Reexamining the Pay Differentials-Organizational Outcomes Relationship in Korea: The Role of Organizational Identification*

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Abstract

This research examines the effects of pay differentials on financial performance and employee turnover in Korea by considering a critical employee-based factor: organizational identification. Incorporating tournament theory and social identity theory, authors theorize that pay differentials increase financial performance and employee turnover without considering employees’ organizational identification. If considered, however, whereas the positive effects of pay differentials on financial performance will be weaker, the effects on turnover will be stronger. Using a sample of Korean cross-industry firms, results show pay differentials have a positive influence on only financial performance. Also, as predicted, while the

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positive relationship between pay differentials and financial performance became weaker, the relationship with turnover became stronger when employees’ organizational identification is high. Theoretical and practical implications for strategic pay structures are discussed.

Keywords: Pay Differentials, Turnover, Organizational Identification, Financial Performance, and Korea

INTRODUCTION

During the Asian financial crisis in the late 1990s, Korean companies experienced transition from an egalitarian (or compressed) pay structure to a more hierarchical pay structure among employees (Bae 1997; Rowley and Bae 2002). Some studies found that this transition in pay structure improved employees’ performance (Kim 2010; Ko and Jung 2008). Simultaneously, however, a number of employees reported that they experienced huge conflicts between traditional value system and newly adopted pay system, which led to the drastic decrease of employees’ organizational loyalty (Bae and Rowley 2002; Kim 2010, Rowley and Bae 2002). The purpose of this study is to clarify the conditions which made differentiated pay more or less effective in Korean organizations context, and thereby providing implications for organizations in other collectivistic societies.

To date, little research on hierarchical pay structure has considered the effects of employees’ shared values. More specifically, although tournament theory and related findings have explained that differentiated pay structures exert positive effects by encouraging severe competition for considerable rewards (Lazear and Rosen 1981; Rosen 1986), those studies have overlooked issues of congruence between pay differentials and employee-based factors such as employees’ values or expectations about their organizations. Congruence here refers to the compatibility between employees’ attitude toward pay differentials and their attitude such as values or expectations about their organizations. This congruence issue is particularly pronounced when discussing the transferability of pay differentials across different social contexts (Kepes, Delery, and Gupta 2009). Using the social identification theory, which explains people’s sense of self when they identify with a group or an organization (Tajfel and Turner 1979), we argue that if a firm designs
and operates a highly differentiated pay structure, employees who identify highly with their organizations will feel that their relational contracts have been severely violated (Abrams, Ando, and Hinkle 1998; Morrison and Robinson 1997).

In addition, most researchers have focused on performance at individual (Becker and Huselid 1992; Ehrenberg and Bognanno 1990) or organizational (Brown, Sturman, and Simmering 2003; Shaw, Gupta, and Delery 2002) levels. In particular, previous research is overly weighted toward examining financial outcomes (Bloom 1999; Brown, Sturman, and Simmering 2003; Kepes, Delery, and Gupta 2009; Shaw, Gupta, and Delery 2002) because financial performance at the firm level directly relates to firm survival. In contrast, existing literature with a few exceptions (e.g., Bloom and Michel 2002; Pfeffer and Davis-Blake 1992; Shaw and Gupta 2007) has often overlooked turnover as another important organizational effectiveness. However, considering that there are some limitations of financial performance as a reflection of employees’ perceptions or attitudes (Batt, Colvin, and Keefe 2002; Holtom, Mitchell, and Eberly 2008), turnover should be considered another organizational outcome that indicates the effectiveness of the differentiated pay system from the employee’s perspective.

Taken together, this paper will expand the compensation literature in two ways. First, recognizing that previous research has overlooked employee-based factors, we highlight the congruence between pay systems and value systems. Considering that incongruence between employees’ sense of oneness with an organization (organizational identification) and individual performance-driven pay systems can trigger severe conflicts, it is vital to address organizational identification, an employee-based factor, to determine pay differentials’ true effects. This approach may somewhat clarify seemingly contradictory results in previous studies on differentiated pay structure (Henderson and Fredrickson 2001). Second, we call attention to employee turnover as a critical organizational outcome in the pay structure literature. Turnover can reflect employees’ perceptions about current pay systems, which can be difficult to capture by measuring a firm’s financial performance alone (Batt, Colvin, and Keefe 2002; Holtom, Mitchell, and Eberly 2008). By considering employee turnover, in parallel with financial performance, our study will further expand our understanding regarding the effects of pay differentials on organizations.
The paper is structured as follows. First, we begin by reviewing the literature on pay differentials, and theorize the relationship between pay differentials and organizational performance—financial performance and turnover rates—from the tournament theory view. We then extend the tournament theory by incorporating the organizational identification theory and suggest that the pay differentials effects are strengthened or weakened depending on the extent of employees’ organizational identification. After testing the hypotheses using a sample of cross-industry companies in Korea, we discuss the implications of our empirical findings for practitioners and scholars.

LITERATURE REVIEW AND RESEARCH HYPOTHESES

Pay Differentials and Organizational Outcomes

Pay differentials refer to a firm’s pay structure in which employee compensation is distributed across job positions (vertical differential) or within the same jobs (horizontal differential) (Bloom and Michel 2002; Gerhart and Rynes 2003). In this paper, we focus on intra-firm pay differentials (vertical differential) that effectively indicate how much the firm emphasizes outcomes and competitiveness (Gerhart and Rynes 2003). Greater gaps in pay structures indicate that firms highly value each individual’s achievements and rivalries (Lazear and Rosen 1981; Rosen 1986). Tournament theory provides appropriate rationales to strongly support and widely disseminate the differentiated pay system; it suggests that larger pay differentials in an organizational hierarchy encourage employees to work harder (Rosen 1986). This rests on uneven pay growth based on relative performance evaluations, not the absolute performance level (Lazear 1995; Lazear and Rosen 1981). According to the ‘survival of the fittest’ rule, only a few winning contestants can advance to the next round and enjoy considerable rewards and incentives (Rosen 1986). This motivation effect is more important when it is difficult to monitor employees’ intentions and behaviors (Lambert, Larcker, and Weigelt 1993; Rosen 1986). As a result, uneven pay growth at upward stages encourages employees to work harder voluntarily (Rosen 1986).

Previous research founded on these perspectives has asserted
that steeper pay differentials raise each employee’s productivity, and this overall increase in individual performance also enhances firm performance (Jenkins et al. 1998; Lazear 1995, 1999; Lazear and Rosen 1981; Milgrom and Roberts 1992; Stajkovic and Luthans 2001). In other words, steeper pay structures maximize each individual’s performance; thus organizational performance reaches its highest level because the whole is equal to the sum of its parts. This directly indicates a firm’s purpose of signaling to increase employee productivity and financial performance (Balkin and Gomez-Mejia 1987; Gerhart and Rynes 2003). Consistent with tournament theory and related literature, we expect that larger pay differentials should enhance firm performance as well as each individual’s productivity.

**H1:** Pay differentials will be positively related to the financial performance of firms.

In addition to firm performance, tournament theory also applies to employee turnover. As noted earlier, tournament theory suggests differentiated treatment and rewards through rank-order contests (Lazear and Rosen 1981; Rosen 1986). Tournament rewards increase precipitously at higher stages of the organizational hierarchy, so winners can enjoy huge rewards (Lambert, Larcker, and Weigelt 1993; Rosen 1986). In stark contrast, losers are disqualified from the next round, and are expected to quit. Thus, employees with relatively high expectations of winning have more incentive to remain with the organization, but employees who feel disadvantaged under this differentiated pay system are more likely to leave (Bloom and Michel 2002; Pfeffer and Davis-Blake 1992; Shaw et al. 2009; Shaw and Gupta 2007).

Previous research using tournament theory has shown that larger pay differentials trigger quitting. For example, Lazear (1999) demonstrated that the adoption of a piece-rate plan lowered the turnover rates of high performers, but increased the quitting rates of average employees. Consistent with Lazear’s findings, Shaw and Gupta (2007) showed that pay differential differently affects employee turnover; good performers’ turnover patterns markedly differ from those of average and low performers. In addition, Pfeffer and Davis-Blake (1992) also found that the patterns of turnover rates vary somewhat according to their own places in
salary distribution. In other words, whereas good performers at the top of the pay structure show low turnover rates, average or bad performers placed in the middle or bottom of the structure show high resignation rates. Based on tournament theory and earlier empirical results, the overall turnover rate will increase as pay differentials become larger, because only a few winners tend to stay and most losers are likely to leave.

H2: Pay differentials will be positively related to employee turnover rate.

The Role of Organizational Identification

As noted earlier, tournament theory predicts increased firm performance and employee turnover. However, these predictions can be challenged, because tournament theory overlooks employee-based factors that critically determine pay differential effects. To create the expected effects, the pay system must be not only congruent with other human resource practices, but must also be compatible with employees’ value systems (Burton, Lauridsen, and Obel 2002, 2004). Among various shared values or perceptions, the extent of employees’ sense of oneness with their employing organization can play a critical role in the success or failure of differentiated pay structure with emphasis on individual performance and competitiveness (Abrams, Ando, and Hinkle 1998; Hekman, Bigley, and Steensma 2009).

Organization identification refers to the sense of ‘oneness’ with an organization (Ashforth and Mael 1989; Mael and Ashforth 1992). The concept has theoretical foundations in social identity theory, which explains why people wish to belong to certain social groups for psychological attachments, how they identify themselves based on group or organizational characteristics, and what parameters reinforce such self-identities as time progresses (Hogg 1992; Hogg and Terry 2000; Tajfel and Turner 1979, 1985). According to this theory, people tend to establish their self-concept by identifying with their groups or organizations, and the extent of this identification greatly influences their perceptions, attitudes, and behaviors (Abrams, Ando, and Hinkle 1998; Ashforth and Mael 1989; Mael and Ashforth 1992, 1995). In other words, the more employees feel at one with their organization (the stronger their organizational
identification), the more they perceive organizational difficulties as being their own problems, and the more they cooperate with others to achieve organizational goals.

Organizational identification can be understood as the working of the relational self—the self in relation to significant others or groups (Andersen and Chen 2002; Cross, Bacon, and Morris 2000). The main difference between organizational identification and relational self is found in that organizational identification includes individuals’ identification with organizations while relational self is more about individuals’ relation with significant others or groups.

These tendencies of identifying with an organization are definitely stronger when the relationship between an organization and an employee is similar to the common fate of the community (Abrams, Ando, and Hinkle 1998). This relational pattern can be easily found in East Asian countries, which are heavily influenced by Confucianism (Bae and Lawler 2000; Chiang 2005; Rowley, Benson, and Warner 2004). In this aspect, when employees strongly identify with their organization, they are likely to feel and expect close links; they value a psychological contract based on social exchange, an organizational value-oriented control mechanism, and cooperation among members to improve organizational performance (Kerr and Slocum 1987; Lepak and Snell 2002; Ouchi 1979, 1980; Rousseau 1989, 1995).

However, these characteristics can be incongruent with the intent of the pay system that emphasizes larger gaps in organizational hierarchies. As mentioned above, larger pay differentials based on tournament theory suggest that principals control agents through larger gaps in the pay structure because of difficulty in monitoring agents’ behavior. Thus, reinforcement of pay differentials signals messages such as definite separation between the employee and the organization, market-based employment contracts, control mechanisms throughout the system, and competitiveness to maximize individual performance (Kerr and Slocum 1987; Lazear 1999; Lazear and Rosen 1981; Lepak and Snell 2002; Ouchi 1979, 1980). This incongruence can engender unintended effects: employees can become confused about what behavior the firm rewards and become less motivated (Kerr 1975). As a result, the purpose of the pay system becomes discolored (Baron and Kreps 1999; Bowen and Ostroff 2004; Burton and Obel 2004; Kerr 1975; Li, Frenkel, and Sanders 2011). Accordingly, when considering
organizational identification, pay differentials may damage a firm’s financial performance.

**H3:** Organizational identification will negatively moderate the relationship between pay differentials and a firm’s financial performance, so that the relationship between pay differentials and a firm’s financial performance will be weaker when organizational identification is high.

As previously discussed, when organizational identification is high, employees feel at one with their organization, perceive organizational difficulties as being their own problems, and cooperate with others to achieve organizational goals (Abrams, Ando, and Hinkle 1998; Ashforth and Mael 1989; Mael and Ashforth 1992). However, high pay differentials mean that only some select employees will get increased pay while the majority will inevitably be left to feel disadvantaged. This will reduce the extent of attachment and trust that the latter group of employees had for the organizations and increase their turnover intentions (Kerr and Slocum 1987; Mael and Ashforth 1995; Mossholder, Settoon, and Henagan 2005; Shaw and Gupta 2007). Thus, the positive relationship between pay differentials and employee turnover rate will be stronger when employees’ organizational identification is high.

**H4:** The organizational identification of employees will positively moderate the relationship between pay differentials and employee turnover, so that the relationship between pay differentials and employee turnover rates will be stronger when employees’ organizational identification is high.

**METHODOLOGY**

**Data and Sample**

We obtained the data for this study from the Human Capital Corporate Panel (HCCP) 2007 survey, which the Korean Research Institute for Vocational Education and Training (KRIVET) collected in collaboration with the Korea Ministry of Labor. The sampling frame represented all Korean companies with more than 100 employees,
foreign company subsidiaries, and public service organizations (see Yang and Klaas 2011). From 7,246 Korean companies, KRIVET used the stratified sampling method to select and contact approximately 1,899 companies. We initially obtained a stratified random sample of 467 firm cases with $100 million in total assets and 100 or more employees. Our sample size was reduced to 400 cases (21.1% of the 1,899 firms surveyed, and 86% of the survey respondents) with 10,461 individuals from 15 different industries as the final sample (N = 400, n = 10,461). On average, we found 26.08 individual respondents per company, approximately 83% males with a mean age of 36.7 years and an average organizational tenure of 8.7 years. There are no significant mean differences of testable variables between our final samples and deleted ones.

Measurement

Independent variables

Pay differentials. We estimated the hierarchical or vertical pay differential for each company by using pay information items in the HCCP data: the total annual salary of a first-year staff member, a first-year manager, and a first-year general manager. Because of this practical difficulty in obtaining salary information for all employees, we used Siegel and Hambrick’s (2005) approach to make the maximum use of our limited information. To calculate intra-firm pay differentials, we first computed the average pay difference between general managers (Level 1) and managers (Level 2), and then divided the value by the average pay level of the manager (Level 1 - Level 2)/ Level 2). We used the same method (Level 2 - Level 3)/ Level 3) to calculate the pay differential between managers (Level 2) and first-year staff. The first pay differential divided by the second pay differential became the final pay differential ((Level 1 - Level 2)/ Level 2) / (Level 2 - Level 3)/ Level 3)). If this value was greater than 1, it meant that the pay differentials grew more hierarchically in the case of general managers and managers, rather than in case of managers and first-year employees. This approach was also suggested by Main and colleagues (1993) and McClelland (2008).

Organizational identification. Our measure was based on measures used by Mael and Ashforth (1992) and Hekman et al. (2009). We operationalized organizational identification using four items rated from 1 = strongly disagree to 5 = strongly agree in the
HCCP data: 1) Too much in my life would be disrupted if I decided to leave my company, 2) I really feel as if this company’s problems are my own, 3) This company deserves my loyalty, and 4) If I had another chance to work elsewhere, I would leave my company (reversed coding). The value used for organizational identification was the mean of responses for the four items and the Cronbach’s alpha among them was .75.

We also checked the statistical validity of employees’ organizational identification at the firm level because of the level issue in the aggregation of members’ shared perceptions. We computed $r_{wg}$, which indicates the adjusted within-group agreement for a slight negative skew in the expected variance, and obtained a median value of .85, which was above the conventionally acceptable $r_{wg}$ value of .70 (James et al. 1984, 1992).

Also we conducted one-way analysis of variance, and checked the between-group variance for all of these variables. Normally, aggregation can be justified when the score of ICC (1) is under .30 (Bliese 2000) and the score of ICC (2) is above .70 (Kozlowski and Klein 2000, Glick 1985). In our results, ICC (1) was .15 and ICC (2) was .82. Thus, we concluded that aggregation could be justified. The final value of organizational identification at the firm level was the aggregated mean of the four items and the Cronbach’s alpha was .87 which is higher than the score of individuals (Rousseau 1985).

**Dependent variables**

We considered two dependent variables of organizational outcomes that are usually employed in the contemporary literature on compensation (Shaw, Gupta, and Delery 2002): the firm’s financial performance (Brown, Sturman, and Simmering 2003; Kepes, Delery, and Gupta 2009) and the turnover rate (Bloom and Michel 2002; Shaw and Gupta 2007).

Firm’s financial performance. We used the return on assets (ROA), which the pay differential literature has widely used as a measure of financial performance (Brown, Sturman, and Simmering 2003; Henderson and Fredrickson 2001; Kepes, Delery, and Gupta 2009). The value used for ROA was the net profit divided by the total assets of the year 2008 in the annual reports database to reflect the lagged effects of pay differentials. The amount of net profit, total assets, and equities were measured in 1,000 Korean Won, which equals approximately $1.
Employee turnover rate. We operationalized turnover rate as the number of individuals who left a firm divided by the total number of employees in the firm (Shaw et al. 2005). We included only full-time employees in remaining and leaving counts.

Control variables
We controlled several variables that might account for the relationships between our independent and dependent variables. First, we controlled for the effect of organizational age (LNAGE) and size (LNSIZE) because organizational age and size have been acknowledged as critical firm-specific factors that affect various organizational outcomes (Bloom and Michel 2002). LNAGE was operationalized as the logged value of 2007 minus the founding year and LNSIZE was measured as the logarithm of assets (Bloom and Michel 2002). Next, we controlled for the effects of union and foreign institutions because the existence and power of the union are associated with pay-related decisions and workforce performance (Kaufman 2002) and foreign companies tend to adopt and implement performance-driven pay systems (Ding, Fields, and Akhtar 1997; Lu and Bjorkman 1997). Union was coded 1 if a union was present and 0 if not. Foreign was coded 1 if foreign institutions have share holdings and 0 if not. Because downsizing can directly affect turnover rates (Budro 1999), we controlled for the effect of Downsizing, which coded 1 for downsizing within three years and 0 for all other cases. Prior Performance was also controlled because of the influence of prior performance on current outcome. In addition, seniority-based pay and pay level were controlled because they relate to pay differential decisions and workforce performance (Shaw, Gupta, and Delery 2002; Yang and Klaas 2011). Seniority was coded 1 if respondents reported that their companies use seniority-based pay and 0 if not. We measured Pay Level as the average of newcomer pay, first-year manager pay, and first-year general manager pay weighted by the number of employees at each job level. Finally, we also controlled Industry dummies with 15 dummy variables to capture the 16 industries represented in our sample. These industry codes were provided by the classification of the HCCP datasets.
Data Analysis

We used hierarchical regression analysis to examine the relationship between pay differentials and organizational outcomes. We entered the control variables in Step 1, the independent variables in Step 2 (Hypotheses 1 and 2), and the two-way interaction terms in Step 3 (Hypotheses 3 and 4). The variables were mean centered prior to interactions to reduce multicollinearity (Aiken and West 1991).

RESULTS

Main Analyses

Table 1 shows the descriptive statistics and correlations among all variables. Of particular interest are the correlations of financial firm performance and turnover rate with pay differentials. ROA, as a measure of financial firm performance, was positively correlated to pay differentials ($r = .08$, $p < .10$). The correlation between the pay differentials and turnover rate was also positively related ($r = .05$), yet this relationship was not statistically significant. In addition, while organizational identification was negatively associated with turnover rates ($r = -.08$, n.s.), it was positively related to the firm performance variable ($r = .17$, $p < .001$).

We used hierarchical regression analyses to test the hypotheses. The regression results are reported in Tables 2 and 3. Table 2 shows the hierarchical regression results for the pay differentials and firm financial performance. As shown in Table 2, Model 1 explained a significant amount of variance ($R^2 = .180$, $p < .001$). As shown in Model 2, the pay differentials had a positive relationship with ROA as a measure of financial firm performance ($b = 6.70$, $p < .05$). Accordingly, Hypothesis 1 was supported, as we expected that the pay differential should be positively related to the firms’ financial performance. We then entered an interaction term between the pay differentials and organizational identification. Model 3 of Table 2 reports the results of the interaction of pay differentials and organizational identification. The results showed that the interaction term – pay differentials $\times$ organizational identification – was statistically significant ($b =$
Table 1. Descriptive statistics and correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
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<tr>
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<td>.23</td>
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<td>.48</td>
<td>.05</td>
<td>.08</td>
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<td>4. Organizational Identification</td>
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<td>-0.08</td>
<td>.17</td>
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<td>5. Firm Age&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>-.14</td>
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<td>.03</td>
<td>.12</td>
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<td>6. Firm Size&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>1.07</td>
<td>-.14</td>
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<td>.01</td>
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<td>.12</td>
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<td>7. Union</td>
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<td>8. Foreign</td>
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<td>.03</td>
<td>-.03</td>
<td>.16</td>
<td>.04</td>
<td>.18</td>
<td>.06</td>
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<td>9. Downsizing</td>
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<td>.13</td>
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<td>10. Seniority-based Pay</td>
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<td>12. Prior Performance</td>
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<td>31.61</td>
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<td>.34</td>
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<td>.05</td>
<td>.01</td>
<td>.08</td>
<td>.14</td>
<td>.04</td>
<td>-.08</td>
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</table>

Notes: <sup>a</sup> n = 400 (two-tailed test). <sup>b</sup> logarithm.

<sup>1</sup> p < .10, <sup>2</sup> p < .05, <sup>3</sup> p < .01, <sup>4</sup> p < .001.
We conducted a series of tests comparing successive models by using incremental F-tests, as shown at the bottom of Table 2. The first test indicates that Model 2, including pay differentials as well as control variables, significantly better than Model 1 ($\Delta R^2 = .012, p < .05$). The second test also shows that Model 3, which included the interaction terms of pay differentials and organizational identification, significantly better than Model 2 ($\Delta R^2 = .022, p < .001$). This result clearly indicates that the shared organizational identification of employees can weaken the positive relationship between pay differentials and financial firm performance, supporting Hypothesis 3. Figure 1 also supported our prediction of pay differentials and financial firm performance.

Table 3 indicates the hierarchical regression results for the pay differentials and employee turnover rate. As with earlier steps, the first step included the set of control variables (Model 1). The pay dif-
ferential variable was included in Model 2. As expected, we obtained a positive relationship of pay differential with turnover rate, but the relationship was not statistically significant ($b = .01, \text{n.s.}$). Thus, Hypothesis 2, stating that pay differentials should increase turnover rate, was not supported. As shown in Model 3 of Table 3, we entered an interaction term of pay differentials and organizational identification. The results showed that the interaction term – pay differentials $\times$ organizational identification – was statistically significant ($b = .16, p < .05$). Consistent with Hypothesis 4, this finding suggests that the shared organizational identification of employees can strengthen the positive relationship between pay differentials and turnover rate. Incremental $F$-tests reported no statistically significant difference between Models 1 and 2 ($\Delta R^2 = .00, \text{n.s.}$) and a marginally significant difference between Models 2 and 3 ($\Delta R^2 = .013, p < .10$).

**Additional Analyses**

As shown in Table 3, Hypothesis 2 was not supported. To conduct more robust analyses and to identify why the hypothesis was unsupported, we further examined at the effects of employee tenure.

**Figure 1. Two-way interactive effects of pay differentials and organizational identification on financial performance (ROA)**

Notes: ‘Low pay differentials’ is one standard deviation below the mean. ‘High pay differentials’ is one standard deviation above the mean.
Table 3. Regression results for effects of pay differentials and organizational identification on turnover rate

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<thead>
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<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
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<td>Control Variables</td>
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<td>Independent Variables</td>
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<tr>
<td>Pay Differentials (PD)</td>
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<td>Two-way Interaction</td>
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<tr>
<td>Organizational</td>
<td>.01</td>
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<tr>
<td>Identification (OI)</td>
<td></td>
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<tr>
<td>PD x OI</td>
<td>.16†</td>
<td>.16†</td>
<td>.16†</td>
</tr>
<tr>
<td>F value</td>
<td>1.810**</td>
<td>1.734**</td>
<td>1.825**</td>
</tr>
<tr>
<td>R²</td>
<td>.96</td>
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<td>.96</td>
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<tr>
<td>△R²</td>
<td>.000</td>
<td>.013†</td>
<td>.013†</td>
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Notes: a N = 400 (Tenure < 1 → mean: 21.07, s. d.: 143.72, Tenure > 10 → mean: 10.47, s. d.: 74.28). 15 Industry dummies were included in all equations. Unstandardized coefficients are reported.

† p < .10, † p < .05, * p < .01, ** p < .001.
Organizational identification is about employees’ sense of oneness with their organizations. This requires employees to spend some time within the organizations so they have first-hand experiences with the organization’s strategies, policies, and practices (Abrams, Ando, and Hinkle 1998; Ashforth and Mael 1989). Therefore, employee tenure is an important factor in developing a sense of organizational identification. We divided employee tenure into short-term (less than one year) and long-term (more than ten years). As indicated in Models 5 and 6 of Table 3, the coefficients of pay differentials ($b = -.01$, n.s.) and the interaction between pay differentials and organizational identification ($b = .02$, n.s.) were not significant for employees who worked for less than one year. However, as indicated in Models 8 and 9 of Table 3, the coefficients of the independent variable ($b = .02$, $p < .001$) and the interaction term ($b = .11$, $p < .001$) were highly significant for employees who have worked for more than ten years. Moreover, including the independent variable and the interaction term in the model of employees with long-term tenure explained an additional 6% and 32% of the variance. Figure 2 also confirms our prediction of organizational identification on the relationship between pay differentials and turnover rate.

**Figure 2. Two-way interactive effects of pay differentials and organizational identification on turnover rate (tenure > 10 years)**

Notes: ‘Low pay differentials’ is one standard deviation below the mean. ‘High pay differentials’ is one standard deviation above the mean.
These findings show that companies should be cautious about adapting and implementing differentiated pay structures from the perspective of employee turnover, which serves as another index of organizational effectiveness. Although firms do not intend to prompt employees to leave, the realized results indicate that employees with long-term relationships are likely to lose their sense of loyalty.

CONCLUSIONS

Although researchers have conducted numerous studies on pay structure, their results have been inconsistent so far (see Gerhart and Rynes 2003 for a review). Tournament theory provides strong rationales that differentiated pay structures could motivate individuals and enhance organizational performance (Eriksson 1999; Lazear 1995). However, some empirical studies have demonstrated that such pay systems may actually damage firms’ financial performance (Bloom 1999; Grund and Westergaard-Nielsen 2008). To reconcile these conflicting conclusions, organizational researchers have investigated the congruence between pay differentials and other factors such as average pay level (e.g., Brown, Sturman, and Simmering 2003), work interdependence (e.g., Shaw, Gupta, and Delery 2002), pay system communication (e.g., Shaw and Gupta 2007). Although informative, most existing studies have investigated the effectiveness of pay differentials from the perspective of organizational practices, overlooking the congruence between the pay differential and employee-based factors such as employees’ values or expectations regarding their relationships with their organizations. This congruence issue is particularly pronounced because the realized effects of the pay differential are the byproducts of interactions among various organizational contexts (Ferris et al. 1998). Based on tournament theory and organizational identification theory, we explored the relationship between pay differentials and organizational outcomes by considering employees’ shared perceptions or values: organizational identification. Results show pay differentials with a sample of Korean cross-industry firms have a positive influence on only financial performance. Also, as predicted, while the positive relationship between pay differentials and financial performance became weaker, the relationship with turnover became stronger when employees’ organizational
identification is high.

These theoretical arguments and empirical results provide implications for researchers. First, this study attempts to reconcile inconsistent findings of pay structure through theoretical expansion. Namely, by integrating tournament theory and organizational identification theory, this paper verifies the true effect of pay differentials as the byproduct of congruence between the HR practice and the employee-side factor. Second, this study calls for more attention to employee turnover as a critical organizational outcome. Given that the financial aspect is limited in its reflection of employees’ perceptions or attitudes (Batt, Colvin, and Keefe 2002; Holtom, Mitchell, and Eberly 2008), researchers need to consider turnover that indicates the effectiveness of the differentiated pay system from an employee perspective.

This paper also has implications for practitioners. These days a large number of firms adopt and implement performance-driven pay schemes just following management fads or imitating other firms. However, HR practitioners need to be more careful when they design and implement hierarchical pay structure because the pay schemes can rather destroy current competencies in real organizational contexts (Lado and Wilson 1994). As our findings show, when employees have strongly shared organizational identification but their organization chooses to emphasize wider pay differentials, the effect may be detrimental to financial performance and may trigger employee turnover. In particular, as our additional analyses show, these unintended results are highlighted for employees with long-term tenure. These findings indicate that the adoption of a individual performance-driven pay system should be considered in the light of overall organizational effectiveness.

As discussed above, this study has several implications, but it also has several limitations that suggest some guidelines for future research. First, we obtained pay data from overall HR practices in Korean firms and, as a result, the creation of testing variables had some limitations. For example, the compensation information in the HCCP data was limited to pay levels of three positions (first-year employees, first-year managers, and first-year general managers). Accordingly, we operationalized pay differentials following Siegel and Hambrick (2005) because this computation way was the most appropriate within our limited data rather than other measurements (e.g. the coefficient of variation, the gini coefficient, or the simple pay
difference). Second, we call for some caution in the interpretation of our findings. As noted earlier, Korean firms compared with other empirical settings have unique characteristics and business environments that could cause stronger effects that support the predictions. Beyond Korea, nevertheless, firms with strong employee organizational identification exist throughout the world including other Asian–Pacific and Western countries. In particular, many companies in Asian–Pacific countries such as China (e.g., Chen, Tsui, and Farh 2002; Farh, Hackett, and Liang 2007), Taiwan (e.g., Zhu 2003), and Japan (e.g., Benson and Debrous 2003) have also experienced severe misfits between individual performance-driven pay systems and collective organizational values. In this regard, our findings may be valid for many companies in other countries, although our empirical data are limited to Korean firms and cautious interpretation is needed.

Based on these limitations, future research might investigate organizational outcomes through more combinations of other pay systems and other employee-side factors. For example, future studies can address interpersonal relationships within an organization and embedded structures (Granovetter 2005; Shaw et al. 2005). These attempts to bolster the interaction effects of compensation systems and organizational contexts will unravel a watershed that transforms compensation systems into successfully or unsuccessfully realized systems. Also, future research could examine how HR systems influenced by contextual factors have evolved and developed as the old and the new harmonize and sometimes collide (Baron, Burton, and Hanna 1996; Jones, Kalmi, and Kauhanen 2010). Not only internal contexts, but external factors such as environmental dynamism could be also considered in the co-evolution of the pay system and organizational factors (Bloom and Michel 2002; Brown, Sturman, and Simmering 2003). In addition, future studies could consider how firms might successfully implement new HR systems despite the side effects. By combining with organizational change, researchers can investigate how firms complementarily and synergistically manage clashing HR systems and employee-side factors (Martin, Jones, and Callan 2005; Rousseau and Tijoriwala 1999).

When a firm chooses exploitation strategy, it is suggested that egalitarian pay structures (compressed pay differentials) will be more effective because employees leverage existing clients, services,
and techniques (Kang, Snell and Swart 2012). However, when a firm pursues exploration strategy, it is suggested that tall pay structures (large pay differentials) will be more effective because employees are encouraged to innovate at the risk of failures. Under this kind of situation, firms need to provide substantial pay incentives to encourage employees to be explorative (Kang, Snell, and Swart 2012). This could be a very interesting and important research topic that needs to be studied in the future.

Promotion versus prevention focus would be a very interesting moderator that needs further attention in the future. Promotion-focused people prefer to use eagerness-related means, the type of means most suited to a concern with advancement, aspiration, and accomplishment (Crowe and Higgins 1997). In contrast, prevention-focused people prefer to use vigilance-related means, the type of means most suited to a concern with protection, safety, and responsibility. Therefore, top management team (TMT)’s collective regulatory orientation such as promotion versus prevention focus is expected to moderate the pay differentials–organizational outcomes relationship such that this relationship will be stronger when TMT is collectively promotion focused rather than prevention focused.

Despite certain limitations, our study contributes to the compensation literature by reconciling conflicting theoretical arguments and empirical results with respect to the effects of pay differentials on organizational outcomes. According to findings of this study, considerations of employee-side factors and other indexes of organizational outcomes are crucial for resolving the contrasting results from previous research on pay differentials. We hope that more advanced studies on pay structure will expand our initial work in the near future.

REFERENCES


Budro, A. (1999), “A conceptual framework for analyzing why organizations...


Kang, S.-C., S. Scott, A. Swart (2012), “Options-based HRM, intellectual capital, and exploratory and exploitative learning in law firms’ practice
Journal of Organizational Behavior, 13(2), 103-123.


