# Rewards to Meet Market Expectations: Evidence of Stock Market Sophistication

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*Very often, firms report earnings that meet or beat market expectation (MBE). In this study, we empirically document that managers are rewarded more cash bonus when their firm MBE more often, and this relation holds same regardless of the extent of managerial entrenchment. We find that stock market reacts positively overall when firms MBE, but it reacts less positively for firms with entrenched managers. The study shows that stock market is more sophisticated in rewarding firms for meeting or beating market expectation than a firm's cash bonus system does.*

## INTRODUCTION

Executive compensation has been the subject of extensive prior research. The majority of compensation studies agree that using stock and options in executive compensation can serve to include the market in accessing and rewarding CEOs. As such, it is relatively effective. However, using these incentives is not without fault, as evidenced by option repricing, backdating, or too little stock ownership. In their survey paper, Core, Guay, and Larcker (2003) state that simple normative prescriptions, such as "repricings are an indication of poor governance" or "more equity ownership by executives is always better than less ownership," are inappropriate. They argue it is almost always necessary to understand the objectives of shareholders, the characteristics of managers, and other elements of the decision-making setting before drawing any conclusions regarding the desirability of observed equity-based incentive plans or the level of equity ownership by managers. They call for a detailed contextual analysis to determine what relation between governance and compensation is appropriate and not misleading.

In this paper, using firms' meeting or beating market expectation as the context, we study whether managers receive financial rewards when their firms meet or beat market expectation (henceforth MBE), and whether one important aspect of managers' characteristics: managerial entrenchment, moderates such rewards. We study how the market reacts when firms MBE, thusly examining whether shareholders benefit from MBE. As such, we examine how the interests of managers and shareholders are aligned due to management entrenchment and the use of stock and options in executives' compensation package.

The literature is mixed on how managerial entrenchment shapes executive pay. Jiraporn, Kim, and Davidson (2005) document a positive association between compensation and anti-takeover provisions (ATPs); a measure of managerial entrenchment. Fahlenbrach (2008) challenges the claims that entrenched managers design their own compensation contracts. He argues that corporate governance and firm pay-for-performance may substitute for each other: if a firm has generally weaker governance, the compensation contract helps better align the interests of shareholders and those of the CEO.

We examine executive compensation as a whole, as well as individual components such as cash bonuses. We find that managers receive more cash bonus when their firms MBE, and the cash bonus reward does not differ based upon whether managers is entrenched. There is some weak evidence showing that entrenched managers actually receive less increase in the total compensation (including cash, stock, and options) when their firms MBE more often. We find that shareholders experience positive abnormal returns in the short-run when their firms MBE. However, such positive abnormal returns are significantly reduced when firms have entrenched managers.

Our study shows that stock markets are effective in rewarding managers' behaviors and the use of stock and options in executive pay can be effective in aligning the interests of shareholders with those of managers. As such, we conclude the markets are relatively sophisticated in regards to this issue. We also further show that cash bonuses are not reduced in a firm with entrenched managers, even though their firms have less positive abnormal returns around the time that firms MBE. Thus, the cash bonus is less effective in incentivizing managers to maximize shareholders' interests. Using cash bonuses as a component in pay-for-performance design is inconsistent with the notion of marrying managerial compensation to changes in shareholders' equity value.

The balance of the paper proceeds as follows. Section 2 reviews the literature and develops testable hypotheses. Section 3 describes the sample. Section 4 presents the results and Section 5 concludes the paper and provides the policy implications of the study.

## LITERATURE REVIEW AND HYPOTHESES

### The Financial Benefits of Meeting or Beating Market Expectations

The typical modern executive compensation package includes both cash (salary and bonuses) and equity-based (stock plus stock options) components. In terms of cash bonuses, Yang (2006) shows the compensation committee places more contract value on above-target performance rather than on-target performance when setting CEO bonuses. Matsunaga and Park (2001) find a significant incremental adverse effect on CEO bonuses when the firm's quarterly earnings fall short of the consensus analyst forecast. They conclude that CEO bonuses provide managers with an incentive to beat analysts' earnings forecasts. Kim and Yang (2009) find firms often set lower EPS targets than analyst consensus to enact for the CEO's bonus payout.

Teoh, Yang, and Zhang (2009) document "walk down" rewards and "walk up" penalties for analysts' forecasts of earnings. In addition, Cheng and Warfield (2005) find that executives who receive a larger percentage of their compensation via equity are more likely to meet or just beat analysts' quarterly earnings targets. Further, when target earnings are met or surpassed, stock prices increase (Bartov, Givolyb, and Hayn, 2002). The higher stock price provides executives personal profit opportunities by exercising their vested options or by simply selling stocks. Thus, we expect that managers' compensation will be higher for firms who meet or beat earnings expectations more often. . Thus, generally we put forth the following hypothesis:

> *H1: Executives will benefit financially when their firms meet or beat expectations consistently.*

Since the cash bonus is often linked to the earnings target, we further expect the cash bonus to be influenced most dramatically, relative to other components of executive compensation.

**Managerial Entrenchment and Rewards when Firms MBE**

The relationship between managerial entrenchment and compensation is potentially complex. Shleifer and Vishny (1989) explain that entrenched managers can "reduce the probability of being replaced, extract higher wages and larger perquisites from shareholders, and obtain more latitude in determining corporate strategy." The literature shows that entrenched managers (whose firms have high entrenchment index) are associated with more serious agency problems, poor operating performance, and lower stock valuations (Gompers, Ishii, and Metrick, 2003; Core, Guay, and Rusticus, 2006; Masulis, Wang, and Xie, 2007).[1]

Essentially, the entrenched managers face few disciplinary concerns and may thus be more likely to be motivated by personal rather than shareholders' interests. Thus, if there are significant personal benefits to doing so, entrenched managers may be more motivated to meet or beat market expectation.

Jiraporn, Kim, and Davidson (2005) document a positive association between compensation and anti-takeover provisions (ATPs), one widely-used measure of managerial entrenchment. Baik and Jiang (2006) find that managers can use management forecasts to dampen analysts' expectations. Graefe-Anderson and Wang (2011) document that when the market consensus is high, a firm with entrenched manages is more likely to beat or meet the consensus.

If entrenched managers use compensation to extract rents from shareholders with less chance of being disciplined, we would expect that the benefits they receive from meeting or beating market expectation to exceed those of unentrenched managers. . Thus, we have the following hypothesis:

> *H2: Entrenched executives will benefit financially from meeting or beating expectations more than their non-entrenched counterparts*

Fahlenbrach (2008) challenges the claims that entrenched managers design their own compensation contracts. He argues that corporate governance and firm pay-for-performance may act as substitutes. If a firm has weaker governance, the compensation contract may help better align the interests of shareholders executives. If Fahlenbrach (2008)'s substitution argument holds, firms with high entrenchment may have high pay-for-performance sensitivity. Then, when firms MBE, the degree of additional compensation may depend on whether shareholders benefit via increased stock values.

**Stock Market Reactions to Meeting or Beating Market Expectations**

Bernhardt and Campello (2007) find there are positive market reactions when a firm's announced earnings surpass the market consensus. Thus, it seems the market considers firms beating expectations to be a positive signal. . To meet or beat market expectations managers often actively engage in earnings and/or expectations management (Matsumoto, 2002; Lin, Radhakrishnan, and Su, 2006; Bhojraj, et al 2009; Bartov, Givoly, and Hayn, 2002; Skinner and Sloan, 2002).

Some studies find that firms with entrenched managers, as measured by the number of Anti-Takeover Provisions, are less likely to manage earnings (e.g., Zhao and Chen, 2008a, 2008b). However, Graefe-Anderson and Wang (2011) find that entrenched managers guide firms to MBE more often through 'expectations management' and less through 'earnings management'.

The literature suggests that entrenched managers are associated with more serious agency problems, poor operating performance, and lower stock valuations (Gompers, Ishii, and Metrick, 2003; Core, Guay, and Rusticus, 2006; Masulis, Wang, and Xie, 2007).[1] Thus, if entrenched managers are "playing the earnings game", we expect that market reactions to meeting or beating the market expectation by entrenched managers will be discounted. Given these arguments, we have the following hypothesis.

> *H3: The positive market reaction will be discounted when managers are entrenched.*

## DATA

To explore market reactions, we use quarterly data since earnings are reported quarterly. However, we use annual data to examine the benefits of beating the market. Data are obtained from IRRC, Compustat, ExecuComp, and IBES. We focus on firms in the S&P 1500, since this represents the overlap in coverage for the various databases. The data periods for each source vary and are detailed in Appendix 1.

Information on quarterly reported actual earnings is obtained from Compustat and is first used to compute the variable %MBE, which represents the percentage of quarters in a given year that a firm's final earnings announcement exceeded the final analysts' forecast consensus. We include %MBE with other annual variables such as managerial entrenchment, total executive compensation, total cash compensation, and other annual control variables. To measure managerial entrenchment, we follow many other studies like Gompers, Ishii, and Metrick (2003), Core, Guay, and Rusticus (2006) and Masulis, Wang, and Xie (2007), use the entrenchment index (*EIndex)* compiled by Bebchuk, Cohen, and Ferrell (2009).

Table 1 reports descriptive statistics on the annual compensation data. We measure managerial benefit by both the cash bonus and total compensation for all top executives or the CEO. The average level of bonuses for all top executives is $2.16 million dollars, of which over a third is solely is attributed to the CEO. In addition, the average change in total compensation for all executives is $383,000. The equivalent number for CEOs alone is nearly $800,000. On average, firms beat the market estimate nearly three out of four quarters of the year. Note the median of *%MBE* is 1.00, indicating that more than half of sample firms beat expectations for all quarters in a year. On average, the sample firms provided a 14.02 percent return to stockholders during the previous year.

**TABLE 1**
**SUMMARY STATISTICS**

This table reports descriptive statistics on annual data used to test the financial benefits from meeting or beating the market expectation. *BonusTop* is the total bonus received by all top executives for the year. Δ*TotCompTop* is the percentage increase in the total compensation reported for all top executives together. Total compensation is the sum of salary, bonus, other annual, the value of restricted stock granted, the value of stock options exercised, long-term incentive payouts, and all other compensation. *BonusCEO* is the bonus received by firm CEO for the year. Δ*TotCompCEO* is the percentage increase in total compensation reported for the CEO. All compensation variables are in thousands of dollars. We eliminate observations in which the CEO's increase in total compensation is higher than the 99% percentile and lower than the 1% percentile. *LnAssets* is the natural log of the firm's total assets. *%MBE* is the number of quarters between firm general annual meetings in which the firm meets or beats final consensus analyst forecast. *EIndex* is entrenchment index, as developed by Bebchuk, Cohen, and Ferrell (2009). *Return* is stock return observation year. *BdSize* is the size of the board of directors. *%Outsiders* is the percentage of outside directors on the board. *BdHold* is percentage of shares held by the board. *Options* is the natural log of the number of options held by top executives. *Leverage* is total debt divided by total equity.

| Variable | N | Mean | Median | 5% | 25% | 75% | 95% |
|---|---|---|---|---|---|---|---|
| BonusTop | 2383 | 2160.770 | 1474.110 | 0 | 653.032 | 2738.426 | 6685.000 |
| ΔTotCompTop | 2383 | 0.383 | 0.086 | -0.688 | -0.257 | 0.546 | 2.344 |
| BonusCEO | 2383 | 767.090 | 490.000 | 0.000 | 166.523 | 1000.000 | 2500.000 |
| ΔTotCompCEO | 2383 | 0.798 | 0.086 | -0.788 | -0.633 | 0.693 | 4.645 |
| | | | | | | | |
| LnAassets | 2381 | 7.671 | 7.478 | 5.577 | 6.605 | 8.589 | 10.230 |
| %MBE | 2383 | 0.724 | 1.000 | 0 | 0.5 | 1.0 | 1.0 |
| EIndex | 2383 | 2.144 | 2.000 | 0 | 1 | 3 | 4 |
| Return | 2383 | 14.018 | 6.946 | -46.540 | -16.758 | 32.146 | 89.177 |
| BdSize | 2383 | 9.789 | 10.000 | 6.000 | 8.000 | 11.000 | 14.000 |
| %Outsiders | 2383 | 0.655 | 0.667 | 0.363 | 0.555 | 0.777 | 0.888 |
| BdHold | 2383 | 9.815 | 2.100 | 0 | 0 | 10.000 | 46.700 |
| Options | 2353 | 7.399 | 7.386 | 5.609 | 6.714 | 8.146 | 9.209 |
| Leverage | 2381 | 1.608 | 1.188 | 0.230 | 0.665 | 1.937 | 4.842 |

## PERSONAL BENEFITS

### Univariate Analysis

We use two measures of managerial benefits, cash bonus and the total compensation for executives. We begin analyzing the possibility of differing levels of compensation contingent upon MBE with univariate comparisons. We segment the sample into firms with above- or below- average %MBE. These results are presented in Table 2.

Panel A presents the results for all top executives, while Panel B report compensation for only the CEO. Total changes in total compensation and bonuses are significantly higher for executives guiding firms that consistently meet or beat earnings estimates. In total, upper level executives are paid over $700,000 in bonuses if their firm's meet or beat estimates. This is logical, given that many bonuses are tied to the firm surpassing expectations. This corresponds to a more comprehensive increase in total compensation (which includes increases in stock and option values) that more than doubles firms where executives fail to meet or beat estimates. The results are similar when examining only CEO compensation as opposed to all upper level executives.

In short, the results of Table 2 support Hypothesis 1 that meeting or beating the market expectation benefits managers personally through higher compensation and the rewards are reflected by both cash bonus and the increase in the total compensation.

**TABLE 2**
**UNIVARIATE ANALYSIS: BENEFITS ASSOCIATED WITH BEATING THE MARKET**

This table presents univariate analysis on the sample, segmented by high and low levels of consistency in meeting or beating market estimates. Observations that represent high levels of consistency are those with above median values of %MBE, whereas below median values represent low levels of consistency. Panel A examines compensation for all top executives in total, while Panel B examines only CEO compensation. Compensation is defined by either changes in total compensation (included stock and options) or bonuses. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Panel A: for all top executives

| % MBE | Obs. | BonusTop | Diff. | Inc. % MBE | Obs. | ΔTotCompTop | Diff. |
|---|---|---|---|---|---|---|---|
| 0 | 1123 | 1787.212 | | 0 | 776 | 0.249 | |
| | | (63.104) | | | | (0.040) | |
| 1 | 1260 | 2493.705 | -706.493*** | 1 | 1607 | 0.447 | -0.202*** |
| | | (75.929) | (100.089) | | | (0.040) | (0.060) |

Panel B: for CEO only

| % MBE | Obs. | BonusCEO | Diff. | Inc. % MBE | Obs. | ΔTotCompCEO | Diff. |
|---|---|---|---|---|---|---|---|
| 0 | 1123 | 604.917 | | 0 | 776 | 0.679 | |
| | | (25.283) | | | | (0.120) | |
| 1 | 1260 | 911.629 | -306.711*** | 1 | 1607 | 0.855 | -0.175* |
| | | (33.142) | (42.452) | | | (0.699) | (0.130) |

We also run two-way ANOVA to check whether the level of managerial entrenchment and the level of firms' meeting or beating expectation interactively affect the cash bonus and the increase in total compensation. The interaction effects are insignificant, which suggests that entrenched managers do not receive differing levels of compensation based upon their ability to meet or beat earnings estimates. Thus, the preliminary evidence is inconsistent with the notion put forth in Hypothesis 2. However, we there are many significant influences from other variables that need to be controlled for. We now turn to more robust statistical methods of estimation.

**Multivariate Analyses**

To strengthen the results from Table 2, we turn to multivariate analyses, which allow for inclusion of control variables. Specifically, we estimate the following equation:

$$Benefit = \alpha_0 + \beta_1 \%MBE + \beta_2 EIndex + \beta_3 LnAssets + \beta_4 Return + \beta_5 BdSize + \beta_6 \%Outsiders + \beta_7 BdHold + \beta_8 Options + \beta_9 Leverage + \beta_{Year} + \varepsilon$$

*Benefits* is either the total annual bonus (*Bonus*) or the increase in total annual compensation for all top executives (Δ*TotComp*) *%MBE* is the percentage of quarters between two consecutive general annual meetings in which the announced actual earnings met or beat the final consensus analyst forecast. The control variables include the firm size, entrenchment index, stock returns over the year, board size, the

percentage of outside directors, the natural log of the number of options held by the board, and the institutional shareholdings in the firm. These variables control for important firm and governance characteristics that may also influence managerial benefits.

Table 3 presents the results of the above model. All models are panel data firm random effect models. The anti-takeover amendment dataset from IRRC is unbalanced for firm year. Our annual data is also unbalanced. Some firms have more years in the data and some firms only have one year. Therefore, we apply a random effects model. Comparison between a random effects model and a fixed effects model shows that the random effects model better fits the data. Models with dependent variables ending in "Top" are the sum of all top executives, while "CEO" designations only refer to compensation relevant to the CEO.

The control variables are qualitatively consistent with expectations. Larger firms and firms with higher stock returns pay higher bonuses and give higher pay raises. Executives' option holdings are also positively associated with the bonus and increases in compensation. Boards with more outsiders are less likely to grant large bonuses or give large raises in the total pay.

We now turn our attention to the primary variables of concern. The coefficient on *%MBE* is positive and statistically significant in all models, which is consistent with both the univariate findings and Hypothesis 1. As an example, consider Model 1. The coefficient of *%MBE* is 0.557, significant at 1% level. This suggests that beating expectations by one additional quarter during the year would translate into a 0.1393 increase in natural logarithm of bonus for top 5 executives (25% * 0.557). At the median total bonus for the top five executives of $1,474,110, this suggests an increase in total bonus of $220,333, which results in an additional bonus of $44,067 per executive.

We add interaction terms to examine the incremental impact of entrenchment on compensation in the event of MBE. However, in each instance, when added, the coefficient is insignificant. This indicates there is no difference in cash bonus reward for MBE between the entrenched and unentrenched managers.

Models (5) - (8) use the change in total executive compensation to capture managerial personal benefits, including stocks and options. In these models, compensation is measured as the percentage change from time *t* to time *t*+1, and *%MBE+1* captures the %MBE in time *t*+1. We find a positive relationship between beating the market expectation and the increase in the total executive pay.

The interaction item between *%MBE+1* and *EIndex* carries negative coefficients. And it is significant at the 10% level coefficient in all top executives model. This result indicates that as the frequency of MBE increases, the increase in total executive pay reduces when managers are entrenched. However, the relatively low significance level, coupled with the insignificant coefficient in the Bonus model, makes it difficult to make definitive conclusions.

**TABLE 3**
**MULTIVARIATE ANALYSIS: INFLUENCE OF ENTRENCHMENT AND MBE ON COMPENSATION**

Benefit is defined as the natural logarithm of *BonusTop* (Columns 1-2), *BonusCEO* (Columns 3-4), Δ*TotCompTop* (Columns 5-6), or Δ*TotCompCEO* (Columns 7-8). *% MBE+1* is *% MBE* for the next coming year. %MBE*EIndex and %MBE+1*EIndex are interaction variables designed to measure incremental influences. All models are panel data model with firm random effect estimation. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

| Dependent | LnBonusTop | | LnBonusCEO | | LnΔTotCompTop | | LnΔTotCompCEO | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Intercept | 2.624*** | 2.596*** | 2.210*** | 2.162*** | -0.085 | -0.071 | -0.683*** | -0.768 |
| | (0.243) | (0.258) | (0.241) | (0.250) | (0.253) | (0.265) | (0.561) | (0.593) |
| % MBE | 0.557*** | 0.593*** | 0.369*** | 0.448*** | 0.043 | 0.042 | 0.048 | 0.044 |
| | (0.052) | (0.101) | (0.047) | (0.092) | (0.080) | (0.080) | (0.178) | (0.179) |
| % MBE+1 | | | | | 0.358*** | 0.598*** | 0.347* | 0.477 |
| | | | | | (0.082) | (0.155) | (0.183) | (0.348) |
| %MBE*Eindex | | -0.019 | | -0.036 | | | | |
| | | (0.039) | | (0.036) | | | | |
| %MBE+1*Eindex | | | | | | -0.111* | | -0.060 |
| | | | | | | (0.061) | | (0.136) |
| Eindex | -0.009 | 0.002 | 0.014 | 0.042 | -0.035 | 0.044 | -0.044 | -0.002 |
| | (0.024) | (0.038) | (0.023) | (0.036) | (0.022) | (0.049) | (0.050) | (0.109) |
| Ln(assets) | 0.353*** | 0.355*** | 0.334*** | 0.336*** | -0.009 | -0.008 | -0.014 | -0.014 |
| | (0.028) | (0.030) | (0.028) | (0.029) | (0.027) | (0.027) | (0.061) | (0.061) |
| Return | 0.001*** | 0.002*** | 0.000*** | 0.001*** | 0.001** | 0.001** | 0.001 | 0.001 |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.001) | (0.001) |
| Board Size | 0.047*** | 0.047*** | 0.029** | 0.030** | -0.030** | -0.030** | -0.061** | -0.061** |
| | (0.012) | (0.013) | (0.011) | (0.012) | (0.013) | (0.013) | (0.029) | (0.030) |
| % Outsiders | -0.122 | -0.132 | -191.40 | 0.004 | -0.357* | -0.345* | -0.931** | -0.918** |
| | (0.166) | (0.169) | (145.99) | (0.153) | (0.185) | (0.185) | (0.418) | (0.414) |
| Board Holdings | -0.001 | -0.001 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 |
| | (0.001) | (0.002) | (0.001) | (0.001) | (0.002) | (0.002) | (0.003) | (0.004) |
| Options Held | 0.149*** | 0.150*** | 0.119*** | 0.116*** | 0.103*** | 0.099*** | 0.372*** | 0.371*** |
| | (0.029) | (0.030) | (0.028) | (0.029) | (0.029) | (0.030) | (0.066) | (0.066) |
| Leverage | -0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | -0.001 | -0.001 |
| | (0.003) | (0.004) | (0.003) | (0.003) | (0.001) | (0.005) | (0.012) | (0.012) |
| Control Year | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 2351 | 2351 | 2351 | 2351 | 2351 | 2351 | 2351 | 2351 |
| R-square | 0.353 | 0.357 | 0.319 | 0.318 | 0.033 | 0.034 | 0.026 | 0.026 |

In conclusion, the results of Table 3 support those suggested in Table 2. Managers receive financial rewards when their firms MBE, which is consistent with the understanding that pay is often tied to firm performance However, we find little evidence that the level of entrenchment influences compensation. More importantly, in the one instance where we identify a significant relationship, it runs counter to our expectations. The weak significant and negative coefficient of the interaction variable indicates that when

firms with entrenched managers increase the frequency of meeting or beating market expectations, the total compensation for all top executives actually increase by a less amount than if the managers were unentrenched.

**Market Reactions**

Lastly, we turn our attention to Hypothesis 3, which states that the positive market reaction to MBE will be lower if managers of the firm are entrenched. Specifically, we investigate the impact of managerial entrenchment on cumulative abnormal returns (CARs) around earnings announcements. CARs are residuals computed from the simply market model with CRSP Value Weighted portfolios as the benchmark. All stock price data are obtained from the Center for Research in Security Prices (CRSP). Following Datta, Iskandar-Datta and Raman (2001) and Bernhardt and Campello (2008), we compute two-day and 15-day cumulative abnormal returns (CAR (-1, 0) and CAR (-14, +1)) respectively. The results are similar for two windows; thus we will only report the results on CAR (-1, 0).

Table 4 presents univariate comparison. When the firm beats the market, the market reacts positively regardless of whether the managers are entrenched. These results are as expected, given the positive signal being sent, and is also consistent with previous studies. For the quarters in which a firm meets or beats market expectation, the high-entrenched group has lower CARs than the low-entrenched group for both event windows. This is consistent with Hypothesis 3. It seems the market discounts the positive signal if provided by a firm with entrenched managers. A potential explanation for this result is that the market recognizes such managers may be able to coerce deflated earnings estimates by either managing or manipulating earnings. It seems market can tell that these firms' meeting or beating market expectation may be the results of managers' maneuvers, as documented in Graefe-Anderson and Wang (2011).

**TABLE 4**
**MARKET REACTION TO MBE WITH ENTRENCHED MANAGERS**

This table reports univariate comparison of market reactions to firms MBE, segmented by managerial entrenchment. CAR(-1, 0) and (-14, +1) are cumulative abnormal returns around the actual quarterly earnings reporting dates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

| Groups | Beat=1 | | | | Beat=0 | | | |
|---|---|---|---|---|---|---|---|---|
| | CAR (-1, 0) | | CAR(-14, 1) | | CAR (-1, 0) | | CAR (-14, +1) | |
| | N | Mean (std err.) | N | Mean (std err.) | N | Mean (std err.) | N | Mean (std err.) |
| Total | 4565 | 0.0083** (0.0007) | 4565 | 0.0167** (0.0015) | 1744 | -0.0098** (0.0013) | 1744 | -0.0223** (0.0029) |
| Low- Entrench | 1940 | 0.0103** (0.0011) | 1940 | 0.0199** (0.0026) | 786 | -0.0075** (0.0020) | 786 | -0.0190** (0.0043) |
| High-Entrench | 2625 | 0.0069** (0.0009) | 2625 | 0.0143** (0.0019) | 958 | -0.0117** (0.0017) | 958 | -0.0250** (0.0038) |
| Dif. | | 0.0034** (0.0015) | | 0.0056** (0.0032) | | 0.0042* (0.0026) | | 0.0061 (0.0058) |

We also find that failure to MBE is met with a larger market decrease if managers are entrenched. When combined with the previous finding, this could suggest that entrenched managers are held to a higher standard, perhaps due to their entrenched nature. The market seems to reward such firms less in the event of a positive signal, but punish them more in the event of a negative signal.

## CONCLUSIONS

This study examines whether managerial entrenchment influences manager compensation when the firm meets or beats market expectation. In addition, we examine how entrenchment affects the market's reaction to this event. We find that managers receive more cash bonuses from meeting or beating the market consensus regardless of whether they are entrenched. We further find that entrenched managers do not receive more increase in total compensation from positive performance. In fact, they actually receive a bit less in total compensation relative to their unentrenched counterparts. This is consistent with the findings that firms with entrenched managers experience a lower stock price increase following the positive signal of MBE.

This study suggests the executive bonus system lacks sensitivity in relation to the level of entrenchment. The same does not seem to be true of the stock market, however. Rather, it appears the stock market is relatively sophisticated when it comes to distinguishing the positive information received from earnings reports. This suggests that, if possible, firms should avoid cash bonuses, and use stock and options as executive compensation more. Stock and stock options will better align executive benefits to those of the shareholders than the cash bonus. Using more stock or options may help reduce the weakness of cash bonus system, and therefore reduce the 'earnings game' in the Wall Street.

## ENDNOTE

1. Straska and Waller (2010) show high ATP is good for shareholders when the firm is in disadvantage situation in merger negotiation. We believe this unique circumstance will not invalidate our use of APTs to proxy for managerial entrenchment on the general basis.

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**APPENDIX: DATA SOURCES**

| Data Source | Time Period (In fiscal year) | Variables | Number of Observations | Identification |
|---|---|---|---|---|
| ExecuComp | 1992-2005 | Total number of options held by top executives;<br><br>Bonus for all top executives<br><br>Increase in TDC2 for all top executives together | 36178 | Cusip6+fyear (fiscal year includes beginning calendar date and ending calendar date, taken from COMPUSTAT) |
| IRRC-governance index | 1990-2003 | Entrenchment index | 19755 | Cusip6+fyear (Stable, fiscal or calendar years make no difference) |
| IRRC-Director | 1996-2005 | Board size, percentage of outsiders, board shareholding | 16019 | cusip6+annual meeting date |
| | 1996-2003 | Combined Governance file | 8834 | |
| Compustat | 1996-2003 | Quarterly earnings, stock price | 60584 | Cusip, quarterly reporting date, fiscal year |
| | 1996-2003 | Quarterly file | 8659 | |
| | 1996-2003 | Annual file | 2383 | |