Harakiri: Is Japanese managerial compensation "sticky"?*

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Abstract

In this study, we empirically document the managerial compensation contract in Japan, mainly focusing on the fixed salary. In particular, this study examines the asymmetric sensitivity of managerial compensation, depending on the firm's performance, because, in managerial compensation practice, one can confirm the stickiness of managerial compensation. In this study, based on previous cost behavior studies, we define asymmetric compensation behavior depending on the firm performance as sticky or anti-sticky. From our analysis, surprisingly, we find that managerial compensation is not only non-sticky in Japan, but also Japanese firms use the fixed salary as a punishment device. In other words, while conventional wisdom reveals the existence of stickiness in the managerial compensation contract, our evidence shows a significant decrease in managerial compensation, *i.e.*, the anti-sticky compensation, in Japan when firms cannot achieve the previous performance. This managerial compensation practice, where executives take responsibility for the deterioration of their company's performance through their compensation, is similar to the traditional Japanese self-punishment act, *harakiri*, and can be considered a typical practice of managerial compensation in Japanese culture.

Keywords: managerial compensation contract; fixed salary; performance evaluation; managerial compensation stickiness; punishment

JEL classifications: M41; M48; G14

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1 Introduction

Harakiri (seppuku) is a traditional form of self-punishment act in Japan (Kakubayashi, 1993; Watanabe et al., 1973). Originally, it was practiced by samurai, which is the warrior class in feudal Japan, as a means to restore or protect honor in the face of defeat, disgrace, or other dishonorable circumstances. *Harakiri* was regarded as an honorable way to commit suicide, embodying the values of loyalty, courage, and self-discipline that were central to the samurai code, known as Bushido. While *harakiri* was a method of suicide, it also served as a demonstration of one's resolve and loyalty. Recently, the practice of *harakiri* has largely vanished because of the change of the era as a method of suicide. However, *harakiri* remains a symbol of the extreme commitment to honor that characterized the samurai ethos. Therefore, while one may infer that it is not recognized as a formal word in other countries, in Japan, people use *harakiri* as an important communication term to represent a situation in which one takes responsibility in everyday life.

In this study, focusing on the fixed salary, we document the managerial compensation contract in Japan empirically. In particular, this study examines the asymmetric behavior of managerial compensation, depending on the firm's performance. This is because several previous studies demonstrate the existence of managerial compensation stickiness based on the empirical analysis (e.g., Yang and Mo, 2018; Sun et al., 2024). Additionally, based on the field study, Edmans et al. (2023) states as the follows:

> We first asked directors ..., "Have you ever significantly decreased the target quantum of pay for an incumbent CEO?" Only 23% of directors responded "Yes." Combined with the difficulty of significantly increasing pay, this suggests that *CEO pay is sticky*, and that directors decide pay changes rather than pay levels, ... (Edmans et al., 2023, p. 10)

One can infer that compensation stickiness means the small sensitivity of managerial compensation to the firm's performance. However, we call the asymmetric managerial compensation sensitivity on the performance as compensation *sticky* or *anti-sticky* based on the previous cost behavior studies in the accounting field (e.g., Anderson et al., 2003; Banker and Chen, 2006). This is because, in managerial compensation contracts, while the managers obtain large compensation in bonuses when the firm achieves high performance, the lower bound of managerial compensation is determined in the contract with the exception of the clawback provisions. This practice means that, in practice, one can confirm the asymmetric sensitivity in managerial compensation. As Edmans et al. (2023) mentioned, only a few directors indicate the decreasing managerial compensation, and therefore, in addition to the managerial compensation practice, we can confirm the *sticky* in managerial compensation, which is defined by SG&A studies based on fundamental analysis. Actually, Edmans et al. (2017) also focuses on the pay decrease in this paper and interviews why the firm does not cut managerial compensation radically, while they define the *sticky* as a different meaning from our study. In particular, because Edmans et al. (2023) asked "What causes you to increase the target quantum of pay for an incumbent CEO?", and they obtained the general agreement between directors and investors as "good recent CEO performance the highest, with support of 76%/0.98 from directors and 75%/1.05

from investors" (Edmans et al., 2023, p. 9). This survey implies the pay increase when the firm achieves high performance, while Edmans et al. (2023) suggests that only a few firms cut the compensation for the small performance (23%). Importantly, as we focus on firm performance to evaluate the sensitivity of managerial compensation, and since Edmans et al. (2023) proposes that firms do not reduce compensation for poor performance while managers receive payments for high performance, this study can address the concept of *sticky* compensation.

To consider the managerial compensation *sticky*, in the Japanese institutional setting, the fixed salary plays an important role because Japanese firms mainly use the fixed salary to compensate managers in practice. In fact, Pan and Zhou (2018) provides that "on average, Japanese CEOs' base salaries account for 71% of their total compensation, whereas annual bonuses and grants of stock options, which are the major components of incentive pay in Japan, together account for merely 23% of the total" (Pan and Zhou, 2018, p. 2263). Compared with other countries, Japanese firms pay a large amount of the fixed salary in managerial compensation, and therefore, the fixed salary plays a significant role in managerial compensation in Japan. Additionally, because Hamamura et al. (2024) demonstrates the significant relationship between the fixed salary and firm performance in Japan, it is useful to divide the managerial compensation into the fixed salary and bonus in Japanese firms. Therefore, we develop the following research question in this study: Is managerial compensation sticky in Japan with respect to fixed salary?

To assess our research question, we analyze whether fixed salaries and bonuses become sticky when a firm cannot exceed its previous performance. In other words, we explore whether managerial compensation does not decrease when the firm fails to achieve the previous performance–an important benchmark in managerial compensation contracts–compared to when the firm achieves a higher current performance than the previous performance, using data from Japanese listed firms.

Our analysis demonstrates that Japanese firms use fixed salaries as a punishment. In other words, in Japan, when firms cannot achieve a higher performance than the previous performance, the fixed salary in managerial compensation is reduced. This is an interesting result because while previous studies provide evidence of the managerial compensation stickiness in other countries, managerial compensation is *anti-stick* in Japan. From the Japanese tradition, this result indicates the *harakiri*, which is a self-punishment act by the managers to keep their honor as a top manager.

While several previous studies have analyzed managerial compensation contracts in Japan (e.g., Basu et al., 2007; Kato and Rockel, 1992; Kato and Kubo, 2006; Mitsudome et al., 2008; Xu, 1997), only limited studies have examined the asymmetry of managerial compensation in terms of performance. In the managerial compensation study in Japan, previous studies demonstrate the use of accounting performance to evaluate managers (e.g., Iwasaki et al., 2018; Kaplan, 1994; Otomasa et al., 2020). Therefore, it is important to consider whether asymmetric payment is observed in Japan, depending on the performance of the firm.

The previous managerial compensation study in Japan, Hamamura et al. (2024) is one of the closest studies to our paper. Based on Banker et al. (2013) and Otomasa et al. (2020), Hamamura et al. (2024) considers whether the fixed salary in Japan depends on the firm performance or not.[1] Consequently, they demonstrate that the fixed salary depends on the current earnings and the current stock return, and therefore, the fixed salary is not fixed with respect to the current performance. Related to our study, Hamamura et al. (2024) emphasizes the use of past performance to decide the fixed salary. In addition to these results, it is important to analyze the managerial compensation contract, dividing the sample into the fixed salary and bonus. In their study, they demonstrate that over 50% samples compensate managers using only the fixed salary. Their outcomes propose the importance of shedding light on the firms that do not employ the bonus. While their analysis focuses on the fixed salary in Japan, they do not consider the asymmetry of managerial compensation with respect to current performance.

In other countries, several financial economics studies show the existence of the *sticky* in managerial compensation (e.g., Chen et al., 2023; Jackson et al., 2008; Leone et al., 2006; Lu et al., 2015; Yang and Mo, 2018).[2] Zhang and Lu (2015) overviews these studies to find a new research opportunity in managerial compensation research, focusing on managerial compensation sticky. On the other hand, several financial economics studies explore the existence of stickiness in managerial compensation to luck (e.g., Gaver and Gaver, 1998; Garvey and Milbourn, 2006). Consequently, these studies demonstrate the existence of the sticky for luck in managerial compensation. In other words, in their studies, while managers receive payment for good luck, firms do not reduce payments for bad luck. One can infer that, in future studies, their result suggests dividing the effect of luck and observable performance, which is independent of luck. Additionally, as we proposed, Edmans et al. (2023) suggests the existence of compensation stickiness using the survey in managerial compensation contracts. Therefore, there is no doubt that the firms set the sticky compensation in the managerial compensation contract based on the previous evidence.

2 Japanese Institutional Setting and Hypothesis

Before the research design, let us propose the institutional setting in Japan to clarify the mechanism of our study. Based on this discussion, we develop the hypothesis in this paper.

In Japan, firms are required to disclose the details of the managerial compensation contract by the Financial Services Agency and Cabinet Office. In particular, they offer regulations in 2019, 2021, and 2023 to Japanese firms. For these regulations, Japanese firms have to disclose the details of the determination of the managerial compensation. However, we can obtain data that represents the level of fixed salaries and bonuses in their reports before these regulations. Therefore, we can use the data on fixed salaries and bonuses to analyze managerial compensation contracts in Japan. On the other hand, in the past, only a few firms employed stock rewards in managerial compensation contracts.[3] From this setting, we focus on the cash compensation in this study.

Under the disclosure regulation, we can confirm the managerial compensation contract

[1] In the US, Banker et al. (2013) also examines the effect of performance on the fixed salary. However, their results indicate that the fixed salary is not always affected by the current performance.

[2] Previous studies demonstrate that the wage of an employee is also sticky (e.g., Barattieri et al., 2014; Hall, 2005). One can infer that employee wages and managerial compensation have different properties. However, previous evidence supports the existence of sticky compensation in managerial compensation.

[3] Pan and Zhou (2018) shows that only 6% stock rewards are included in managerial compensation in Japan.

from the observable report. In their reports, one can find the decision process of the managerial compensation contracts. However, according to a report from the Daiwa Institute of Research, among the top 500 firms listed on the Tokyo Stock Exchange (TSE), 287 companies do not disclose the details of their managerial compensation contracts in their reports.[4] While we cannot find the detailed process of determining managerial compensation, firms disclose the level of managerial compensation in their reports. Therefore, one can learn about managerial compensation practices based on the implicit approach in Japan.

Additionally, in this situation, one may consider that managerial compensation contracts do not specifically decide how to compensate managers. This fact means that the managers may face an incomplete contract. Under the incomplete contract, without previous contracts, managers are rewarded based on the current performance in the stream of the subjective performance evaluation. In other words, in the Japanese institutional setting, without the signing of contracts, managers may engage the management of firms. However, in the traditional way, managers are compensated without a specific compensation contract, and this means that, depending on the performance, managerial compensation is decided freely in Japan.

On the other hand, several firms set up compensation committees within their companies. According to the Tokyo Stock Exchange, about 100 firms (2.5%) set the compensation committee in 2024, which is applied based on the regulation, and about 2,300 listed firms (60%) in Japan applied the compensation committee in 2024, which is not recognized based on the regulation.[5] Hamamura and Inoue (2023) demonstrates that when firms have a committee, the level and change of managerial compensation decrease.

However, while firms have a compensation committee, based on its committee, managers in several firms decide on the managerial compensation contract, and shareholders mainly agree with its suggestion. Therefore, in Japan, managers mainly decide the level of managerial compensation. In other words, if the managerial compensation decreases as the performance decreases, it becomes *harakiri* because the managers set the lower managerial compensation for the decline in performance as a self-punishment act.

In this situation, Otomasa (2021) finds that managers in Japan reduce the compensation when they face performance decreases. However, Otomasa (2021) only focuses on several cases of compensation reduction, and therefore, his analysis cannot construct an understanding of the Japanese management forecast practice based on the Japanese culture or several incentive systems. In the recent case, we can also see the example of compensation reduction due to the bad performance of the firm in Japan. For example, Nissan releases that the CEO voluntarily reduces the pay as the follows[6]:

> CEO Makoto Uchida will voluntarily forfeit 50% of his monthly compensation starting in November 2024 and the other executive committee members will also

[4]We obtain this information from the following website (in Japanese): https://www.dir.co.jp/report/research/law-research/securities/20201112_021887.pdf (Last accessed: January 1, 2024).

[5]We obtain this information from the following website (in Japanese). https://www.jpx.co.jp/equities/listing/ind-executive/nlsgeu000005va0p-att/aocfb40000003dlj.pdf (Last accessed: August 9, 2024)

[6]We obtain this information from the following website. URL: https://global.nissannews.com/en/releases/241107-01-e (Last accessed: November 13, 2024)

> voluntarily take a pay reduction accordingly. (The last paragraph in the Stabilize and right-size business Section)

One can consider that this is a typical *harakiri* activity of the CEO for the performance reduction in Japan because, in this release, managers *voluntarily* reduce compensation for the performance decreasing as a self-punishment act. Otomasa (2021) and several examples suggest the importance of an empirical approach to reveal the Japanese compensation practice. In other words, while we can recognize several firms reduce managerial compensation as the firm performance decreases in Japan, previous empirical evidence does not reveal whether this practice is our overestimation of Japanese practice based on our bias or not.

As we mentioned, Edmans et al. (2023) indicates the existence of the managerial compensation sticky. Generally, if the managers can have power in the contract design, then they do not set a favorable contract for themselves. In the Japanese institutional setting, the managers can join the determination process of the contract design, and therefore, from the perspective of the contract theory, Japanese managers do not set unfavorable contracts in managerial compensation. This prediction means that Japanese managers design the *sticky* compensation in their contracts. In fact, Edmans et al. (2017) indicates the existence of rent extraction by the manager in the compensation contract. In other words, the rent extraction hypothesis may also support the compensation stickiness in the contract.[7] On the other hand, we can suggest other anticipations based on Japanese tradition. While it is difficult to predict the effect of the loss, the result of Edmans et al. (2023) is effective to consider the managerial compensation practice in other countries, in addition to the contract theory. Therefore, while we find the typical Japanese tradition, we develop the following hypothesis to confirm the managerial compensation stickiness in Japan.

H1: The managerial compensation is not reduced when the firm cannot achieve the previous earnings, compared with the case in which the firm achieves the previous earnings.

On the other hand, while this paper considers total cash compensation in the previous hypothesis, according to previous studies, Japanese firms mainly use the fixed salary to compensate managers (e.g., Hamamura et al., 2024; Morita et al., 2020; Pan and Zhou, 2018). These practices provide the importance to consider the fixed salary in the Japanese institutional setting, and therefore, we develop the following hypothesis to consider the managerial compensation sticky in Japan.

H2: The fixed salary is not reduced when the firm cannot achieve the previous earnings, compared with the case in which the firm achieves the previous earnings.

We assess the previous hypothesis using data from a firm listed in Japan. While our result may only provide the facts, it leads to an important understanding of the Japanese managerial

[7] From the other perspective, according to Kahneman and Tversky (1979), the agents have a loss aversion preference and do not sign the contract if their compensation may be reduced in the loss case. Therefore, the principal proposes the sticky managerial compensation contract from the agency theory with the psychological effect.

compensation practice. Additionally, the result may yield important managerial insight into the managerial compensation practice under the specific culture.

3 Research Design

3.1 Regression model

First, we propose the regression model to test our hypothesis in our paper. In this study, we analyze the following regression model based on previous studies (e.g., Albuquerque, 2009; Banker et al., 2013; Hamamura et al., 2024; Nam, 2020; Otomasa et al., 2020).

$$
\begin{aligned}
\Delta ln(COMP)_{i,t} = \beta_0 &+ \beta_1 \Delta E_{i,t} + \beta_2 D\_Dec_{i,t} + \beta_3 \Delta E_{i,t} \times D\_Dec_{i,t} + \beta_4 \Delta E^2_{i,t} + \beta_5 \Delta E^2_{i,t} \times D\_Dec_{i,t} \\
&+ \beta_6 \Delta E_{i,t-1} + \beta_7 D\_Dec_{i,t-1} + \beta_8 \Delta E_{i,t-1} \times D\_Dec_{i,t-1} + \beta_9 \Delta E^2_{i,t-1} \\
&+ \beta_{10} \Delta E^2_{i,t-1} \times D\_Dec_{i,t-1} + \beta_{11} MFE_{i,t} + \beta_{12} MFE_{i,t} \times D\_Dec_{i,t} + \beta_{13} MFE_{i,t-1} \\
&+ \beta_{14} MFE_{i,t-1} \times D\_Dec_{i,t-1} + \beta_{15} MFI_{i,t} + \beta_{16} RET_{i,t} + \beta_{17} RET_{i,t-1} \\
&+ \beta_{18} \Delta ln(COMP)_{i,t-1} + \beta_{19} SALES_{i,t} + \beta_{20} MTB_{i,t} + \beta_{21} R\&D_{i,t} + \beta_{22} RISK_{i,t} \\
&+ \beta_{23} OWNER_{i,t} + \beta_{24} COMM_{i,t} + \beta_{25} BORD_{i,t} \\
&+ YearFixedEffects + IndustryFixedEffects + \varepsilon_{i,t}, \qquad (1)
\end{aligned}
$$

where $\Delta ln(COMP)_{i,t}$ denotes the change in the natural logarithm of the total amount of compensation for all directors (excluding outside directors) for firm i from year $t-1$ to year t. Following Hamamura et al. (2024), we analyze three types of compensation. Namely, fixed salary ($SALARY_{i,t}$), incentive compensation ($BONUS_{i,t}$), and cash compensation ($CASHCOMP_{i,t} = SALARY_{i,t} + BONUS_{i,t}$).

In independent variable, $\Delta E_{i,t}$ ($\Delta E_{i,t-1}$) is the change of actual earnings before special item and taxes for firm i from year $t-1$ ($t-2$) to year t ($t-1$), divided by total assets for firm i at end of year $t-1$ ($t-2$). Previous studies have shown a positive relationship between earnings and management compensation in the previous period (e.g., Banker et al., 2013; Hamamura et al., 2024), as well as a positive relationship between earnings and management compensation in the current period (e.g., Hamamura et al., 2024; Nam, 2020; Otomasa et al., 2020). In this study, we consider whether there is a difference in the relationship between compensation and earnings, with earnings increasing and earnings decreasing or not. Thus, we include in Equation (1) a dummy variable indicating whether earnings decreased in the current or previous year. $D\_Dec_{i,t}$ ($D\_Dec_{i,t-1}$) is a dummy variable that takes the value 1 if earnings decreased from year $t-1$ (year $t-2$) to year t (year $t-1$) and 0 otherwise. The incremental relationship between compensation and earnings when earnings decrease compared to when earnings increase in year t (year $t-1$) is indicated by $E_{i,t} \times D\_Dec_{i,t}$ ($E_{i,t-1} \times D\_Dec_{i,t-1}$).

Next, according to Hamamura et al. (2024), $\Delta E_{i,t}$ and $\Delta E_{i,t-1}$ play an important role to consider the managerial compensation contract in Japan because if managerial compensation has an upper bound with respect to the firm performance, then the managerial compensation becomes a concave with respect to the firm performance. Consequently, Hamamura et al. (2024) demonstrates that $\Delta E^2_{i,t}$ and $\Delta E^2_{i,t-1}$ is negatively associated with managerial compensation.

Therefore, our study also employs $\Delta E^2_{i,t}$ ($\Delta E^2_{i,t-1}$) in the analysis.

In addition, Otomasa et al. (2020) and Hamamura et al. (2024) indicate that management forecast is an important determinant in Japanese compensation contracts. $MFE_{i,t}$ is management forecast errors, which are the actual earnings before special item and taxes for firm i in year t minus the initial management forecasts for firm i in year t, divided by total assets for firm i at the end of $t-1$. $MFI_{i,t}$ is management forecast innovations (MFI). MFI is the initial management forecasts for firm i in year t minus the actual earnings before special items and taxes for firm i in year $t-1$, divided by total assets for firm i at the end of $t-1$. Following Otomasa et al. (2020), $MFI_{i,t}$ is scaled by decile rank. Lastly, $RET_{i,t}$ ($RET_{i,t-1}$) is the stock return for firm i from year $t-1$ ($t-2$) to year t ($t-1$), because the previous study shows that positive relationship between stock return and compensation (e.g., Albuquerque, 2009; Hamamura et al., 2024; Nam, 2020). $\Delta ln(COMP)_{i,t-1}$, $SALES_{i,t}$, $MTB_{i,t}$, $R\&D_{i,t}$, $RISK_{i,t}$, $OWNER_{i,t}$, $COMM_{i,t}$, and $BORD_{i,t}$ are control variables. Appendix A shows the definition of variables.

We employ the change analysis to estimate the regression model. In the level analysis, the level of managerial compensation depends on the firm's specific features. This implies that when the firm that ordinarily earns a large profit can also achieve a large profit in the current term, it does not facilitate an increase in managerial performance using the fixed salary. In other words, these large firms are stable, and therefore, the fixed salary plays an important role to ensure the minimum rewards. On the other hand, in the change analysis, variables are modified as the rate in the model. This implies that, regardless of the earnings size, change analysis demonstrates the relationship between increments of fixed salaries and earnings, and therefore, the change analysis is appropriate to assess our model as a sensitivity analysis. Additionally, Lambert and Larcker (1987) also suggests the usefulness of the change analysis.

3.2 Sample Selection and descriptive statistics

Table 1 represents the outline procedure of sample selection. Our initial sample is 61,486 firm-year observations, which includes Japanese-listed firms for fiscal years ending on or after March 2006 through March 2022 in the NEEDS-MT Firm Basic Data (Executive) database. First, we exclude 17,414 firm-year observations that have missing or not greater than zero compensation for year t, year $t-1$, and year $t-2$. Next, we exclude 975 firm-year observations because of missing NEEDS-FinancialQUEST2.0 database matching (financial data and stock data). Moreover, we exclude 1,205 firm-year observations from the financial industry based on the Nikkei's industrial middle classification. We also exclude 1,593 firm-year observations that do not use generally accepted Japanese accounting principles for year t, year $t-1$, and year $t-2$. Furthermore, we exclude 722 firm-year observations that do not have 12 months fiscal years for year t, year $t-1$, and year $t-2$. In addition, we exclude 196 firm-year observations that have a negative book value of equity for year t. We exclude 960 firm-year observations that have greater than 100% director's ownership for year t. We also exclude 3,115 firm-year observation that management earnings for year t forecasts are not disclosed on the same day as the earnings announcement in year $t-1$. Finally, we exclude 2,235 firm-year observations because of missing variables for analysis. Our final sample consists of 33,071 firm-year observations.

[Table 1]

Next, Table 2 indicates the descriptive statistics. The $CASH\,COMP_{i,t}\,(million\,yen)$ indicates that the mean (median) of cash compensation in this analysis sample is 157.138 (123.000) million yen in this study. Additionally, Table 2 also shows that the mean (median) of fixed salary ($SALARY_{i,t}\,(million\,yen)$) is 136.167 (109.000) million yen and the mean (median) of incentive compensation ($BONUS_{i,t}\,(million\,yen)$) is 50.692 (32.000) million yen.

Next, the mean (median) of $\Delta ln(CASH\_COMP)_{i,t}$ is positive, and therefore, Japanese firms' cash compensation has increased on average over the sample period. Moreover, because the mean (median) of $\Delta ln(SALALY)_{i,t}$ is positive, Japanese firms increase the fixed salary on average. In addition, because the mean (median) of $\Delta(BONUS)_{i,t}$ is positive, incentive contracts have become widely used in Japan. This trend indicates that, because of the emphasis on governance systems in Japan, Japanese firms have begun to apply for incentive compensation in the managerial compensation contract. Furthermore, the mean and median of $\Delta E_{i,t}$ are positive. These indicate that the earnings of Japanese firms are increasing on average. The mean of $D\_Dec_{i,t}$ is 0.403. Around 40% of Japanese firms decrease earnings. Additionally, the mean (median) of $MFE_{i,t}$ is negative (positive). More than half of the firm's actual earnings exceed initial management forecasts. However, on average, the missing forecasts are greater than the ones that exceed them. Lastly, $RET_{i,t}$ has positive means and positive medians. These indicate that Japanese firms have had positive stock returns on average over the sample period.

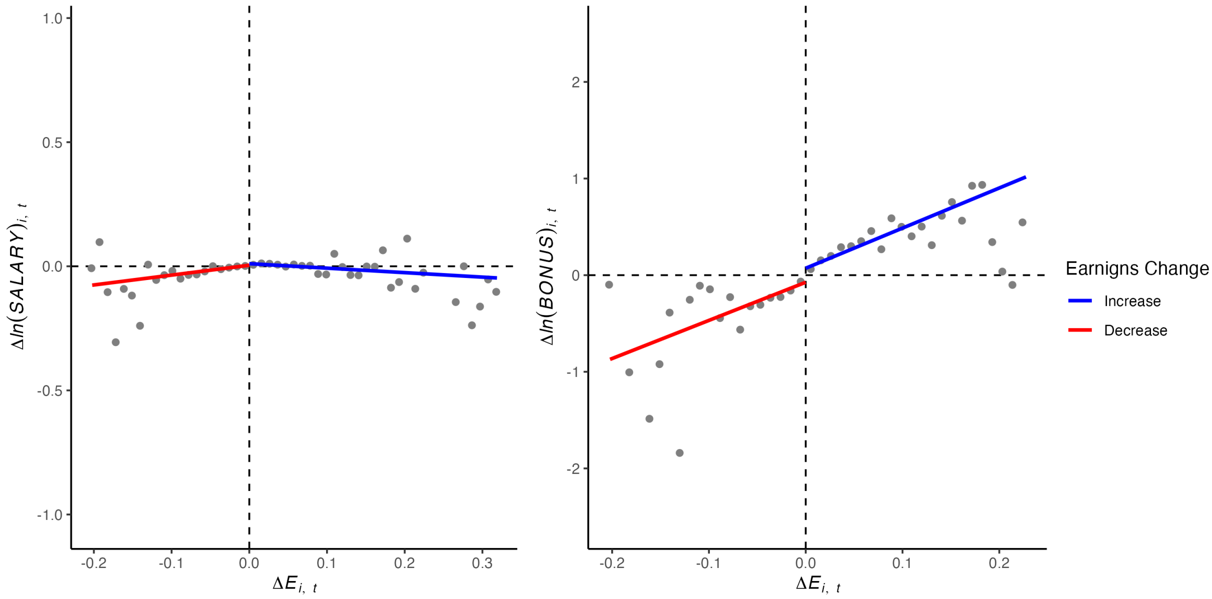
[Table 2]

Additionally, we confirm the Pearson's correlation matrix in Table 3. This table shows that all compensation changes ($\Delta ln(CASH\,COMP)_{i,t}$, $\Delta ln(SALARY)_{i,t}$, $\Delta ln(BONUS)_{i,t}$) are positively correlated with $\Delta E_{i,t}$, $\Delta E_{i,t-1}$, $RET_{i,t}$, and $RET_{i,t-1}$. When the earnings change (stock return) of the previous period and the current period are greater, the compensation changes are greater. Moreover, all compensation changes are also positively correlated with $MFE_{i,t}$. Hence, exceeding management forecasts leads to greater changes in managerial compensation. In addition, while the correlation between $\Delta ln(CASH\,COMP)_{i,t}$ and $\Delta ln(SALARY)_{i,t}$ is 0.861, the correlation between $\Delta ln(CASH\,COMP)_{i,t}$ and $\Delta ln(BONUS)_{i,t}$ is 0.629. This result may imply that the effect of the fixed salary on the cash compensation is larger than that of the bonus in Japan.

[Table 3]

Lastly, we confirm the relationship between the change in compensation and the change in earnings in Figure 1. The left-hand side figure indicates the relationship between the change of the fixed salary ($\Delta ln(SALARY)_{i,t}$) and the change in the current earnings ($\Delta E_{i,t}$). On the other

Figure 1: The change in the fixed salary and incentive compensation from the previous period to the current period, depending on the change in earnings.



Note: The graphs are bin scatterplots based on the number of bins set to 50. For each bin of change in earnings, the average value of the change in compensation is plotted.

hand, the right-hand figure represents the relationship between the change of the incentive compensation ($\Delta ln(BONUS)_{i,t}$) and the change of earnings ($\Delta E_{i,t}$). From these figures, there is a positive relationship between the change in the incentive compensation and the change in earnings, regardless of whether earnings increase or decrease. However, while the change in fixed salary and the change in earnings are positively related when earnings decrease, their relationship becomes negative when earnings increase. However, we need to empirically confirm the effect of earnings on the fixed salary based on the model analysis.

4 Results

4.1 Main analysis

In Tables 4 – 6, we propose the result of regression analysis of Equation (1). Tables 4, 5, and 6 represent the result of the case in which we employ cash compensation, salary, and bonus as dependent variables, respectively.

[Table 4]

First, we review the results for cash compensation in Tables 4. In Column (1), the coefficient of $\Delta E_{i,t}$ is significant and positive. From this result, we can observe the positive relationship between changes in earnings and changes in cash compensation. Moreover, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ is positive and significant in Column (2). From F test, the sum of coefficients of

$\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ is positive and significant. This result shows that cash compensation is reduced when a firm's earnings decrease relative to previous earnings, suggesting that managers of Japanese firms are punished for their low performance. This result is one of the analogies of Otomasa et al. (2020). Additionally, the coefficient of $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ has significant positive, and the sum of coefficients of $\Delta E^2_{i,t}$ and $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is significantly positive in Column (3). Hence, this result suggests that there is a lower bound to the punishment effect of cash compensation in Japan. Lastly, in the full model in Column (5), $\Delta E_{i,t}$ does not have a significant effect on cash compensation. On the other hand, $\Delta E_{i,t} \times D\_Dec_{i,t}$ has a positive and significant effect on cash compensation. The sum of coefficients of $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ is significantly positive in F test. Thus, we can confirm the difference between the two effects on cash compensation. This result indicates the asymmetric compensation behavior for the change in earnings. Additionally, while $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is positive and significant, and the sum of coefficients of $\Delta E^2_{i,t}$ and $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is significantly positive. After controlling for various factors, this result suggests that there are lower limits to compensation.

[Table 5]

Next, we review the results for the salary in Table 5. In Column (1), the coefficient of $\Delta E_{i,t}$ is not significant. Moreover, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ is positive and significant in Column (2). The sum of coefficients of $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ is positive and significant in F test, This result shows that the fixed salary is reduced when the current earnings decrease, and it suggests that managers of Japanese firms are punished for their low performance. Additionally, in Column (3), the coefficient of $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is not significant, and the sum of coefficients of $\Delta E^2_{i,t}$ and $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is also not significant. In the full model in Column (5), while $\Delta E_{i,t}$ does not have significant, $\Delta E_{i,t} \times D\_Dec_{i,t}$ has positive and significant. From the F test, the sum of coefficients of $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ is positive and significant. This result indicates the asymmetric compensation behavior for the change in earnings. Additionally, the coefficient of $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is not significant, and the sum of coefficients of $\Delta E^2_{i,t}$ and $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is also not significant. These results suggest that the punishment effect of the fixed salary has no lower limit. From this outcome, one can infer that the salary plays an important role to consider the punishment in managerial compensation in Japan.

[Table 6]

Lastly, we confirm the case in which we employ the bonus as an independent variable in Table 6. Importantly, in the analysis in Column (5), the coefficient of $\Delta E_{i,t}$ and the sum of coefficients of $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ are positive and significant. However, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ is not significant. The results confirm that managers receive bonuses whether or not the firm achieves its previous earnings. Moreover, the coefficient of $\Delta E^2_{i,t}$ is significant negative, and the coefficient of $\Delta E^2_{i,t} \times D\_Dec_{i,t}$ is significant positive in Column (5). In addition, the sum of coefficients of $\Delta E_{i,t}^2$ and $\Delta E_{i,t}^2 \times D\_Dec_{i,t}$ has positive and significant. These results indicate that there are upper and lower limits to this relationship. This observation may reflect the symmetric behavior of managerial compensation, indicating that the bonus is appropriately used to reward managers in Japan. Therefore, the asymmetric effect in cash compensation appears to be associated with the salary in this context. In other words, when considering compensation stickiness, it is important to focus on the salary component in Japan. Based on these results, H1 and H2 are not supported.

4.2 Without bonus and with bonus firms

On the other hand, as Hamamura et al. (2024) demonstrated, some firms only pay fixed salaries to managers in Japan. In fact, in our sample, while 16,315 observations pay only salary, 9,789 observations pay both salary and bonus from year $t-2$ to t. Therefore, by dividing our sample (without bonus and with bonus), we investigate whether punishment at the time of decrease in earnings differs between the two cases.

Table 7 shows the result of the dividing analysis. First, without a bonus sample (Column (1)), the coefficient of $\Delta E_{i,t}$ is not significant. When current earnings increase, the change in current earnings is not related to the change in fixed salary. Moreover, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ is positive and significant. The sum of coefficients of $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ is significant in F test. When earnings decrease, fixed compensation also decreases. It suggests the punishment for a fixed salary.

[Table 7]

Next, in fixed salary with bonus sample (Column (2)), the coefficient of $\Delta E_{i,t}$ is insignificant. As current earnings increase, there is no relationship between current earnings and fixed salary. Furthermore, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ is not significant. In F test, the sum of coefficients $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ is not significant. These results show that there is no relationship between changes in current earnings and changes in fixed salary at the time of the current earnings decrease, suggesting no punishment for fixed salary in bonus firms. In other words, if we consider the firms that do not employ the bonus, then we find that H2 is not supported.

4.3 The effect of the large decrease in earnings

Even if the firm cannot achieve the previous earnings as a benchmark, it can be expected that the managers will obtain the ensured fixed salary despite a small loss. Therefore, in an additional analysis, we examine the effect of the larger decrease in current earnings. In this analysis, we make a new variable $D\_LargeDec_{i,t}$, which means a dummy variable that takes the value of one if firm i has the lowest decile rank of $\Delta E_{i,t}$ in year t and 0 otherwise. Based on this variable and Equation (1), we convert the variable from $D\_Dec_{i,t}$ to $D\_LargeDec_{i,t}$ in Equation (1).

[Table 8]

We describe the result in Table 8 in this case. From this table, we can observe that the coefficient of $\Delta E_{i,t} \times D\_LargeDec_{i,t}$ has a significant and positive effect on the compensation under the without bonus firms in Column (2). Moreover, the sum of coefficients $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_LargeDec_{i,t}$ is significantly positive in F test. In other words, we can confirm the robustness of our result. Therefore, anti-sticky compensation is particularly observed in large loss firms, and this result indicates that H2 is not supported. It may mean *harakiri* to keep the honor and take responsibility for their work.

4.4 The effect of the regulation reform

As we noted, because the management compensation regulations in Japan have changed since 2019, we confirm the impact of the reform of regulations. The regulation reform may have an impact on the determination of managerial compensation in Japanese firms because its regulation requires the disclosure of the details of the managerial compensation contract. Therefore, we estimate Equation (1), dividing the sample before and after the regulation reform. In particular, we distinguish between the sample periods before the fiscal year ending in March 2019 (prior to the regulatory change) and on or after the fiscal year ending in March 2020 (following the regulatory change).[8] We describe the result in Table 9.

[Table 9]

Panel A of Table 9 shows the result of the impact of the regulation reform. Before the regulation reform, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ has a significant and positive effect on the compensation in the without bonus firms (Column (3)). According to F test, the sum of coefficients $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ is significantly positive. However, after the regulation reform, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ and the sum of coefficients $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ are not significant (Column (4)). Additionally, Panel B of Table 9 indicates the result of employing $D\_LargeDec_{i,t}$. The coefficient of $\Delta E_{i,t} \times D\_LargeDec_{i,t}$ and the sum of coefficients $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_LargeDec_{i,t}$ are positive and significant only before the regulation reform in the without bonus firm. Our results suggest that the regulation reform has affected the self-punishment acts of Japanese managers in their compensation. In fact, after the regulation reform, we cannot confirm the difference between the number of without-bonus firms and with bonus firms (2,325 vs. 2,154), as there is a difference before the regulation reform (12,866 vs. 6,727). In this situation, managers are punished for deteriorating performance even if they do not perform *harakiri* in Japanese culture.

[8] Because we employ the change analysis in compensation from the previous year and the current year ($\Delta ln(COMP)_{i,t}$), for observations with a fiscal year ends between March 2019 and February 2020, the change in compensation may include the impact of regulation reforms. Thus, we exclude that period in this analysis.

4.5 Average compensation on the board

In the main analysis, we employ data on the total compensation of board members, excluding outside directors. This is because Japanese firms are not required to disclose the amount of individual CEO compensation unless the CEO's compensation is 100 million yen or more. On the other hand, previous studies have applied the compensation of individual CEOs (e.g., Albuquerque, 2009; Nam, 2020). Therefore, we also conduct our analysis using average compensation as a robustness check. We introduce average compensation based on the total compensation of all directors, excluding outside directors, divided by the number of directors, excluding outside directors.

[Table 10]

Table 10 shows the results of the average analysis. In panel A, before the regulation reform, the coefficient of $\Delta E_{i,t} \times D\_Dec_{i,t}$ and the sum of coefficients $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_Dec_{i,t}$ are significantly positive in the without-bonus firms (Column (5)). Additionally, the coefficient of $\Delta E_{i,t} \times D\_LargeDec_{i,t}$ and the sum of coefficients $\Delta E_{i,t}$ and $\Delta E_{i,t} \times D\_LargeDec_{i,t}$ are also significantly positive before the regulation reform in the without-bonus firm (Column (5) in Panel B). Using average compensation, these results ensure the robustness of the main result. Our analysis suggests that Japanese firms commit self-punishment using their compensation.

5 Discussion and Conclusion

In this study, focusing on the fixed salary, we document the managerial compensation contract in Japan empirically. In particular, this study examines the asymmetric behavior of managerial compensation, depending on the firm performance, because, in managerial compensation practice, one can confirm the stickiness of managerial compensation.

From our analysis, surprisingly, we find that while managerial compensation is anti-sticky in Japan, Japanese firms use the fixed salary as a punishment device. In other words, while the conventional wisdom reveals the existence of stickiness in the managerial compensation contract, our evidence shows a significant decrease in managerial compensation in Japan. This managerial compensation practice, where executives take responsibility for the deterioration of their company's performance through their compensation, is similar to the traditional Japanese self-punishment act, *harakiri*, and can be considered a typical practice of managerial compensation under the Japanese culture. According to Otomasa (2021), in Japan, one can observe that firms reduce managerial compensation as a self-punishment when they cannot achieve high performance. For example, the managers of Relo Group Inc. returned compensation voluntarily for the loss in the past year.[9] On the other hand, Kobayashi Pharmaceutical Co. states the voluntary forfeiture of compensation by executives on October 8, 2024, because of the health problems of *benikoji* supplements. For this problem, Kobayashi Pharmaceutical

[9] We obtain this information from the following report. URL: https://www.relo.jp/english/ir/news/docs/d51c4821eea719110fbc8ea1bb6076c53aadfca7.pdf (Last accessed: November 3, 2024)

Co. anticipates a net income decrease of 40.5 percent to 12.1 billion yen.[10] The example of Kobayashi Pharmaceutical Co. may represent the relationship between profit and managerial compensation.[11] These are typical examples of self-punishment for the loss, and this example represents the existence of *harakiri* as a Japanese traditional culture. Additionally, our result may identify that the result of Hamamura et al. (2024) is obtained from the effect of the large decrease in firms.

In fact, in Japanese culture and institutional settings, the managers are appointed through internal promotions within the company. In other words, as Colpan and Yoshikawa (2012) demonstrated, Japanese firms mainly hire corporate-appointed directors as top managers. In this case, in Japan, the managerial compensation contract does not become a specific compensation contract based on the agency theory. This practice means that we cannot understand the managerial compensation contract based on the loss aversion in the contract. Consequently, the Japanese culture, *harakiri* plays a very important role to consider the managerial compensation practice in Japan. The culture is beyond the prospect theory in Japan.

On the other hand, from the perspective of managerial insights, one can consider that if the manager is punished for cultural reasons beyond the contract, future managers do not wish to become managers in the company. This is because, from the additional unverifiable contract, they may feel disgust or distrust of its self-punishment act. Consequently, its psychological effect yields a small effort or non-participation in the contract. Therefore, to enhance governance, the company must control the manager's behavior through explicit contracts, such as the clawback provision.

The results of this study indicate the potential for future research using data on Japanese managerial compensation. By identifying why managers of Japanese firms self-sacrifice by reducing their fixed salaries, it is possible to understand managerial behavior. Managers may not behave based on self-interest maximization as much as researchers assume. If future research can reveal these, it will have more important implications for the design of managerial compensation. Additionally, one can consider that the preference or utility function of managers is different between Japan and other countries. In other words, in the future study, we should specify the utility function of managers using empirical studies.

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[10]We obtain this information from the following news. URL: https://www.asahi.com/ajw/articles/15381549 (Last accessed: October 11, 2024)

[11]While one may consider that the executive reduces the reward to carry out responsibility for the health problem, for the shareholders, the firm value and profits are lowered by the problem. Therefore, this example may suggest the typical behavior for the loss in Japan.

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A Variable Definitions

Variable	Definition	Source
$\Delta ln(CASHCOMP)_{i,t}$	The change in the total amount of cash compensation for directors, excluding outside directors for firm i from year $t-1$ to year t. After calculating the change, we consider the natural logarithm of it (*i.e.*, $\log(CASHCOMP_{i,t}/CASHCOMP_{i,t-1})$).	NEEDS-MT Firm Basic Data (Executive)
$\Delta ln(SALARY)_{i,t}$	The change in the total amount of fixed salary for directors, excluding outside directors for firm i from year $t-1$ to year t. After calculating the change, we consider the natural logarithm of it (*i.e.*, $\log(SALARY_{i,t}/SALARY_{i,t-1})$).	NEEDS-MT Firm Basic Data (Executive)
$\Delta ln(BONUS)_{i,t}$	The change in the total amount of incentive compensation for directors, excluding outside directors for firm i from year $t-1$ to year t. After calculating the change, we consider the natural logarithm of it (*i.e.*, $\log(BONUS_{i,t}/BONUS_{i,t-1})$).	NEEDS-MT Firm Basic Data (Executive)
$\Delta E_{i,t}$	The change of earnings before special items and taxes for firm i from year $t-1$ to year t, divided by total assets in year $t-1$.	NEEDS-FinancialQUEST2.0
$D\_Dec_{i,t}$	A dummy variable that takes the value of one if earnings before special items and taxes decreased from year $t-1$ to year t and zero otherwise.	NEEDS-FinancialQUEST2.0
$D\_LargeDec_{i,t}$	A dummy variable that takes the value of one if firm i has the lowest decile rank of $\Delta E_{i,t}$ in year t and 0 otherwise.	NEEDS-FinancialQUEST2.0
$\Delta E_{i,t-1}$	The change of earnings before special items and taxes for firm i from year $t-2$ to year $t-1$, divided by total assets in year $t-1$.	NEEDS-FinancialQUEST2.0
$D\_Dec_{i,t-1}$	A dummy variable that takes the value of one if earnings before special items and taxes decreased from year $t-2$ to year $t-1$ and zero otherwise.	NEEDS-FinancialQUEST2.0
$RET_{i,t}$	The stock return for firm i from year $t-1$ to year t.	NEEDS-FinancialQUEST2.0
$RET_{i,t-1}$	The stock return for firm i from year $t-2$ to year $t-1$.	NEEDS-FinancialQUEST2.0
$MFE_{i,t}$	Management forecast errors, which is the actual earnings before special item and taxes for firm i in year t minus the initial management forecasts for firm i in year t, divided by total assets for firm i at the end of $t-1$.	NEEDS-FinancialQUEST2.0
$MFI_{i,t}$	Management forecast innovations, which is the initial management forecasts for firm i in year t minus the actual earnings before special item and taxes for firm i in year $t-1$, divided by total assets at the end of $t-1$. This valuable is scaled by decile rank.	NEEDS-FinancialQUEST2.0
$SALES_{i,t}$	The natural logarithm of sales for firm i in year t.	NEEDS-FinancialQUEST2.0
$MTB_{i,t}$	The market to book ratio for firm i in year t [market value of equity/book values of equity]	NEEDS-FinancialQUEST2.0
$R\&D_{i,t}$	The ratio of research and development expenditures to sales for firm i in year t.	NEEDS-FinancialQUEST2.0
$RISK_{i,t}$	Standard deviation in the residuals from a regression of firm i stock returns on industry stock returns estimated with the previous 36 months of data (Industry is based on the Nikkei's industrial classification)	NEEDS-FinancialQUEST2.0
$OWNER_{i,t}$	Director ownership ratio for firm i in year t [director ownership number/ (number of outstanding shares + number of treasury shares)].	
$COMM_{i,t}$	A dummy variable that takes the value of one if firm i has Compensation Committee in year t and 0 otherwise.	
$BORD_{i,t}$	The natural logarithm of the number of directors, excluding outside directors for firm i in year t.	
YearFixedEffects	Based on the Japanese calendar. In Japan, the year begins in April and ends in March the following year. For example, 2021 indicates the fiscal year ending April 2021 through March 2022.	NEEDS-FinancialQUEST2.0
IndustryFixedEffects	Based on the Nikkei industrial middle classification.	NEEDS-FinancialQUEST2.0

Table 1: Sample Selection

Initial Sample: Firm-year observations on management compensation for Japanese listed firms in fiscal years ending on or after March 2006, through March 2022 in NEEDS-MT Firm Basic Data (Executive) database	61,486
Delete: Firm-year observations that have missing or not greater than zero salary for year t, year $t-1$, and year $t-2$	(17,414)
Delete: Firm-year observation that have missing NEEDS-FinancialQUEST2.0 database matching (financial data and stock data)	(975)
Delete: Firm-year observations for financial firms (Nikkei's industrial middle classification 47, 49, 51, 52)	(1,205)
Delete: Firm-year observations that do not use Japanese generally accepted accounting principles for year t, year $t-1$, and year $t-2$	(1,593)
Delete: Firm-year observations that do not have 12 months fiscal years for year t, year $t-1$, and year $t-2$	(722)
Delete: Firm-year observations that have a negative book value of equity for year t	(196)
Delete: Firm-year observations that have the ratio of directors' shareholdings of 100% or more in year t	(960)
Delete: Firm-year observations that management earnings forecasts for year t are not disclosed on the same day as the earnings announcement in year $t-1$	(3,115)
Delete: Firm-year observations that have missing variables for analysis	(2,235)
Final Sample	**33,071**

Table 2: Describe Statistic

	Mean	Std. Dev.	25th	Median	75th
$CASHCOMP_{i,t}\,(million\,yen)$	157.138	125.801	74.000	123.000	197.000
$\Delta CASHCOMP_{i,t}$	0.009	0.205	-0.089	0.009	0.105
$\Delta CASHCOMP_{i,t-1}$	0.006	0.205	-0.091	0.009	0.105
$SALARY_{i,t}\,(million\,yen)$	136.167	102.017	68.000	109.000	170.000
$\Delta SALARY_{i,t}$	0.002	0.196	-0.086	0.000	0.090
$\Delta SALARY_{i,t-1}$	-0.002	0.196	-0.089	0.000	0.089
$BONUS_{i,t}\,(million\,yen)$	50.692	59.587	16.000	32.000	61.000
$\Delta BONUS_{i,t}$	0.043	0.515	-0.154	0.000	0.241
$\Delta BONUS_{i,t-1}$	0.035	0.511	-0.154	0.000	0.231
$\Delta E_{i,t}$	0.006	0.038	-0.009	0.004	0.018
$\Delta E^2_{i,t}$	0.002	0.005	0.000	0.000	0.001
$D\_Dec_{i,t}$	0.403	0.491	0.000	0.000	1.000
$\Delta E_{i,t-1}$	0.005	0.039	-0.009	0.004	0.018
$\Delta E^2_{i,t-1}$	0.002	0.005	0.000	0.000	0.001
$D\_Dec_{i,t-1}$	0.402	0.490	0.000	0.000	1.000
$MFE_{i,t}$	-0.002	0.034	-0.012	0.001	0.012
$MFE_{i,t-1}$	-0.002	0.033	-0.011	0.001	0.012
$MFI_{i,t}$	0.550	0.287	0.300	0.500	0.800
$RET_{i,t}$	0.104	0.429	-0.147	0.025	0.245
$RET_{i,t-1}$	0.146	0.452	-0.113	0.060	0.291
$SALES_{i,t}$	10.457	1.590	9.350	10.373	11.503
$MTB_{i,t}$	1.492	1.689	0.635	0.972	1.642
$R\&D_{i,t}$	0.011	0.020	0.000	0.003	0.014
$RISK_{i,t}$	0.089	0.058	0.054	0.073	0.104
$OWNER_{i,t}$	0.075	0.119	0.003	0.019	0.090
$COMM_{i,t}$	0.147	0.355	0.000	0.000	0.000
$BORD_{i,t}$	1.759	0.411	1.386	1.792	2.079

All continuous variables are Winsorized at their 1st and 99th percentiles by year. See Appendix A for variable definitions.

Table 3: Pearson's Correlation Matrix

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1)	$\Delta CASHCOMP_{i,t}$	1.000											
(2)	$\Delta CASHCOMP_{i,t-1}$	-0.006	1.000										
(3)	$\Delta SALARY_{i,t}$	0.861	0.053	1.000									
(4)	$\Delta SALARY_{i,t-1}$	0.024	0.871	0.028	1.000								
(5)	$\Delta BONUS_{i,t}$	0.629	-0.092	0.139	0.010	1.000							
(6)	$\Delta BONUS_{i,t-1}$	-0.038	0.634	0.077	0.157	-0.221	1.000						
(7)	$\Delta E_{i,t}$	0.097	-0.073	0.017	-0.074	0.310	0.005	1.000					
(8)	$\Delta E^2_{i,t}$	-0.023	-0.053	-0.036	-0.050	0.080	0.019	0.370	1.000				
(9)	$D\_Dec_{i,t}$	-0.107	0.044	-0.027	0.047	-0.275	-0.008	-0.608	-0.042	1.000			
(10)	$\Delta E_{i,t-1}$	0.153	0.099	0.162	0.027	0.028	0.303	-0.084	-0.039	0.027	1.000		
(11)	$\Delta E^2_{i,t-1}$	0.017	-0.046	0.017	-0.055	0.029	0.043	0.154	0.373	-0.019	0.316	1.000	
(12)	$D\_Dec_{i,t-1}$	-0.142	-0.112	-0.146	-0.039	-0.031	-0.263	0.036	0.058	0.010	-0.610	-0.028	1.000
(13)	$MFE_{i,t}$	0.142	0.017	0.070	-0.002	0.271	0.057	0.604	-0.058	-0.450	0.084	-0.093	-0.107
(14)	$MFE_{i,t-1}$	0.160	0.137	0.164	0.073	0.025	0.246	-0.160	-0.260	0.040	0.576	-0.077	-0.443
(15)	$MFI_{i,t}$	-0.009	-0.083	-0.034	-0.055	0.099	-0.064	0.377	0.192	-0.317	-0.143	0.141	0.185
(16)	$RET_{i,t}$	0.064	-0.028	0.007	-0.031	0.180	0.010	0.374	0.152	-0.295	0.029	0.048	-0.043
(17)	$RET_{i,t-1}$	0.148	0.059	0.140	0.009	0.085	0.154	0.100	0.022	-0.096	0.374	0.157	-0.290
(18)	$SALES_{i,t}$	0.014	0.018	-0.002	0.000	-0.016	-0.016	-0.026	-0.206	-0.050	-0.023	-0.215	-0.063
(19)	$MTB_{i,t}$	0.040	0.029	0.036	0.029	0.054	0.061	0.184	0.279	-0.102	0.142	0.242	-0.091
(20)	$R\&D_{i,t}$	0.003	0.012	0.001	0.004	0.010	0.026	-0.010	0.076	0.027	0.007	0.072	0.018
(21)	$RISK_{i,t}$	0.040	0.011	0.035	0.006	0.053	0.081	0.127	0.302	-0.026	0.158	0.329	-0.042
(22)	$OWNER_{i,t}$	0.020	0.020	0.032	0.032	0.009	0.022	0.037	0.125	-0.005	0.030	0.120	-0.006
(23)	$COMM_{i,t}$	-0.018	-0.022	-0.046	-0.038	0.003	-0.025	0.017	-0.017	-0.017	-0.035	-0.035	0.014
(24)	$BORD_{i,t}$	0.111	0.093	0.115	0.091	0.038	0.046	-0.037	-0.163	-0.028	-0.016	-0.170	-0.057

		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
(13)	$MFE_{i,t}$	1.000											
(14)	$MFE_{i,t-1}$	0.338	1.000										
(15)	$MFI_{i,t}$	-0.219	-0.416	1.000									
(16)	$RET_{i,t}$	0.311	-0.012	0.114	1.000								
(17)	$RET_{i,t-1}$	0.107	0.330	0.036	-0.038	1.000							
(18)	$SALES_{i,t}$	0.151	0.170	-0.147	-0.039	-0.018	1.000						
(19)	$MTB_{i,t}$	-0.026	-0.053	0.233	0.286	0.214	-0.151	1.000					
(20)	$R\&D_{i,t}$	-0.019	-0.012	0.013	0.000	0.002	-0.018	0.057	1.000				
(21)	$RISK_{i,t}$	-0.097	-0.104	0.187	0.212	0.255	-0.349	0.357	0.084	1.000			
(22)	$OWNER_{i,t}$	-0.066	-0.075	0.147	0.053	0.039	-0.336	0.173	-0.075	0.195	1.000		
(23)	$COMM_{i,t}$	0.064	0.059	-0.054	-0.061	-0.009	0.239	0.019	0.030	-0.096	-0.124	1.000	
(24)	$BORD_{i,t}$	0.097	0.110	-0.127	-0.019	-0.024	0.453	-0.166	-0.017	-0.264	-0.184	-0.061	1.000

All continuous variables are Winsorized at their 1st and 99th percentiles by year. See Appendix A for variable definitions.

Table 4: Regression Results for Equations (1) (cash compensation)

		$\Delta ln(CASH\,COMP)_{i,t}$				
		(1)	(2)	(3)	(4)	(5)
$\Delta E_{i,t}$	β_1	0.366***	-0.087	0.456***	0.588***	0.283
		(6.681)	(-1.052)	(3.139)	(4.315)	(1.634)
$D\_Dec_{i,t}$	β_2		-0.023***	-0.012***	-0.010**	-0.011***
			(-5.792)	(-3.330)	(-2.535)	(-3.064)
$\Delta E_{i,t} \times D\_Dec_{i,t}$	β_3		0.695***	0.484*	0.329	0.892***
			(4.568)	(2.107)	(1.603)	(3.555)
$\Delta E^2_{i,t}$	β_4			-3.374***	-3.112***	-1.615**
				(-8.155)	(-7.886)	(-2.545)
$\Delta E^2_{i,t} \times D\_Dec_{i,t}$	β_5			6.405***	6.395***	5.246***
				(4.492)	(5.014)	(4.369)
$\Delta E_{i,t-1}$	β_6				0.878***	0.567***
					(8.859)	(7.131)
$D\_Dec_{i,t-1}$	β_7				-0.009**	-0.010***
					(-2.746)	(-3.301)
$\Delta E_{i,t-1} \times D\_Dec_{i,t-1}$	β_8				0.335	0.123
					(1.499)	(0.661)
$\Delta E^2_{i,t-1}$	β_9				-2.941***	-1.800***
					(-6.923)	(-4.598)
$\Delta E^2_{i,t-1} \times D\_Dec_{i,t-1}$	β_{10}				7.968***	5.955***
					(5.818)	(4.277)
$MFE_{i,t}$	β_{11}					0.495***
						(4.358)
$MFE_{i,t} \times D\_Dec_{i,t}$	β_{12}					-0.702***
						(-5.363)
$MFE_{i,t-1}$	β_{13}					0.470***
						(4.181)
$MFE_{i,t-1} \times D\_Dec_{i,t-1}$	β_{14}					0.097
						(0.847)
$MFI_{i,t}$	β_{15}					0.002
						(0.203)
$RET_{i,t}$	β_{16}	0.025***	0.023***	0.021***	0.026***	0.018***
		(5.681)	(5.339)	(4.804)	(6.266)	(4.848)
$RET_{i,t-1}$	β_{17}				0.033***	0.025***
					(5.113)	(4.100)
$\Delta CASH\,COMP_{i,t-1}$	β_{18}	-0.017	-0.019*	-0.019*	-0.038***	-0.044***
		(-1.675)	(-1.873)	(-1.898)	(-4.308)	(-5.152)
$SALES_{i,t}$	β_{19}	-0.003*	-0.004***	-0.004***	-0.006***	-0.007***
		(-2.041)	(-3.231)	(-3.200)	(-5.465)	(-7.167)
$MTB_{i,t}$	β_{20}	0.001	0.002**	0.002**	-0.002*	0.000
		(1.068)	(2.359)	(2.227)	(-1.981)	(-0.380)
$R\&D_{i,t}$	β_{21}	0.014	0.070	0.065	0.126	0.128
		(0.165)	(0.829)	(0.772)	(1.461)	(1.435)
$RISK_{i,t}$	β_{22}	0.143***	0.184***	0.186***	0.064*	0.106***
		(3.653)	(5.111)	(5.170)	(1.887)	(3.590)
$OWNER_{i,t}$	β_{23}	0.050**	0.054**	0.051**	0.045**	0.044**
		(2.732)	(2.895)	(2.751)	(2.580)	(2.478)
$COMM_{i,t}$	β_{24}	0.000	0.000	0.000	0.001	0.002
		(-0.081)	(-0.102)	(0.010)	(0.224)	(0.483)
$BORD_{i,t}$	β_{25}	0.069***	0.067***	0.067***	0.065***	0.064***
		(22.624)	(21.692)	(22.736)	(23.153)	(23.114)
YearFixedEffects		YES	YES	YES	YES	YES
IndustryFixedEffects		YES	YES	YES	YES	YES
Observations		33,071	33,071	33,071	33,071	33,071
Adjusted R^2		0.050	0.054	0.055	0.084	0.090
F value	$\beta_1 + \beta_3 = 0$		32.183***	33.139***	41.129***	34.899***
	$\beta_4 + \beta_5 = 0$			5.807**	8.255***	11.562***
	$\beta_6 + \beta_8 = 0$				35.080***	15.364***
	$\beta_9 + \beta_{10} = 0$				14.197***	8.913***
	$\beta_{11} + \beta_{12} = 0$					2.601
	$\beta_{13} + \beta_{14} = 0$					29.929***

All continuous variables are Winsorized at their 1st and 99th percentiles by year. *t*-statistics are reported in parentheses and are based on clustered standard error by year-level. *, **, and *** indicate statistical significance at 10%, 5%, and 1%, respectively (two-tailed). See Appendix A for variable definitions.

Table 5: Regression Results for Equations (1) (salary)

		$\Delta ln(SALARY)_{i,t}$				
		(1)	(2)	(3)	(4)	(5)
$\Delta E_{i,t}$	β_1	0.006	-0.306***	-0.200	-0.106	-0.207
		(0.117)	(-4.835)	(-1.613)	(-0.897)	(-1.236)
$D\_Dec_{i,t}$	β_2		-0.003	-0.002	0.000	-0.001
			(-0.942)	(-0.567)	(0.127)	(-0.164)
$\Delta E_{i,t} \times D\_Dec_{i,t}$	β_3		0.711***	0.611**	0.527**	0.818***
			(5.185)	(2.314)	(2.262)	(3.085)
$\Delta E^2_{i,t}$	β_4			-0.660	-0.363	0.511
				(-1.248)	(-0.699)	(0.882)
$\Delta E^2_{i,t} \times D\_Dec_{i,t}$	β_5			0.729	0.734	0.129
				(0.416)	(0.439)	(0.087)
$\Delta E_{i,t-1}$	β_6				0.932***	0.604***
					(10.962)	(6.339)
$D\_Dec_{i,t-1}$	β_7				-0.009**	-0.010***
					(-2.532)	(-2.922)
$\Delta E_{i,t-1} \times D\_Dec_{i,t-1}$	β_8				0.046	-0.061
					(0.240)	(-0.364)
$\Delta E^2_{i,t-1}$	β_9				-3.020***	-1.879***
					(-7.759)	(-4.046)
$\Delta E^2_{i,t-1} \times D\_Dec_{i,t-1}$	β_{10}				7.235***	5.199***
					(5.041)	(3.589)
$MFE_{i,t}$	β_{11}					0.178
						(1.687)
$MFE_{i,t} \times D\_Dec_{i,t}$	β_{12}					-0.356***
						(-3.137)
$MFE_{i,t-1}$	β_{13}					0.519***
						(5.517)
$MFE_{i,t-1} \times D\_Dec_{i,t-1}$	β_{14}					0.028
						(0.287)
$MFI_{i,t}$	β_{15}					0.003
						(0.510)
$RET_{i,t}$	β_{16}	0.010**	0.009**	0.009*	0.014***	0.009**
		(2.167)	(2.125)	(2.014)	(3.363)	(2.417)
$RET_{i,t-1}$	β_{17}				0.029***	0.021***
					(4.525)	(3.629)
$\Delta SALARY_{i,t-1}$	β_{18}	0.009	0.007	0.007	0.003	-0.001
		(0.637)	(0.524)	(0.522)	(0.227)	(-0.072)
$SALES_{i,t}$	β_{19}	-0.005***	-0.005***	-0.005***	-0.007***	-0.008***
		(-3.730)	(-4.795)	(-4.783)	(-7.219)	(-8.440)
$MTB_{i,t}$	β_{20}	0.003***	0.004***	0.004***	0.000	0.001
		(3.106)	(4.180)	(4.217)	(0.270)	(1.420)
$R\&D_{i,t}$	β_{21}	0.028	0.081	0.080	0.126	0.127
		(0.368)	(1.058)	(1.045)	(1.653)	(1.582)
$RISK_{i,t}$	β_{22}	0.135***	0.170***	0.170***	0.051	0.085***
		(3.904)	(5.287)	(5.306)	(1.718)	(3.155)
$OWNER_{i,t}$	β_{23}	0.056***	0.061***	0.060***	0.053**	0.052**
		(3.055)	(3.253)	(3.187)	(2.905)	(2.843)
$COMM_{i,t}$	β_{24}	-0.011**	-0.011**	-0.011**	-0.010**	-0.009**
		(-2.602)	(-2.687)	(-2.679)	(-2.542)	(-2.317)
$BORD_{i,t}$	β_{25}	0.067***	0.065***	0.065***	0.063***	0.063***
		(19.177)	(18.949)	(19.212)	(18.575)	(18.713)
YearFixedEffects		YES	YES	YES	YES	YES
IndustryFixedEffects		YES	YES	YES	YES	YES
Observations		33,071	33,071	33,071	33,071	33,071
Adjusted R^2		0.053	0.055	0.055	0.082	0.086
F value	$\beta_1 + \beta_3 = 0$		12.090***	3.775*	4.995**	8.501***
	$\beta_4 + \beta_5 = 0$			0.002	0.058	0.203
	$\beta_6 + \beta_8 = 0$				27.000***	11.430***
	$\beta_9 + \beta_{10} = 0$				10.189***	6.091**
	$\beta_{11} + \beta_{12} = 0$					2.521
	$\beta_{13} + \beta_{14} = 0$					27.276***

All continuous variables are Winsorized at their 1st and 99th percentiles by year. *t*-statistics are reported in parentheses and are based on clustered standard error by year-level. *, **, and *** indicate statistical significance at 10%, 5%, and 1%, respectively (two-tailed). See Appendix A for variable definitions.

Table 6: Regression Results for Equations (1) (bonus)

		$\Delta ln(BONUS)_{i,t}$				
		(1)	(2)	(3)	(4)	(5)
$\Delta E_{i,t}$	β_1	5.365***	3.757***	7.083***	7.068***	6.924***
		(13.186)	(6.729)	(10.171)	(10.708)	(4.610)
$D\_Dec_{i,t}$	β_2		-0.137***	-0.071***	-0.072***	-0.075***
			(-9.194)	(-4.764)	(-4.891)	(-4.846)
$\Delta E_{i,t} \times D\_Dec_{i,t}$	β_3		0.401	0.294	0.275	0.216
			(0.471)	(0.353)	(0.281)	(0.150)
$\Delta E^2_{i,t}$	β_4			-26.984***	-26.890***	-27.929***
				(-12.293)	(-10.722)	(-9.098)
$\Delta E^2_{i,t} \times D\_Dec_{i,t}$	β_5			62.102***	62.077***	64.219***
				(5.478)	(5.396)	(5.837)
$\Delta E_{i,t-1}$	β_6				1.269	1.711*
					(1.743)	(2.058)
$D\_Dec_{i,t-1}$	β_7				-0.026*	-0.026**
					(-2.058)	(-2.248)
$\Delta E_{i,t-1} \times D\_Dec_{i,t-1}$	β_8				1.073	-0.503
					(1.069)	(-0.446)
$\Delta E^2_{i,t-1}$	β_9				-0.827	-1.876
					(-0.225)	(-0.495)
$\Delta E^2_{i,t-1} \times D\_Dec_{i,t-1}$	β_{10}				13.019	10.112
					(1.559)	(1.481)
$MFE_{i,t}$	β_{11}					0.715
						(0.508)
$MFE_{i,t} \times D\_Dec_{i,t}$	β_{12}					-0.123
						(-0.100)
$MFE_{i,t-1}$	β_{13}					-0.794
						(-1.490)
$MFE_{i,t-1} \times D\_Dec_{i,t-1}$	β_{14}					1.804**
						(2.282)
$MFI_{i,t}$	β_{15}					-0.060
						(-1.229)
$RET_{i,t}$	β_{16}	0.109***	0.098***	0.087***	0.097***	0.088***
		(5.067)	(4.749)	(4.281)	(5.028)	(4.880)
$RET_{i,t-1}$	β_{17}				0.025	0.029
					(1.206)	(1.329)
$\Delta BONUS_{i,t-1}$	β_{18}	-0.226***	-0.226***	-0.225***	-0.256***	-0.257***
		(-13.285)	(-13.828)	(-14.869)	(-16.604)	(-16.754)
$SALES_{i,t}$	β_{19}	-0.010*	-0.011**	-0.010**	-0.011**	-0.011**
		(-2.069)	(-2.495)	(-2.259)	(-2.478)	(-2.323)
$MTB_{i,t}$	β_{20}	-0.020***	-0.017***	-0.016***	-0.025***	-0.023***
		(-4.004)	(-3.220)	(-3.216)	(-4.362)	(-3.609)
$R\&D_{i,t}$	β_{21}	0.687*	0.741*	0.672	0.762*	0.808**
		(1.748)	(1.795)	(1.709)	(1.963)	(2.125)
$RISK_{i,t}$	β_{22}	0.211	0.275	0.242	0.049	0.065
		(0.961)	(1.328)	(1.231)	(0.229)	(0.299)
$OWNER_{i,t}$	β_{23}	-0.082	-0.074	-0.071	-0.076	-0.054
		(-0.849)	(-0.746)	(-0.716)	(-0.826)	(-0.574)
$COMM_{i,t}$	β_{24}	0.014	0.012	0.013	0.013	0.014
		(1.077)	(1.049)	(1.114)	(1.059)	(1.138)
$BORD_{i,t}$	β_{25}	0.091***	0.086***	0.087***	0.084***	0.082***
		(7.280)	(6.485)	(6.566)	(6.599)	(6.632)
YearFixedEffects		YES	YES	YES	YES	YES
IndustryFixedEffects		YES	YES	YES	YES	YES
Observations		9,789	9,789	9,789	9,789	9,789
Adjusted R^2		0.165	0.176	0.182	0.190	0.192
F value	$\beta_1 + \beta_3 = 0$		43.702***	88.353***	72.254***	51.068***
	$\beta_4 + \beta_5 = 0$			12.890***	12.432***	13.362***
	$\beta_6 + \beta_8 = 0$				16.453***	6.972***
	$\beta_9 + \beta_{10} = 0$				2.552	2.069
	$\beta_{11} + \beta_{12} = 0$					0.266
	$\beta_{13} + \beta_{14} = 0$					1.623

All continuous variables are Winsorized at their 1st and 99th percentiles by year. t-statistics are reported in parentheses and are based on clustered standard error by year-level. *, **, and *** indicate statistical significance at 10%, 5%, and 1%, respectively (two-tailed). See Appendix A for variable definitions.

Table 7: Regression Results for Without Bonus Firms and with Bonus Firms

		$\Delta ln(SALARY)_{i,t}$	
		w/o Bonus (1)	w/ Bonus (2)
$\Delta E_{i,t}$	β_1	-0.070	-0.344
		(-0.441)	(-0.860)
$D\_Dec_{i,t}$	β_2	0.001	-0.005
		(0.158)	(-0.686)
$\Delta E_{i,t} \times D\_Dec_{i,t}$	β_3	0.800**	0.491
		(2.514)	(1.292)
$\Delta E^2_{i,t}$	β_4	0.034	2.649
		(0.060)	(1.671)
$\Delta E^2_{i,t} \times D\_Dec_{i,t}$	β_5	0.487	-2.687
		(0.413)	(-0.965)
$\Delta E_{i,t-1}$	β_6	0.560***	0.407
		(4.101)	(1.579)
$D\_Dec_{i,t-1}$	β_7	-0.017***	-0.007
		(-3.662)	(-1.559)
$\Delta E_{i,t-1} \times D\_Dec_{i,t-1}$	β_8	0.148	-0.456
		(0.551)	(-1.245)
$\Delta E^2_{i,t-1}$	β_9	-1.598**	-0.700
		(-2.861)	(-0.436)
$\Delta E^2_{i,t-1} \times D\_Dec_{i,t-1}$	β_{10}	6.176***	-0.273
		(3.436)	(-0.094)
$MFE_{i,t}$	β_{11}	0.086	0.131
		(0.812)	(0.537)
$MFE_{i,t} \times D\_Dec_{i,t}$	β_{12}	-0.370**	-0.232
		(-2.704)	(-0.760)
$MFE_{i,t-1}$	β_{13}	0.653***	0.189
		(5.215)	(0.932)
$MFE_{i,t-1} \times D\_Dec_{i,t-1}$	β_{14}	-0.107	0.341
		(-0.975)	(1.661)
$MFI_{i,t}$	β_{15}	-0.007	0.009
		(-1.073)	(0.610)
$RET_{i,t}$	β_{16}	0.012**	0.001
		(2.521)	(0.125)
$RET_{i,t-1}$	β_{17}	0.026***	0.004
		(3.999)	(0.443)
$\Delta SALARY_{i,t-1}$	β_{18}	0.008	0.022
		(0.521)	(1.527)
$SALES_{i,t}$	β_{19}	-0.005***	-0.009***
		(-5.380)	(-7.821)
$MTB_{i,t}$	β_{20}	0.001	0.002
		(1.267)	(0.963)
$R\&D_{i,t}$	β_{21}	0.108	-0.133
		(1.043)	(-1.434)
$RISK_{i,t}$	β_{22}	0.073*	0.146**
		(2.114)	(2.556)
$OWNER_{i,t}$	β_{23}	0.038*	0.065*
		(1.895)	(1.934)
$COMM_{i,t}$	β_{24}	0.003	0.004
		(0.390)	(0.781)
$BORD_{i,t}$	β_{25}	0.060***	0.053***
		(11.646)	(8.312)
YearFixedEffects		YES	YES
IndustryFixedEffects		YES	YES
Observations		16,315	9,789
Adjusted R^2		0.093	0.058
F value	$\beta_1 + \beta_3 = 0$	8.178***	0.160
	$\beta_4 + \beta_5 = 0$	0.137	0.000
	$\beta_6 + \beta_8 = 0$	10.288***	0.026
	$\beta_9 + \beta_{10} = 0$	7.229***	0.242
	$\beta_{11} + \beta_{12} = 0$	5.289**	0.094
	$\beta_{13} + \beta_{14} = 0$	15.285***	18.019***

All continuous variables are Winsorized at their 1st and 99th percentiles by year. *t*-statistics are reported in parentheses and are based on clustered standard error by year-level. *, **, and *** indicate statistical significance at 10%, 5%, and 1%, respectively (two-tailed). See Appendix A for variable definitions.

Table 8: Regression Results for Large Earnings Decrease

		$\Delta ln(SALARY)_{i,t}$		
		All	w/o Bonus	w/ Bonus
		(1)	(2)	(3)
$\Delta E_{i,t}$	β_1	-0.069	-0.015	-0.070
		(-0.581)	(-0.118)	(-0.279)
$D\_LargeDec_{i,t}$	β_2	0.023	0.025	-0.009
		(1.458)	(1.447)	(-0.274)
$\Delta E_{i,t} \times D\_LargeDec_{i,t}$	β_3	1.207**	1.349***	-0.019
		(2.579)	(3.019)	(-0.020)
$\Delta E^2_{i,t}$	β_4	-0.128	-0.241	1.322
		(-0.301)	(-0.447)	(1.403)
$\Delta E^2_{i,t} \times D\_LargeDec_{i,t}$	β_5	3.557	3.732*	-2.687
		(1.723)	(1.867)	(-0.456)
Controls		YES	YES	YES
YearFixedEffects		YES	YES	YES
IndustryFixedEffects		YES	YES	YES
Observations		33,071	16,315	9,789
Adjusted R^2		0.086	0.093	0.058
F value	$\beta_1 + \beta_3 = 0$	5.719**	8.275***	0.007
	$\beta_4 + \beta_5 = 0$	2.484	2.508	0.058

All continuous variables are Winsorized at their 1st and 99th percentiles by year. t-statistics are reported in parentheses and are based on clustered standard error by year-level. *, **, and *** indicate statistical significance at 10%, 5%, and 1%, respectively (two-tailed). See Appendix A for variable definitions.

Table 9: Regression Results for Regulation Reform

Panel A Decrease Dummy

		$\Delta ln(SALARY)_{i,t}$					
		All		w/o Bonus		w/ Bonus	
		Before	After	Before	After	Before	After
		(1)	(2)	(3)	(4)	(5)	(6)
$\Delta E_{i,t}$	β_1	-0.290	0.078	-0.142	0.282	-0.996***	0.165
		(-1.341)	(0.277)	(-0.660)	(1.828)	(-4.746)	(0.367)
$D\_Dec_{i,t}$	β_2	-0.003	0.006	0.001	0.006	-0.017***	0.025
		(-0.544)	(1.810)	(0.198)	(0.794)	(-3.290)	(2.357)
$\Delta E_{i,t} \times D\_Dec_{i,t}$	β_3	0.946**	0.340	1.064**	-0.001	0.432	1.275*
		(2.703)	(1.608)	(2.718)	(-0.004)	(0.847)	(3.708)
$\Delta E^2_{i,t}$	β_4	1.082	-0.544	0.685	-2.696	5.647***	0.045
		(1.574)	(-0.305)	(1.015)	(-2.642)	(3.295)	(0.014)
$\Delta E^2_{i,t} \times D\_Dec_{i,t}$	β_5	-2.351	1.491	-0.245	2.086	-9.072***	2.779
		(-1.109)	(0.688)	(-0.111)	(1.033)	(-3.193)	(0.856)
Controls		YES	YES	YES	YES	YES	YES
YearFixedEffects		YES	YES	YES	YES	YES	YES
IndustryFixedEffects		YES	YES	YES	YES	YES	YES
Observations		24,495	5,857	12,866	2,325	6,727	2,154
Adjusted R^2		0.101	0.041	0.104	0.050	0.073	0.039
F value	$\beta_1 + \beta_3 = 0$	4.563**	19.937***	8.193***	0.945	1.826	49.530***
	$\beta_4 + \beta_5 = 0$	0.305	3.353*	0.028	0.187	0.988	1.523

Panel B Large Decrease Dummy

		$\Delta ln(SALARY)_{i,t}$					
		All		w/o Bonus		w/ Bonus	
		Before	After	Before	After	Before	After
		(1)	(2)	(3)	(4)	(5)	(6)
$\Delta E_{i,t}$	β_1	-0.082	-0.008	-0.048	0.054	-0.196	0.093
		(-0.506)	(-0.059)	(-0.260)	(0.249)	(-1.034)	(0.156)
$D\_LargeDec_{i,t}$	β_2	0.023	-0.006	0.033	-0.027	-0.063	0.046
		(0.767)	(-0.317)	(1.169)	(-0.519)	(-0.984)	(0.741)
$\Delta E_{i,t} \times D\_LargeDec_{i,t}$	β_3	1.257	0.265	1.788**	-0.309	-2.437	2.295
		(1.350)	(0.678)	(2.164)	(-0.314)	(-1.156)	(1.180)
$\Delta E^2_{i,t}$	β_4	0.136	-0.098	0.256	-1.622	0.874	1.598
		(0.254)	(-0.089)	(0.392)	(-1.121)	(0.460)	(1.012)
$\Delta E^2_{i,t} \times D\_LargeDec_{i,t}$	β_5	1.488	0.581	4.712	-1.017	-17.893	4.778
		(0.288)	(0.724)	(0.917)	(-0.328)	(-1.188)	(0.618)
Controls		YES	YES	YES	YES	YES	YES
YearFixedEffects		YES	YES	YES	YES	YES	YES
IndustryFixedEffects		YES	YES	YES	YES	YES	YES
Observations		24,495	5,857	12,866	2,325	6,727	2,154
Adjusted R^2		0.101	0.041	0.104	0.050	0.072	0.037
F value	$\beta_1 + \beta_3 = 0$	1.536	1.306	4.210**	0.102	1.523	2.236
	$\beta_4 + \beta_5 = 0$	0.090	0.209	0.848	0.499	1.251	0.514

All continuous variables are Winsorized at their 1st and 99th percentiles by year. t-statistics are reported in parentheses and are based on clustered standard error by year-level. *, **, and *** indicate statistical significance at 10%, 5%, and 1%, respectively (two-tailed). See Appendix A for variable definitions.

Table 10: Regression Results by Average Compensation

Panel A Decrease Dummy

		$\Delta ln(SALARY)_{i,t}$								
		All			w/o Bonus			w/ Bonus		
		All (1)	Before (2)	After (3)	All (4)	Before (5)	After (6)	All (7)	Before (8)	After (9)
$\Delta E_{i,t}$	β_1	-0.448**	-0.430	-0.127	-0.312	-0.323	0.397	-1.081*	-1.726***	-0.416
		(-2.303)	(-1.735)	(-0.575)	(-1.420)	(-1.210)	(1.069)	(-1.961)	(-3.825)	(-0.766)
$D\_Dec_{i,t}$	β_2	0.004	0.004	0.011	0.002	0.005	0.001	0.004	-0.009	0.049*
		(0.957)	(0.697)	(1.012)	(0.322)	(0.609)	(0.031)	(0.485)	(-1.199)	(3.970)
$\Delta E_{i,t} \times D\_Dec_{i,t}$	β_3	1.310***	1.585***	0.647**	1.119**	1.698***	-0.745	1.703***	1.533**	3.214*
		(4.631)	(4.484)	(7.877)	(2.485)	(3.449)	(-0.803)	(3.171)	(2.613)	(3.706)
$\Delta E^2_{i,t}$	β_4	1.079	1.645	-0.832	0.170	1.047	-5.327	7.515***	9.666***	5.240
		(1.201)	(1.610)	(-0.625)	(0.139)	(1.082)	(-2.498)	(3.046)	(4.686)	(1.435)
$\Delta E^2_{i,t} \times D\_Dec_{i,t}$	β_5	1.860	0.037	3.866	1.620	2.429	2.859	-4.579	-9.100**	3.401
		(1.094)	(0.012)	(1.840)	(0.764)	(0.742)	(1.378)	(-1.615)	(-2.560)	(1.292)
Controls		YES	YES	YES	YES	YES	YES	YES	YES	YES
YearFixedEffects		YES	YES	YES	YES	YES	YES	YES	YES	YES
IndustryFixedEffects		YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations		33,071	24,495	5,857	16,315	12,866	2,325	9,789	6,727	2,154
Adjusted R^2		0.087	0.096	0.069	0.102	0.108	0.087	0.071	0.075	0.079
F value	$\beta_1 + \beta_3 = 0$	8.570***	9.507***	7.193***	3.781*	8.745***	0.306	1.956	0.171	26.054***
	$\beta_4 + \beta_5 = 0$	4.979**	0.400	16.472***	0.949	1.238	1.330	3.267*	0.033	3.801*

Panel B Large Decrease Dummy

		$\Delta ln(SALARY)_{i,t}$								
		All			w/o Bonus			w/ Bonus		
		All (1)	Before (2)	After (3)	All (4)	Before (5)	After (6)	All (7)	Before (8)	After (9)
$\Delta E_{i,t}$	β_1	-0.267*	-0.240	-0.128	-0.202	-0.212	0.301	-0.514	-0.713*	-0.308
		(-1.800)	(-1.256)	(-0.528)	(-1.282)	(-1.081)	(1.365)	(-1.479)	(-1.794)	(-1.176)
$D\_LargeDec_{i,t}$	β_2	0.023	0.041	-0.036	0.035	0.059	-0.037	0.001	-0.069	0.141
		(1.135)	(1.553)	(-1.136)	(1.013)	(1.523)	(-0.461)	(0.038)	(-1.211)	(2.120)
$\Delta E_{i,t} \times D\_LargeDec_{i,t}$	β_3	1.527**	2.294**	-0.361	1.751*	3.026***	-1.494	0.959	-1.816	5.984*
		(2.441)	(2.865)	(-0.666)	(1.921)	(3.102)	(-1.322)	(0.796)	(-0.916)	(3.947)
$\Delta E^2_{i,t}$	β_4	0.240	0.756	-0.903	-0.338	0.532	-4.918**	4.920**	4.001	6.018*
		(0.323)	(0.876)	(-0.677)	(-0.323)	(0.645)	(-4.771)	(2.710)	(1.764)	(3.292)
$\Delta E^2_{i,t} \times D\_LargeDec_{i,t}$	β_5	4.807*	6.452	-0.759	5.797	11.331**	-1.948	-2.357	-17.507	16.841
		(1.762)	(1.550)	(-0.339)	(1.352)	(2.482)	(-0.359)	(-0.372)	(-1.465)	(2.467)
Controls		YES	YES	YES	YES	YES	YES	YES	YES	YES
YearFixedEffects		YES	YES	YES	YES	YES	YES	YES	YES	YES
IndustryFixedEffects		YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations		33,071	24,495	5,857	16,315	12,866	2,325	9,789	6,727	2,154
Adjusted R^2		0.087	0.096	0.069	0.102	0.108	0.088	0.070	0.074	0.077
F value	$\beta_1 + \beta_3 = 0$	4.049**	6.975***	1.745	3.177*	9.678***	1.441	0.116	1.620	11.423***
	$\beta_4 + \beta_5 = 0$	3.354*	2.972*	0.892	1.475	5.888**	1.958	0.175	1.254	8.955***

All continuous variables are Winsorized at their 1st and 99th percentiles by year. *t*-statistics are reported in parentheses and are based on clustered standard error by year-level. *, **, and *** indicate statistical significance at 10%, 5%, and 1%, respectively (two-tailed). See Appendix A for variable definitions.