
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 17: Loyalty

Horizontal pay dispersion for administrative support employees (2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	2.093	1.191	4.05	1.08	1.553	2.294	-2.996	1.878	2.724	-3.446
	(1.782)	(2.091)	(4.872)	(2.097)	(2.597)	(1.777)	(2.295)	(1.839)	(2.973)	(10.45)
Individual Status Dummy		0.223	0.724							0.955
		(0.25)	(0.81)							(0.975)
Individual Status Interaction			-3.514							-5.408
			(5.407)							(6.433)
Individual Size-of-Stake				0.00014	0.000252					-0.0000842
				(0.000129)	(0.000386)					(0.000487)
Individual Size-of-Stake Interaction					-0.000757					0.00106
					(0.00245)					(0.00309)
Site Status Percent Owners						0.00926	-0.0679*			-0.0966
						(0.0128)	(0.034)			(0.07)
Site Status Interaction							0.523*			0.747
							(0.209)			(0.418)
Site Size-of-Stake Average								0.000139	0.000312	0.000298
								(0.000135)	(0.000488)	(0.0012)
Site Size-of-Stake Interaction									-0.00116	-0.000485
									(0.00316)	(0.00753)
N	557	192	192	192	192	557	557	547	547	192
Chi-Square	54.39	30.45	30.72	30.51	30.69	55.01	62.09	51.69	51.97	34.17
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 18: Loyalty

Horizontal pay dispersion for professional/technical employees (3)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.298	0.397	1.132	0.492	0.856	0.783	1.321	1.132	1.377	3.450
	(0.777)	(0.944)	(1.489)	(0.932)	(1.017)	(0.803)	(1.589)	(0.816)	(1.149)	(3.154)
Individual Status Dummy		-0.0491	0.150							-0.0875
		(0.0866)	(0.323)							(0.381)
Individual Status Interaction			-1.087							0.1000
			(1.701)							(2.031)
Individual Size-of-Stake				0.00000703	0.0000684					0.0000418
				(0.0000143)	(0.0000717)					(0.0000799)
Individual Size-of-Stake Interaction					-0.000312					-0.000173
					(0.000355)					(0.000398)
Site Status Percent Owners						-0.00170*	-0.000510			0.00120
						(0.000847)	(0.00313)			(0.00393)
Site Status Interaction							-0.00680			-0.0152
							(0.0173)			(0.0241)
Site Size-of-Stake Average								-0.0000229	0.0000272	0.000359
								(0.0000434)	(0.000171)	(0.000257)
Site Size-of-Stake Interaction								-0.000274	-0.00183	
								(0.000906)	(0.00143)	
N	3907	1605	1605	1605	1605	3907	3907	3684	3684	1605
Chi-Square	281.7	130.7	131.1	130.5	131.3	285.3	285.2	275.7	275.8	135.7
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 19: Loyalty

Horizontal pay dispersion for sales employees (4)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.834	1.622	13.12*	1.479	7.743*	2.015	2.415	2.132	4.532	56.49
	(1.656)	(2.619)	(5.996)	(2.623)	(3.663)	(1.859)	(3.780)	(1.650)	(2.405)	(45.43)
Individual Status Dummy		-0.335	2.422							0.942
		(0.291)	(1.290)							(1.753)
Individual Status Interaction			-14.77*							-7.683
			(6.802)							(8.906)
Individual Size-of-Stake				0.0000281	0.00102*					0.00104
				(0.0000329)	(0.000454)					(0.000569)
Individual Size-of-Stake Interaction					-0.00484*					-0.00488
					(0.00220)					(0.00277)
Site Status Percent Owners						0.00225	0.00832			0.0891
						(0.0103)	(0.0511)			(0.170)
Site Status Interaction							-0.0303			-1.127
							(0.250)			(1.156)
Site Size-of-Stake Average								0.000182*	0.000667	0.00263
								(0.0000759)	(0.000365)	(0.00285)
Site Size-of-Stake Interaction									-0.00232	-0.0200
									(0.00171)	(0.0211)
N	628	229	229	229	229	628	628	628	628	229
Chi-Square	23.81	20.90	24.27	20.76	23.78	23.87	23.89	29.46	31.35	27.37
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 20: Loyalty

Vertical pay dispersion across job types (8)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.521	0.583	0.540	0.530	0.754	0.540	0.807	0.569	1.096	1.299
	(0.460)	(0.542)	(0.725)	(0.543)	(0.557)	(0.464)	(0.761)	(0.460)	(0.666)	(1.064)
Individual Status Dummy		0.0832*	0.0710							-0.0720
		(0.0343)	(0.142)							(0.155)
Individual Status Interaction			0.0672							0.749
			(0.756)							(0.829)
Individual Size-of-Stake				0.00000979	0.0000720					0.0000568
				(0.00000781)	(0.0000377)					(0.0000388)
Individual Size-of-Stake Interaction					-0.000298					-0.000239
					(0.000173)					(0.000177)
Site Status Percent Owners						0.0000539	0.000291			-0.000152
						(0.000164)	(0.000560)			(0.000666)
Site Status Interaction							-0.00137			0.000547
							(0.00311)			(0.00374)
Site Size-of-Stake Average								0.0000314	0.000184	0.000339
								(0.0000390)	(0.000146)	(0.000190)
Site Size-of-Stake Interaction									-0.000810	-0.00155
									(0.000742)	(0.000970)
N	13288	8095	8095	8095	8095	13288	13288	13269	13269	8095
Chi-Square	1041.9	738.9	738.8	734.3	737.7	1041.9	1042.1	1043.2	1044.7	745.4
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 21: Loyalty

Vertical pay dispersion across organizational levels for managers (7)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.952	0.404	0.423	0.400	0.527	0.792	3.219	0.795	1.307	0.778
	(0.710)	(0.965)	(1.804)	(0.967)	(1.105)	(0.670)	(1.760)	(0.753)	(1.111)	(3.451)
Individual Status Dummy		-0.00975	-0.00452							-0.159
		(0.125)	(0.442)							(0.549)
Individual Status Interaction			-0.0258							0.850
			(2.094)							(2.693)
Individual Size-of-Stake				-0.00000299*	0.0000155					0.0000172
				(0.00000151)	(0.0000778)					(0.0000856)
Individual Size-of-Stake Interaction					-0.0000846					-0.0000926
					(0.000357)					(0.000393)
Site Status Percent Owners						-0.00283*	0.00443			-0.00255
						(0.00126)	(0.00538)			(0.00908)
Site Status Interaction							-0.0360			-0.00949
							(0.0253)			(0.0464)
Site Size-of-Stake Average								-0.00000404	0.0000795	0.0000579
								(0.0000194)	(0.000134)	(0.000211)
Site Size-of-Stake Interaction									-0.000390	-0.000289
									(0.000620)	(0.000991)
N	3472	1011	1011	1011	1011	3472	3472	3285	3285	1011
Chi-Square	247.0	100.6	100.6	104.2	104.3	254.2	265.8	243.3	243.4	110.2
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 22: Company Fairness

Horizontal pay dispersion for production employees

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.144	-0.178	0.127	-0.214	-0.107	-0.0841	0.986	0.0232	1.084	1.18
	(0.588)	(0.633)	(0.803)	(0.641)	(0.644)	(0.595)	(1.013)	(0.574)	(0.8)	(1.224)
Individual Status Dummy		0.0652	0.148							0.0578
		(0.0394)	(0.139)							(0.148)
Individual Status Interaction			-0.489							-0.0592
			(0.795)							(0.843)
Individual Size-of-Stake				-0.00000151	0.0000317					0.0000175
				(0.00000492)	(0.0000256)					(0.0000263)
Individual Size-of-Stake Interaction					-0.000143					-0.0000879
					(0.000108)					(0.000111)
Site Status Percent Owners						0.000267	0.00162			0.000379
						(0.000432)	(0.00113)			(0.00126)
Site Status Interaction							-0.0085			-0.00263
							(0.00654)			(0.00725)
Site Size-of-Stake Average								0.000167**	0.000455**	0.000378
								(0.0000586)	(0.000164)	(0.000209)
Site Size-of-Stake Interaction									-0.00178	-0.0013
									(0.00095)	(0.00115)
N	7168	5333	5333	5333	5333	7168	7168	7168	7168	5333
Chi-Square	355.7	276.7	277.1	273.8	275.6	356	357.6	363.5	367.4	284.8
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 23: Company Fairness

Horizontal pay dispersion for administrative support employees (2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.364	-1.418	1.297	-1.06	1.799	-0.0942	1.16	-0.707	2.742	20.49*
	(1.777)	(1.677)	(3.932)	(1.68)	(2.065)	(1.791)	(3.733)	(1.843)	(2.986)	(8.116)
Individual Status Dummy		0.303	0.764							0.462
		(0.203)	(0.637)							(0.727)
Individual Status Interaction			-3.267							-1.444
			(4.279)							(4.846)
Individual Size-of-Stake				-0.0000147	0.000695*					0.000392
				(0.0000849)	(0.000312)					(0.00038)
Individual Size-of-Stake Interaction					-0.00441*					-0.00288
					(0.00186)					(0.00226)
Site Status Percent Owners						0.0109	0.0269			0.133*
						(0.0136)	(0.0439)			(0.0567)
Site Status Interaction							-0.11			-0.659*
							(0.286)			(0.333)
Site Size-of-Stake Average								-0.0000478	0.000676	0.00219*
								(0.000146)	(0.000517)	(0.000933)
Site Size-of-Stake Interaction									-0.00478	-0.0135*
									(0.00331)	(0.00572)
N	570	204	204	204	204	570	570	559	559	204
Chi-Square	38.23	29.96	30.51	27.76	33.16	38.78	38.87	36.68	38.59	43.95
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 24: Company Fairness

Horizontal pay dispersion for professional/technical employees (3)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.742	-0.0218	1.000	0.241	-0.0449	0.677	-0.303	0.237	-0.00681	-1.788
	(0.791)	(0.972)	(1.424)	(0.982)	(1.052)	(0.825)	(1.668)	(0.828)	(1.148)	(3.263)
Individual Status Dummy		-0.122	0.159							0.326
		(0.0784)	(0.297)							(0.347)
Individual Status Interaction			-1.539							-2.913
			(1.568)							(1.876)
Individual Size-of-Stake				0.0000298*	-0.0000210					-0.0000642
				(0.0000135)	(0.0000655)					(0.0000735)
Individual Size-of-Stake Interaction					0.000269					0.000577
					(0.000341)					(0.000391)
Site Status Percent Owners						-0.000237	-0.00228			-0.00541
						(0.000869)	(0.00316)			(0.00410)
Site Status Interaction							0.0119			0.0274
							(0.0177)			(0.0252)
Site Size-of-Stake Average								-0.0000965*	-0.000147	-0.0000842
								(0.0000452)	(0.000171)	(0.000257)
Site Size-of-Stake Interaction									0.000284	0.000393
									(0.000929)	(0.00145)
N	3969	1671	1671	1671	1671	3969	3969	3746	3746	1671
Chi-Square	453.6	108.9	109.9	109.8	109.2	453.6	454.4	468.5	468.6	118.8
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 25: Company Fairness

Horizontal pay dispersion for sales employees (4)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.264	0.547	10.34*	0.730	3.897	1.060	0.445	1.429	3.263	7.790
	(2.433)	(3.994)	(4.805)	(3.996)	(3.912)	(2.513)	(6.712)	(2.540)	(3.960)	(8.533)
Individual Status Dummy		0.104	3.127**							3.163*
		(0.202)	(1.066)							(1.309)
Individual Status Interaction			-15.27**							-15.42*
			(5.295)							(6.441)
Individual Size-of-Stake				0.0000176	0.000545*					0.000199
				(0.0000107)	(0.000242)					(0.000271)
Individual Size-of-Stake Interaction					-0.00256*					-0.000884
					(0.00117)					(0.00131)
Site Status Percent Owners						-0.00562	-0.0133			-0.195
						(0.0186)	(0.0797)			(0.113)
Site Status Interaction							0.0370			0.566
							(0.375)			(0.489)
Site Size-of-Stake Average								0.0000296	0.000317	0.00111
								(0.000140)	(0.000500)	(0.000716)
Site Size-of-Stake Interaction								-0.00166	-0.00815	
								(0.00278)	(0.00453)	
N	633	233	233	233	233	633	633	633	633	233
Chi-Square	47.38	31.03	39.49	33.45	38.04	47.41	47.43	47.35	47.76	53.98
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 26: Company Fairness

Vertical pay dispersion across job types (8)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.261	0.160	0.485	0.113	0.290	0.298	0.0833	0.259	1.198	0.678
	(0.518)	(0.577)	(0.736)	(0.581)	(0.589)	(0.522)	(0.882)	(0.520)	(0.754)	(1.133)
Individual Status Dummy		0.0715*	0.164							0.0621
		(0.0318)	(0.134)							(0.144)
Individual Status Interaction			-0.505							-0.0321
			(0.712)							(0.765)
Individual Size-of-Stake				0.00000379	0.0000523					0.0000370
				(0.00000403)	(0.0000289)					(0.0000299)
Individual Size-of-Stake Interaction					-0.000221					-0.000157
					(0.000130)					(0.000135)
Site Status Percent Owners						0.000103	-0.0000732			-0.000847
						(0.000173)	(0.000608)			(0.000686)
Site Status Interaction							0.00103			0.00361
							(0.00340)			(0.00387)
Site Size-of-Stake Average								0.0000163	0.000280	0.000364
								(0.0000442)	(0.000161)	(0.000196)
Site Size-of-Stake Interaction									-0.00141	-0.00159
									(0.000828)	(0.00101)
N	13462	8249	8249	8249	8249	13462	13462	13443	13443	8249
Chi-Square	1032.2	542.0	542.6	537.5	540.5	1032.5	1032.6	1029.9	1033.4	550.9
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 27: Company Fairness

Vertical pay dispersion across organizational levels for managers (7)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.912	1.450	3.005*	1.557*	2.053*	0.901	5.474*	0.988	0.754	7.774***
	(0.643)	(0.759)	(1.430)	(0.784)	(0.904)	(0.649)	(2.192)	(0.666)	(0.950)	(2.357)
Individual Status Dummy		-0.217*	0.206							0.107
		(0.102)	(0.348)							(0.418)
Individual Status Interaction			-2.092							-1.661
			(1.639)							(2.019)
Individual Size-of-Stake				0.00000387	0.0000703					0.0000864
				(0.00000327)	(0.0000608)					(0.0000684)
Individual Size-of-Stake Interaction					-0.000306					-0.000373
					(0.000280)					(0.000316)
Site Status Percent Owners						-0.000186	0.0131*			0.0144*
						(0.00144)	(0.00627)			(0.00622)
Site Status Interaction							-0.0665*			-0.0776*
							(0.0307)			(0.0322)
Site Size-of-Stake Average								-0.0000138	-0.0000539	-0.000138
								(0.0000210)	(0.000118)	(0.000155)
Site Size-of-Stake Interaction								0.000190	0.000607	0.000607
								(0.000546)	(0.000716)	(0.000716)
N	3499	1039	1039	1039	1039	3499	3499	3311	3311	1039
Chi-Square	214.7	93.32	95.65	89.40	90.94	214.7	220.1	207.6	207.7	122.6
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 28: Willingness to Work Hard

Horizontal pay dispersion for production employees

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.807*	0.886	0.896	0.851	0.855	0.915*	0.787	0.782	0.832	1.417
	(0.401)	(0.46)	(0.643)	(0.459)	(0.478)	(0.407)	(0.646)	(0.403)	(0.54)	(0.874)
Individual Status Dummy		0.0800*	0.0829							0.0383
		(0.0378)	(0.131)							(0.147)
Individual Status Interaction			-0.017							0.185
			(0.75)							(0.839)
Individual Size-of-Stake				0.0000178	0.0000189					0.0000101
				(0.0000121)	(0.000039)					(0.0000366)
Individual Size-of-Stake Interaction					-0.00000675					0.0000135
					(0.000229)					(0.000201)
Site Status Percent Owners						0.000426	0.000235			0.000718
						(0.000318)	(0.000816)			(0.000974)
Site Status Interaction							0.0012			-0.000555
							(0.0047)			(0.00563)
Site Size-of-Stake Average								-0.0000266	-0.0000114	0.000107
								(0.0000409)	(0.000116)	(0.000158)
Site Size-of-Stake Interaction									-0.0000903	-0.000718
									(0.000645)	(0.000837)
N	7165	5339	5339	5339	5339	7165	7165	7165	7165	5339
Chi-Square	346.5	267.2	267.2	263.8	263.8	348.3	348.3	346.9	346.9	271.1
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 29: Willingness to Work Hard

Horizontal pay dispersion for administrative support employees (2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.905	3.425	18.41***	3.181	5.378*	0.6	0.392	1.224	3.336	24.75**
	(1.219)	(1.803)	(4.557)	(1.801)	(2.222)	(1.215)	(2.041)	(1.178)	(2.077)	(8.971)
Individual Status Dummy		-0.311	2.153**							1.848*
		(0.217)	(0.711)							(0.806)
Individual Status Interaction			-17.73***							-16.95**
			(4.897)							(5.523)
Individual Size-of-Stake				-0.0000397	0.000484					0.00014
				(0.0000902)	(0.000323)					(0.000403)
Individual Size-of-Stake Interaction					-0.00328					-0.0012
					(0.00194)					(0.00241)
Site Status Percent Owners						-0.00774	-0.0113			0.0814
						(0.00923)	(0.0298)			(0.0607)
Site Status Interaction							0.023			-0.392
							(0.182)			(0.361)
Site Size-of-Stake Average								0.0000223	0.00044	0.00106
								(0.000093)	(0.000351)	(0.00101)
Site Size-of-Stake Interaction									-0.00276	-0.0034
									(0.00224)	(0.00637)
N	574	204	204	204	204	574	574	563	563	204
Chi-Square	25.29	24.27	36.47	22.5	25.23	26.75	26.77	24.28	25.75	41.82
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 30: Willingness to Work Hard

Horizontal pay dispersion for professional/technical employees (3)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.764	1.249	1.752	1.198	1.380	0.967	-0.106	0.729	1.301	3.962
	(0.737)	(0.913)	(1.464)	(0.897)	(0.966)	(0.774)	(1.473)	(0.761)	(1.081)	(3.085)
Individual Status Dummy		0.0264	0.156							-0.0619
		(0.0814)	(0.307)							(0.352)
Individual Status Interaction			-0.712							0.618
			(1.623)							(1.885)
Individual Size-of-Stake				-0.00000190	0.0000294					0.0000153
				(0.0000122)	(0.0000655)					(0.0000720)
Individual Size-of-Stake Interaction					-0.000157					-0.0000910
					(0.000323)					(0.000355)
Site Status Percent Owners						0.000675	-0.00171			0.00178
						(0.000810)	(0.00293)			(0.00378)
Site Status Interaction							0.0137			-0.00976
							(0.0162)			(0.0231)
Site Size-of-Stake Average								0.0000125	0.000126	0.000236
								(0.0000397)	(0.000157)	(0.000244)
Site Size-of-Stake Interaction								-0.000619	-0.00164	
								(0.000830)	(0.00137)	
N	3978	1673	1673	1673	1673	3978	3978	3755	3755	1673
Chi-Square	240.3	78.26	78.52	78.19	78.49	241.0	241.9	237.9	238.6	82.72
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 31: Willingness to Work Hard

Horizontal pay dispersion for sales employees (4)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.185	0.607	6.576	0.763	1.554	1.038	-0.155	1.290	1.709	10.67
	(1.435)	(2.164)	(5.117)	(2.157)	(3.006)	(1.597)	(3.370)	(1.438)	(2.132)	(10.06)
Individual Status Dummy		-0.382	1.050							0.769
		(0.219)	(1.129)							(1.429)
Individual Status Interaction			-7.313							-5.803
			(5.673)							(7.045)
Individual Size-of-Stake				0.000000506	0.0000914					-0.0000881
				(0.0000112)	(0.000241)					(0.000293)
Individual Size-of-Stake Interaction					-0.000441					0.000451
					(0.00117)					(0.00142)
Site Status Percent Owners						-0.00180	-0.0192			-0.0690
						(0.00867)	(0.0441)			(0.121)
Site Status Interaction							0.0860			0.115
							(0.214)			(0.530)
Site Size-of-Stake Average								0.0000672	0.000143	0.00112
								(0.0000672)	(0.000295)	(0.000785)
Site Size-of-Stake Interaction									-0.000367	-0.00737
									(0.00138)	(0.00504)
N	633	234	234	234	234	633	633	633	633	234
Chi-Square	45.34	26.09	27.29	23.31	23.44	45.38	45.54	46.34	46.42	29.38
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 32: Willingness to Work Hard

Vertical pay dispersion across job types (8)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.219***	1.541***	1.369*	1.506***	1.617***	1.351***	1.181*	1.206**	1.463**	2.147*
	(0.370)	(0.432)	(0.621)	(0.432)	(0.446)	(0.370)	(0.583)	(0.373)	(0.538)	(0.853)
Individual Status Dummy		0.0564	0.00816							-0.119
		(0.0315)	(0.129)							(0.144)
Individual Status Interaction			0.264							0.947
			(0.687)							(0.766)
Individual Size-of-Stake				0.00000512	0.0000362					0.0000253
				(0.00000513)	(0.0000320)					(0.0000333)
Individual Size-of-Stake Interaction					-0.000144					-0.0000999
					(0.000146)					(0.000151)
Site Status Percent Owners						0.000370**	0.000204			0.000207
						(0.000137)	(0.000460)			(0.000554)
Site Status Interaction							0.000959			0.000886
							(0.00255)			(0.00312)
Site Size-of-Stake Average								-0.00000443	0.0000723	0.000270
								(0.0000309)	(0.000120)	(0.000156)
Site Size-of-Stake Interaction									-0.000402	-0.00156*
									(0.000605)	(0.000793)
N	13477	8263	8263	8263	8263	13477	13477	13459	13459	8263
Chi-Square	733.0	482.7	482.6	480.3	481.6	741.4	741.6	732.1	732.5	495.4
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 33: Willingness to Work Hard

Vertical pay dispersion across organizational levels for managers (7)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.0512	0.316	2.164	0.307	0.442	-0.0306	0.948	0.147	0.237	6.321*
	(0.564)	(0.787)	(1.385)	(0.781)	(0.911)	(0.571)	(1.808)	(0.538)	(0.757)	(2.559)
Individual Status Dummy		0.0492	0.511							0.528
		(0.111)	(0.353)							(0.446)
Individual Status Interaction			-2.368							-2.258
			(1.631)							(2.146)
Individual Size-of-Stake				0.00000364	0.0000217					0.0000103
				(0.00000471)	(0.0000631)					(0.0000726)
Individual Size-of-Stake Interaction					-0.0000837					-0.0000304
					(0.000291)					(0.000335)
Site Status Percent Owners						0.000238	0.00323			0.0136*
						(0.00111)	(0.00536)			(0.00671)
Site Status Interaction							-0.0147			-0.0734*
							(0.0258)			(0.0347)
Site Size-of-Stake Average								0.0000133*	0.0000297	-0.000125
								(0.00000557)	(0.0000975)	(0.000167)
Site Size-of-Stake Interaction									-0.0000750	0.000502
									(0.000445)	(0.000774)
N	3510	1044	1044	1044	1044	3510	3510	3322	3322	1044
Chi-Square	178.1	49.91	55.34	50.47	50.65	178.1	178.9	247.0	247.0	60.82
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 34: Turnover Intention

Horizontal pay dispersion for production employees

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.0409	-0.361	-1.057	-0.316	-0.484	0.0999	-1.303	-0.0391	-0.854	-2.316
	(0.609)	(0.686)	(0.883)	(0.691)	(0.698)	(0.616)	(1.031)	(0.608)	(0.846)	(1.326)
Individual Status Dummy		-0.102*	-0.291							-0.193
		(0.0446)	(0.158)							(0.17)
Individual Status Interaction			1.13							0.596
			(0.907)							(0.972)
Individual Size-of-Stake				0.00000391	-0.0000536					-0.0000264
				(0.00000527)	(0.000039)					(0.0000376)
Individual Size-of-Stake Interaction					0.00024					0.000133
					(0.00016)					(0.000155)
Site Status Percent Owners						0.000275	-0.00156			-0.00114
						(0.000451)	(0.00118)			(0.00139)
Site Status Interaction							0.0114			0.00954
							(0.00679)			(0.00796)
Site Size-of-Stake Average								-0.0000806	-0.000305	-0.00017
								(0.0000623)	(0.000176)	(0.00023)
Site Size-of-Stake Interaction								0.00137	0.000513	
								(0.001)	(0.00125)	
N	7163	5333	5333	5333	5333	7163	7163	7163	7163	5333
Chi-Square	488.9	373.3	374.9	368.8	370.9	489.2	492	490.5	492.5	379.6
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 35: Turnover Intention

Horizontal pay dispersion for administrative support employees (2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.542	1.385	-0.396	1.615	1.355	-1.035	-1.511	-0.116	-0.0969	-0.75
	(1.007)	(1.094)	(2.26)	(1.311)	(1.449)	(0.96)	(1.843)	(1.021)	(1.735)	(4.337)
Individual Status Dummy		-0.219	-0.521							-0.596
		(0.115)	(0.354)							(0.39)
Individual Status Interaction			2.197							3.046
			(2.371)							(2.597)
Individual Size-of-Stake				-0.0000676	-0.000122					0.000192
				(0.0000483)	(0.000171)					(0.000202)
Individual Size-of-Stake Interaction					0.000333					-0.00108
					(0.00102)					(0.0012)
Site Status Percent Owners						-0.0171*	-0.0238			0.0168
						(0.00724)	(0.0233)			(0.0303)
Site Status Interaction							0.0449			-0.131
							(0.149)			(0.178)
Site Size-of-Stake Average								-0.000114	-0.00011	-0.00112*
								(0.00008)	(0.000296)	(0.000497)
Site Size-of-Stake Interaction									-0.0000267	0.00475
									(0.00191)	(0.00305)
N	570	204	204	204	204	570	570	559	559	204
Chi-Square	69.79	47.81	47.9	43.62	44.09	78.58	78.67	76.14	76.14	73.87
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 36: Turnover Intention

Horizontal pay dispersion for professional/technical employees (3)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.771	-0.862	-0.661	-0.818	-0.792	-0.594	-0.561	-0.621	-0.522	-0.559
	(0.522)	(0.726)	(1.078)	(0.716)	(0.761)	(0.551)	(1.054)	(0.548)	(0.780)	(2.421)
Individual Status Dummy		-0.0263	0.0284							0.0672
		(0.0589)	(0.225)							(0.259)
Individual Status Interaction			-0.298							-0.559
			(1.188)							(1.384)
Individual Size-of-Stake				-0.00000201	0.00000260					0.000000652
				(0.00000814)	(0.0000472)					(0.0000514)
Individual Size-of-Stake Interaction					-0.0000229					-0.00000820
					(0.000230)					(0.000251)
Site Status Percent Owners						0.000569	0.000644			0.000977
						(0.000577)	(0.00210)			(0.00305)
Site Status Interaction							-0.000432			-0.00295
							(0.0116)			(0.0187)
Site Size-of-Stake Average								0.0000442	0.0000638	-0.0000418
								(0.0000287)	(0.000114)	(0.000190)
Site Size-of-Stake Interaction									-0.000107	0.000428
									(0.000600)	(0.00107)
N	3975	1670	1670	1670	1670	3975	3975	3751	3751	1670
Chi-Square	247.1	157.1	157.1	156.9	156.9	248.1	248.1	246.1	246.1	158.3
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 37: Turnover Intention

Horizontal pay dispersion for sales employees (4)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	2.276	2.091	-0.0853	2.152	0.974	1.140	3.156	2.342	0.981	-35.08
	(1.729)	(2.862)	(5.790)	(2.861)	(3.915)	(1.887)	(3.868)	(1.739)	(2.424)	(41.47)
Individual Status Dummy		0.0312	-0.533							-0.182
		(0.263)	(1.342)							(1.842)
Individual Status Interaction			2.855							-0.0726
			(6.666)							(8.995)
Individual Size-of-Stake				0.0000225	-0.000121					0.0000828
				(0.0000133)	(0.000333)					(0.000446)
Individual Size-of-Stake Interaction					0.000693					-0.000279
					(0.00161)					(0.00216)
Site Status Percent Owners						-0.0184	0.0131			0.157
						(0.0106)	(0.0537)			(0.184)
Site Status Interaction							-0.154			0.0709
							(0.257)			(1.162)
Site Size-of-Stake Average								0.0000372	-0.000262	-0.00411
								(0.0000765)	(0.000384)	(0.00273)
Site Size-of-Stake Interaction									0.00143	0.0293
									(0.00180)	(0.0201)
N	631	233	233	233	233	631	631	631	631	233
Chi-Square	45.76	27.17	27.18	29.75	29.81	48.07	48.75	46.00	46.09	31.25
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 38: Turnover Intention

Vertical pay dispersion across job types (8)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.454	-0.409	-0.899	-0.316	-0.524	-0.441	-0.668	-0.503	-1.012	-1.157
	(0.517)	(0.610)	(0.796)	(0.612)	(0.625)	(0.520)	(0.862)	(0.519)	(0.753)	(1.208)
Individual Status Dummy		-0.135***	-0.276							-0.223
		(0.0364)	(0.151)							(0.165)
Individual Status Interaction			0.771							0.484
			(0.806)							(0.879)
Individual Size-of-Stake				0.00000592	-0.0000528					-0.0000218
				(0.00000433)	(0.0000383)					(0.0000382)
Individual Size-of-Stake Interaction					0.000264					0.000134
					(0.000170)					(0.000170)
Site Status Percent Owners						0.0000376	-0.000157			0.0000216
						(0.000178)	(0.000617)			(0.000745)
Site Status Interaction							0.00114			0.000711
							(0.00344)			(0.00420)
Site Size-of-Stake Average								-0.0000415	-0.000187	-0.000102
								(0.0000439)	(0.000163)	(0.000212)
Site Size-of-Stake Interaction									0.000773	0.000319
									(0.000834)	(0.00109)
N	13463	8249	8249	8249	8249	13463	13463	13444	13444	8249
Chi-Square	880.1	648.6	649.6	638.2	640.7	880.2	880.3	880.3	881.3	654.2
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 39: Turnover Intention

Vertical pay dispersion across organizational levels for managers (7)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.113	-0.435	-0.327	-0.571	-0.510	-0.0221	-6.460**	0.0604	0.878	-4.383
	(0.748)	(0.792)	(1.467)	(0.784)	(0.926)	(0.739)	(2.405)	(0.756)	(1.065)	(2.840)
Individual Status Dummy		0.132	0.164							0.125
		(0.114)	(0.383)							(0.488)
Individual Status Interaction			-0.153							-0.286
			(1.754)							(2.334)
Individual Size-of-Stake				0.00000240	0.0000108					-0.0000303
				(0.00000148)	(0.0000679)					(0.0000797)
Individual Size-of-Stake Interaction					-0.0000388					0.000150
					(0.000312)					(0.000366)
Site Status Percent Owners						0.00195	-0.0168*			-0.0125
						(0.00162)	(0.00694)			(0.00744)
Site Status Interaction							0.0935**			0.0722
							(0.0337)			(0.0385)
Site Size-of-Stake Average								0.0000227	0.000166	0.000164
								(0.0000220)	(0.000133)	(0.000186)
Site Size-of-Stake Interaction									-0.000674	-0.000663
									(0.000616)	(0.000862)
N	3499	1040	1040	1040	1040	3499	3499	3312	3312	1040
Chi-Square	167.7	88.13	88.12	89.26	89.27	169.4	177.4	156.0	157.4	94.80
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 40: Days Absent

Horizontal pay dispersion for production employees

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-3.307	-4.031	-6.189	-4.33	-3.964	-3.571	-9.854**	-3.043	-3.633	-15.08**
	(2.386)	(2.99)	(4.393)	(2.99)	(3.059)	(2.444)	(3.444)	(2.387)	(3.041)	(5.217)
Individual Status Dummy		0.442	-0.18							0.341
		(0.29)	(0.991)							(1.118)
Individual Status Interaction			3.658							0.18
			(5.577)							(6.249)
Individual Size-of-Stake				-0.0000261	0.0000956					0.0000899
				(0.000044)	(0.000222)					(0.000233)
Individual Size-of-Stake Interaction					-0.000528					-0.000544
					(0.000944)					(0.000987)
Site Status Percent Owners						-0.000922	-0.0126*			-0.0181**
						(0.00211)	(0.00518)			(0.00654)
Site Status Interaction							0.0721*			0.0860*
							(0.0294)			(0.0373)
Site Size-of-Stake Average								0.000299	0.0000886	-0.000378
								(0.000247)	(0.000714)	(0.00105)
Site Size-of-Stake Interaction									0.00117	0.00294
									(0.00372)	(0.00517)
N	7112	5298	5298	5298	5298	7112	7112	7112	7112	5298
Chi-Square	241.4	176.2	176.6	174.1	174.4	241.6	247.9	242.9	243	187.4
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 41: Days Absent

Horizontal pay dispersion for administrative support employees (2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-1.271	4.81	19.17	4.427	11.72*	-1.535	-10.84	-1.811	2.694	41.55
	(4.316)	(4.71)	(10.94)	(4.743)	(5.743)	(4.524)	(7.111)	(4.375)	(7.82)	(21.95)
Individual Status Dummy		-0.786	1.645							1.657
		(0.574)	(1.768)							(1.967)
Individual Status Interaction			-17.28							-16.63
			(11.89)							(13.13)
Individual Size-of-Stake				-0.000131	0.00164					0.00111
				(0.000241)	(0.000841)					(0.00102)
Individual Size-of-Stake Interaction					-0.0111*					-0.00614
					(0.00504)					(0.00606)
Site Status Percent Owners						-0.00787	-0.151			0.0115
						(0.0341)	(0.102)			(0.154)
Site Status Interaction							0.935			-0.378
							(0.626)			(0.91)
Site Size-of-Stake Average								-0.00022	0.000625	0.00245
								(0.000346)	(0.00132)	(0.00252)
Site Size-of-Stake Interaction									-0.0057	-0.0201
									(0.00847)	(0.0154)
N	560	198	198	198	198	560	560	549	549	198
Chi-Square	21.57	33.86	36.33	32.03	37.63	21.53	25.94	23.74	23.63	46.52
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 42: Days Absent

Horizontal pay dispersion for professional/technical employees (3)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	1.288	-0.336	-20.30*	1.975	-1.218	0.106	0.00258	0.781	-6.525	-19.76
	(3.185)	(5.698)	(7.991)	(5.911)	(6.156)	(3.753)	(5.863)	(3.323)	(5.561)	(18.75)
Individual Status Dummy		-1.305**	-6.930***							-7.154***
		(0.438)	(1.659)							(1.912)
Individual Status Interaction			30.87***							33.40**
			(8.792)							(10.27)
Individual Size-of-Stake				-0.0000859	-0.000689*					-0.000174
				(0.0000603)	(0.000350)					(0.000380)
Individual Size-of-Stake Interaction					0.00299					0.000600
					(0.00171)					(0.00185)
Site Status Percent Owners						-0.00225	-0.00256			-0.00642
						(0.00379)	(0.0139)			(0.0239)
Site Status Interaction							0.00166			0.0191
							(0.0723)			(0.146)
Site Size-of-Stake Average								-0.0000375	-0.00126	0.000533
								(0.000130)	(0.000760)	(0.00148)
Site Size-of-Stake Interaction								0.00588	-0.00527	
								(0.00359)	(0.00831)	
N	3866	1591	1591	1591	1591	3866	3866	3651	3651	1591
Chi-Square	182.0	97.59	110.9	89.78	93.06	182.4	182.4	180.4	183.2	113.8
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 43: Days Absent

Horizontal pay dispersion for sales employees (4)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	2.046	4.272	7.461	4.401	4.780	2.421	2.745	1.911	1.247	-9.318
	(1.598)	(3.601)	(4.640)	(3.470)	(3.652)	(1.757)	(3.729)	(1.602)	(2.352)	(5.308)
Individual Status Dummy		-0.275*	0.686							0.576
		(0.133)	(0.845)							(0.879)
Individual Status Interaction			-4.749							-4.757
			(4.115)							(4.269)
Individual Size-of-Stake				-0.00000541	0.0000537					0.0000483
				(0.00000678)	(0.000173)					(0.000182)
Individual Size-of-Stake Interaction					-0.000286					-0.000234
					(0.000839)					(0.000881)
Site Status Percent Owners						0.00487	0.00961			-0.0430
						(0.00951)	(0.0490)			(0.0734)
Site Status Interaction							-0.0233			0.560
							(0.237)			(0.319)
Site Size-of-Stake Average								-0.0000730	-0.000196	-0.000958*
								(0.0000734)	(0.000327)	(0.000450)
Site Size-of-Stake Interaction									0.000591	0.00805**
									(0.00153)	(0.00280)
N	624	226	226	226	226	624	624	624	624	226
Chi-Square	146.2	35.27	36.50	31.56	31.64	146.5	146.5	147.4	147.6	77.91
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 44: Days Absent

Vertical pay dispersion across job types (8)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-2.428	-3.006	-6.505	-3.074	-3.065	-2.577	-8.652**	-2.384	-3.446	-12.74*
	(2.053)	(2.627)	(4.084)	(2.624)	(2.745)	(2.076)	(2.925)	(2.065)	(2.906)	(5.005)
Individual Status Dummy		0.0934	-0.887							-0.946
		(0.226)	(0.916)							(1.038)
Individual Status Interaction			5.339							5.513
			(4.829)							(5.471)
Individual Size-of-Stake				-0.0000284	-0.0000258					0.0000253
				(0.0000323)	(0.000229)					(0.000243)
Individual Size-of-Stake Interaction					-0.0000118					-0.000259
					(0.00104)					(0.00109)
Site Status Percent Owners						-0.000348	-0.00753**			-0.00961**
						(0.000842)	(0.00270)			(0.00352)
Site Status Interaction							0.0409**			0.0480*
							(0.0146)			(0.0195)
Site Size-of-Stake Average								0.0000523	-0.000289	0.000490
								(0.000164)	(0.000682)	(0.000975)
Site Size-of-Stake Interaction									0.00172	-0.00222
									(0.00334)	(0.00473)
N	13251	8091	8091	8091	8091	13251	13251	13232	13232	8091
Chi-Square	475.4	297.9	299.3	298.5	298.5	475.6	484.4	473.8	474.1	309.4
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 45: Days Absent

Vertical pay dispersion across organizational levels for managers (7)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-2.202	-5.714*	-5.864	-5.891*	-9.489***	-2.458	-1.817	-2.397	-5.941	-7.661
	(2.119)	(2.343)	(4.422)	(2.311)	(2.781)	(2.175)	(6.207)	(2.281)	(3.193)	(7.917)
Individual Status Dummy		0.149	0.106							2.786
		(0.329)	(1.144)							(1.451)
Individual Status Interaction			0.209							-12.66
			(5.248)							(6.957)
Individual Size-of-Stake				-0.00000153	-0.000469*					-0.000364
				(0.00000522)	(0.000202)					(0.000239)
Individual Size-of-Stake Interaction					0.00215*					0.00166
					(0.000929)					(0.00110)
Site Status Percent Owners						-0.00177	0.000320			-0.00140
						(0.00339)	(0.0193)			(0.0213)
Site Status Interaction							-0.00999			-0.0145
							(0.0906)			(0.110)
Site Size-of-Stake Average								-0.0000282	-0.000685	-0.00126*
								(0.0000230)	(0.000415)	(0.000545)
Site Size-of-Stake Interaction									0.00300	0.00567*
									(0.00189)	(0.00252)
N	3462	1010	1010	1010	1010	3462	3462	3278	3278	1010
Chi-Square	119.5	46.03	46.04	45.91	51.50	119.7	119.8	116.7	119.3	59.81
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 46: Anti-Shirking Behavior

Horizontal pay dispersion for production employees

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.664	0.811	1.159	0.786	0.866	0.694	1.360*	0.571	0.74	2.125**
	(0.396)	(0.44)	(0.623)	(0.439)	(0.446)	(0.404)	(0.64)	(0.387)	(0.515)	(0.823)
Individual Status Dummy		0.0436	0.141							0.071
		(0.0377)	(0.13)							(0.144)
Individual Status Interaction			-0.579							-0.0438
			(0.739)							(0.821)
Individual Size-of-Stake				-0.00000438	0.000022					0.000016
				(0.00000527)	(0.0000267)					(0.0000278)
Individual Size-of-Stake Interaction					-0.000114					-0.0000886
					(0.000114)					(0.000118)
Site Status Percent Owners						0.000124	0.00112			0.00165
						(0.000317)	(0.00081)			(0.000932)
Site Status Interaction							-0.00623			-0.00838
							(0.00465)			(0.00537)
Site Size-of-Stake Average								-0.000104**	-0.000052	-0.00000947
								(0.0000394)	(0.000112)	(0.00015)
Site Size-of-Stake Interaction									-0.000305	-0.000421
									(0.000615)	(0.000782)
N	7180	5349	5349	5349	5349	7180	7180	7180	7180	5349
Chi-Square	438.9	372.4	373.3	371.8	372.9	439	441	447.7	448	382.6
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 47: Anti-Shirking Behavior

Horizontal pay dispersion for administrative support employees (2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.147	1.241	7.139*	0.948	1.987	0.36	-0.515	-0.269	-1.718	4.622
	(1.124)	(1.996)	(3.214)	(1.929)	(2.152)	(1.134)	(2.139)	(1.166)	(1.973)	(7.772)
Individual Status Dummy		-0.153	0.866							0.691
		(0.158)	(0.461)							(0.52)
Individual Status Interaction			-7.286*							-6.78
			(3.085)							(3.461)
Individual Size-of-Stake				0.0000688	0.000312					0.000254
				(0.0000643)	(0.000227)					(0.000263)
Individual Size-of-Stake Interaction					-0.00151					-0.000828
					(0.00135)					(0.00157)
Site Status Percent Owners						0.00714	-0.00539			-0.00373
						(0.00853)	(0.0274)			(0.0614)
Site Status Interaction							0.0837			0.151
							(0.174)			(0.384)
Site Size-of-Stake Average								0.000129	-0.000166	-0.00032
								(0.0000913)	(0.000336)	(0.000829)
Site Size-of-Stake Interaction									0.00196	0.00181
									(0.00216)	(0.00508)
N	573	204	204	204	204	573	573	562	562	204
Chi-Square	61.09	41.93	49.07	41.81	43.43	62.11	62.44	66.37	67.36	53.99
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 48: Anti-Shirking Behavior

Horizontal pay dispersion for professional/technical employees (3)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.604	-0.416	-2.087*	-0.511	-0.358	-0.462	1.104	-0.408	-0.787	-2.197
	(0.553)	(0.519)	(0.989)	(0.522)	(0.602)	(0.579)	(1.125)	(0.597)	(0.843)	(1.987)
Individual Status Dummy		0.0843	-0.324							-0.484*
		(0.0570)	(0.215)							(0.244)
Individual Status Interaction			2.227*							3.246*
			(1.128)							(1.290)
Individual Size-of-Stake				-0.0000134	0.0000105					0.0000453
				(0.00000814)	(0.0000461)					(0.0000511)
Individual Size-of-Stake Interaction					-0.000118					-0.000315
					(0.000225)					(0.000250)
Site Status Percent Owners						0.000473	0.00390			0.000245
						(0.000607)	(0.00221)			(0.00243)
Site Status Interaction							-0.0198			0.00421
							(0.0123)			(0.0148)
Site Size-of-Stake Average								0.0000477	-0.0000287	-0.00000769
								(0.0000318)	(0.000125)	(0.000157)
Site Size-of-Stake Interaction									0.000427	0.0000232
									(0.000668)	(0.000846)
N	3980	1675	1675	1675	1675	3980	3980	3757	3757	1675
Chi-Square	487.4	168.1	172.4	168.6	168.9	488.2	491.3	474.8	475.0	184.3
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 49: Anti-Shirking Behavior

Horizontal pay dispersion for sales employees (4)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	-0.604	-0.416	-2.087*	-0.511	-0.358	-0.462	1.104	-0.408	-0.787	-2.197
	(0.553)	(0.519)	(0.989)	(0.522)	(0.602)	(0.579)	(1.125)	(0.597)	(0.843)	(1.987)
Individual Status Dummy		0.0843	-0.324							-0.484*
		(0.0570)	(0.215)							(0.244)
Individual Status Interaction			2.227*							3.246*
			(1.128)							(1.290)
Individual Size-of-Stake				-0.0000134	0.0000105					0.0000453
				(0.00000814)	(0.0000461)					(0.0000511)
Individual Size-of-Stake Interaction					-0.000118					-0.000315
					(0.000225)					(0.000250)
Site Status Percent Owners						0.000473	0.00390			0.000245
						(0.000607)	(0.00221)			(0.00243)
Site Status Interaction							-0.0198			0.00421
							(0.0123)			(0.0148)
Site Size-of-Stake Average								0.0000477	-0.0000287	-0.00000769
								(0.0000318)	(0.000125)	(0.000157)
Site Size-of-Stake Interaction									0.000427	0.0000232
									(0.000668)	(0.000846)
N	3980	1675	1675	1675	1675	3980	3980	3757	3757	1675
Chi-Square	487.4	168.1	172.4	168.6	168.9	488.2	491.3	474.8	475.0	184.3
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 50: Anti-Shirking Behavior

Vertical pay dispersion across job types (8)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.679	0.934*	1.192*	0.898*	1.005*	0.766*	1.132*	0.687	0.325	1.443
	(0.354)	(0.390)	(0.566)	(0.389)	(0.401)	(0.355)	(0.568)	(0.357)	(0.517)	(0.756)
Individual Status Dummy		0.0515	0.124							0.150
		(0.0291)	(0.119)							(0.132)
Individual Status Interaction			-0.396							-0.416
			(0.630)							(0.701)
Individual Size-of-Stake				-0.00000419	0.0000254					0.0000217
				(0.00000391)	(0.0000276)					(0.0000289)
Individual Size-of-Stake Interaction					-0.000135					-0.000121
					(0.000125)					(0.000130)
Site Status Percent Owners						0.000245	0.000586			0.000838
						(0.000127)	(0.000433)			(0.000494)
Site Status Interaction							-0.00198			-0.00339
							(0.00240)			(0.00277)
Site Size-of-Stake Average								0.00000821	-0.0000982	-0.000228
								(0.0000297)	(0.000114)	(0.000140)
Site Size-of-Stake Interaction									0.000560	0.000768
									(0.000578)	(0.000704)
N	13489	8273	8273	8273	8273	13489	13489	13470	13470	8273
Chi-Square	860.1	559.0	559.5	557.0	558.3	864.2	865.0	858.9	859.9	574.0
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

Table 51: Anti-Shirking Behavior

Vertical pay dispersion across organizational levels for managers (7)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Pay Dispersion	0.0953	0.0646	-1.146	-0.107	-0.235	0.210	-0.0487	0.0263	-0.508	1.735
	(0.462)	(0.539)	(1.009)	(0.540)	(0.629)	(0.453)	(1.500)	(0.468)	(0.664)	(1.716)
Individual Status Dummy		0.191**	-0.154							-0.145
		(0.0728)	(0.255)							(0.311)
Individual Status Interaction			1.677							1.727
			(1.187)							(1.490)
Individual Size-of-Stake				0.00000143	-0.0000162					0.00000683
				(0.00000113)	(0.0000444)					(0.0000507)
Individual Size-of-Stake Interaction					0.0000809					-0.0000258
					(0.000204)					(0.000233)
Site Status Percent Owners						0.00165	0.000880			0.00959*
						(0.000947)	(0.00437)			(0.00459)
Site Status Interaction							0.00383			-0.0434
							(0.0212)			(0.0237)
Site Size-of-Stake Average								-0.0000257*	-0.000120	-0.0000618
								(0.0000122)	(0.0000838)	(0.000116)
Site Size-of-Stake Interaction									0.000439	0.000223
									(0.000387)	(0.000536)
N	3504	1039	1039	1039	1039	3504	3504	3316	3316	1039
Chi-Square	603.8	137.3	138.6	130.7	131.0	614.2	614.2	606.2	608.5	167.7
Model Degrees of Freedom	18	19	20	19	20	19	20	19	20	26

Standard errors in parentheses: * p<0.05 ** p<0.01 *** p<0.001

APPENDIX 2

- * PhD Dissertation
- * How does employee stock ownership influence the outcomes of pay inequality?
- * The occupations are: (1) Production, (2) Admin. support, (3) Prof./technical, (4) Sales,
- * (5) Customer service, (6) Engineering, (7) Scientist, and (8) Management
- * Dispersion analyses: Horizontal 1 - 6, Vertical (7) for managers, and (8) for across occupations
- * Regressions: (0) direct effect, (1) moderated (status) effect, (2) moderated (individual) effect, and (3) moderated (site) effect
- * After dropping non-US employees, those with . or 0 for wages, and tenure less than a year, this is the number of employees by occupation:
- * Production (9,563) Admin. support (1,349) Prof./technical (6,781) Sales (1,186) Customer service (477) Engineering (462) Scientist (42) Management (3,060)
- * Distributed among 206 distinct site, some occupations don't have enough employees per site to calculate dispersion.
- * Dropped Customer service, Engineering, and Scientist.
- * Used Production, Admin. support, Prof./technical, and Sales

- * Robustness check using $r(\text{ge2})$, which is half the square of the coefficient of variation.
- * No hilo moderation, since it's not my research question.

capture log close

set more 1

clear

log using D14r.log, replace

etime, start

set matsize 1000

local dispVar "1 2 3 4 7 8" // Occupations 1 2 3 4 7 8

foreach avar of local dispVar { // LOOP OVER OCCUPATIONS

use megadat2, clear

```

*   quietly by site, sort: gen resprate = _N/facemp

*   drop if resprate < .3                                // Drop sites with response rates under 70%

drop if occup==5 | occup==6 | occup==7                  // Drop occupations with too few observations

drop if country != 41                                    // US sites only

drop if fixpay == . | fixpay <= 0                        // Must have fixed pay data

drop if tenure < 1                                       // New employees are unlikely to know their peers' compensation


* Choose type of analysis

if `avar' < 7 {                                           // HORIZONTAL PAY DISPERSION

    drop if occup != `avar'

    drop if mgt==1 | upmgt==1 | midmgt==1 | lowmgt==1    // Omit managers - eliminate overlap

}

else if `avar' == 7 {                                     // VERTICAL PAY DISPERSION FOR MANAGERS

    drop if mgt!=1 & upmgt!=1 & midmgt!=1 & lowmgt!=1    // Managers only

```

```

}

else if `avar'==8 {                                // VERTICAL PAY DISPERSION ACROSS OCCUPATIONS

    drop if occup==7 | occup==8 | mgt==1 | upmgt==1 | midmgt==1 | lowmgt==1    // Employees only

}

* Calculate granted stock per year

gen grantedval=keptval1+(k401stk1*(100-k401own))/100

    // (previously exercised stock options) + ((401k total stock) * (100 - (401k own contributions)))

replace grantedval=keptval1 if k401==0                // In no 401k then all granted stock is previously exercised options.

replace grantedval=. if grantedval<0                // Eliminate low outliers

gen grantedperyear = grantedval/tenure                // Stock granted per year

gen statusdummy=(grantedperyear>0) if grantedperyear<. // Dummy variable for status effect: any vs. no granted stock

* Group some control variables into dummies to make display more manageable.

gen colgrad = 0

replace colgrad = 1 if ba==1 | grad==1

```

```
replace colgrad = . if missing(ba) | missing(grad)
```

```
* Control variables
```

```
gen agesq=age^2                                // Already defined in comxd
```

```
gen tenuresq=tenure^2
```

```
* Dependent variables
```

```
gen jobsatr = 8 - jobsat                        // Reverse code job satisfaction
```

```
gen loyaltyr = 5 - loyalty                      // Reverse code loyalty
```

```
gen willworkr = 6 - willwork                   // Reverse code willwork
```

```
alpha grdpurp grdtrust grdaccr grdrel grdinfo, gen(giftexch)
```

```
alpha talkemp talksup talkgrp donothng, gen(antishirk)
```

```
local depVars "jobsatr loyaltyr cofair willworkr lookhard daysabs antishirk"
```

```
eststo clear
```


* Drop sites with fewer than 10 observations

sort site

by site: gen N=_N

drop if N<10

by site: gen n1=($_n==1$)

gen newsite=sum(n1)

* Generate Gini coefficients (fixpaygini) and Coefficients of variation (fixpaycv) by site

gen fixpaygini = .

gen fixpaycv = .

replace fixpay = fixpay/(hours*50) // Use hourly pay to measure dispersion in hourly pay, not annual wages

summ newsite // Generates r(max) - counter for total number of sites.

forvalues i= 1/r(max)' {

 ineqdeco fixpay if newsite==`i'

 replace fixpaygini = r(gini) if newsite==`i'

```

        replace fixpaycv = sqrt(2*r(ge2))/(2*(1-1/r(N))) if newsite=='i'           // Standardized coefficient of variation

*        replace fixpaycv = sqrt(2*r(ge2)) if newsite=='i'                       // Unstandardized coefficient of variation
    }

*    Generate dummies and interaction terms

    gen hilodummy=(fixpay>`r(mean)')           // Generate dummies for fixed pay above (1) and below (0) mean.

*    gen hiloint=hilodummy*fixpaygini          // Generate interaction terms for income above and below the mean

    count if grantedperyear>0 & grantedperyear<.           // Count workers with granted stock

    by site: gen sitestatuspct = r(N)/_N                   // Generate percent of group which has granted stock

    egen grantedperyearavg = mean(grantedperyear), by(newsite) // Generate means for granted stock by site


*    Individual Interaction terms

    gen ind_status_gini = statusdummy*fixpaygini           // Status effect

    gen ind_status_cv = statusdummy*fixpaycv               // Status effect

    gen ind_stake_gini = grantedperyear*fixpaygini         // Size of stake effect

```

```
gen ind_stake_cv = grantedperyear*fixpaycv          // Size of stake effect
```

* Site Interaction terms

```
gen site_status_gini = sitestatuspct*fixpaygini      // Status effect
```

```
gen site_status_cv = sitestatuspct*fixpaycv          // Status effect
```

```
gen site_stake_gini = grantedperyearavg*fixpaygini   // Size of stake effect
```

```
gen site_stake_cv = grantedperyearavg*fixpaycv       // Size of stake effect
```

```
macro def controlVars "hilodummy female age agesq aa colgrad nonwhite disab hourly supervis tenure tenuresq hours
```

```
    lfixpay indpay ei train"                          // Left out union due to collinearity
```

* macro def controlVars "hilodummy female age agesq smcol aa ba grad hisp black asian native disab hourly supervis

```
    tenure tenuresq hours lfixpay indpay ei train"
```

```
foreach dvar in `depVars' {                          // LOOP OVER OUTCOME VARIABLES
```

```
    if `dvar'==daysabs | `dvar'==antishirk {          // mixed command for continuous dvar
```

*

PAY DISPERSION ONLY

eststo: mixed `dvar' fixpaygini \$controlVars || newsite: // Direct effect

eststo: mixed `dvar' fixpaycv \$controlVars || newsite: // Direct effect

*

INDIVIDUAL LEVEL

* Status Effect

eststo: mixed `dvar' fixpaygini statusdummy \$controlVars || newsite: // Individual term

eststo: mixed `dvar' fixpaycv statusdummy \$controlVars || newsite: // Individual term

eststo: mixed `dvar' fixpaygini statusdummy ind_status_gini \$controlVars || newsite: // Individual interaction term

eststo: mixed `dvar' fixpaycv statusdummy ind_status_cv \$controlVars || newsite: // Individual interaction term

* Size-of-Stake Effect

eststo: mixed `dvar' fixpaygini grantedperyear \$controlVars || newsite: // Individual term

eststo: mixed `dvar' fixpaycv grantedperyear \$controlVars || newsite: // Individual term

eststo: mixed `dvar' fixpaygini grantedperyear ind_stake_gini \$controlVars || newsite: // Individual interaction term

eststo: mixed `dvar' fixpaycv grantedperyear ind_stake_cv \$controlVars || newsite: // Individual interaction term

*

SITE LEVEL

* Status Effect

```

eststo: mixed `dvar' fixpaygini sitestatuspct $controlVars || newsite:           // Site term
eststo: mixed `dvar' fixpaycv sitestatuspct $controlVars || newsite:           // Site term
eststo: mixed `dvar' fixpaygini sitestatuspct site_status_gini $controlVars || newsite: // Site interaction term
eststo: mixed `dvar' fixpaycv sitestatuspct site_status_cv $controlVars || newsite: // Site interaction term

```

* Size-of-Stake Effect

```

eststo: mixed `dvar' fixpaygini grantedperyearavg $controlVars || newsite:       // Site term
eststo: mixed `dvar' fixpaycv grantedperyearavg $controlVars || newsite:       // Site term
eststo: mixed `dvar' fixpaygini grantedperyearavg site_stake_gini $controlVars || newsite: // Site interaction term
eststo: mixed `dvar' fixpaycv grantedperyearavg site_stake_cv $controlVars || newsite: // Site interaction term

```

*

FULL MODEL

```

eststo: mixed `dvar' fixpaygini statusdummy ind_status_gini grantedperyear ind_stake_gini sitestatuspct site_status_gini
      grantedperyearavg site_stake_gini $controlVars || newsite:

```

```
eststo: mixed `dvar' fixpaycv statusdummy ind_status_cv grantedperyear ind_stake_cv sitestatuspct site_status_cv
```

```
    grantedperyearavg site_stake_cv $controlVars || newsite:
```

```
}
```

```
else {          // meoprobit command for ordinal dvar
```

```
*
```

PAY DISPERSION ONLY

```
eststo: meoprobit `dvar' fixpaygini $controlVars || newsite:           // Direct effect
```

```
eststo: meoprobit `dvar' fixpaycv $controlVars || newsite:           // Direct effect
```

```
*
```

INDIVIDUAL LEVEL

* Status Effect

```
eststo: meoprobit `dvar' fixpaygini statusdummy $controlVars || newsite:           // Individual term
```

```
eststo: meoprobit `dvar' fixpaycv statusdummy $controlVars || newsite:           // Individual term
```

```
eststo: meoprobit `dvar' fixpaygini statusdummy ind_status_gini $controlVars || newsite:           // Individual interaction term
```

```
eststo: meoprobit `dvar' fixpaycv statusdummy ind_status_cv $controlVars || newsite:           // Individual interaction term
```

* Size-of-Stake Effect

```

eststo: meoprobit `dvar' fixpaygini grantedperyear $controlVars || newsite:           // Individual term

eststo: meoprobit `dvar' fixpaycv grantedperyear $controlVars || newsite:           // Individual term

eststo: meoprobit `dvar' fixpaygini grantedperyear ind_stake_gini $controlVars || newsite: // Individual interaction term

eststo: meoprobit `dvar' fixpaycv grantedperyear ind_stake_cv $controlVars || newsite: // Individual interaction term

```

*

SITE LEVEL

* Status Effect

```

eststo: meoprobit `dvar' fixpaygini sitestatuspct $controlVars || newsite:           // Site term

eststo: meoprobit `dvar' fixpaycv sitestatuspct $controlVars || newsite:           // Site term

eststo: meoprobit `dvar' fixpaygini sitestatuspct site_status_gini $controlVars || newsite: // Site interaction term

eststo: meoprobit `dvar' fixpaycv sitestatuspct site_status_cv $controlVars || newsite: // Site interaction term

```

* Size-of-Stake Effect

```

eststo: meoprobit `dvar' fixpaygini grantedperyearavg $controlVars || newsite:           // Site term

eststo: meoprobit `dvar' fixpaycv grantedperyearavg $controlVars || newsite:           // Site term

eststo: meoprobit `dvar' fixpaygini grantedperyearavg site_stake_gini $controlVars || newsite: // Site interaction term

```

```
eststo: meoprobit `dvar' fixpaycv grantedperyearavg site_stake_cv $controlVars || newsite: // Site interaction term
```

```
*
```

FULL MODEL

```
eststo: meoprobit `dvar' fixpaygini statusdummy ind_status_gini grantedperyear ind_stake_gini sitestatuspct site_status_gini
```

```
grantedperyearavg site_stake_gini $controlVars || newsite:
```

```
eststo: meoprobit `dvar' fixpaycv statusdummy ind_status_cv grantedperyear ind_stake_cv sitestatuspct site_status_cv
```

```
grantedperyearavg site_stake_cv $controlVars || newsite:
```

```
}
```

```
* Correlations table
```

```
putexcel set D14rcorr`avar', sheet("`dvar'") modify
```

```
correlate `dvar' fixpaygini fixpaycv statusdummy ind_status_gini grantedperyear ind_stake_gini sitestatuspct
```

```
site_status_gini grantedperyearavg site_stake_gini $controlVars
```

```
return list
```

```
matrix list r(C)
```

```
putexcel A1=matrix(r(C)), names
```



```
        putexcel clear

    }

    esttab using D14r`avar'.csv, replace se scalars(chi2 df_m)

    eststo clear

    drop `dvar' fixpaygini fixpaycv statusdummy ind_status_gini grantedperyear ind_stake_gini sitestatuspct site_status_gini

        grantedperyearavg site_stake_gini $controlVars

    }

    etime

    clear

    log close _all
```