MANAGERIAL INCENTIVES AND CHEAP TALK

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Abstract

In this paper we study empirically how managerial incentives determine strategic transmission of soft information from managers to investors through the use of "cheap talk" and the effect that such transmission may have on managerial survival. Using a sample of 1,363 US firms for the 1992-2008 period, and taking stock splits as our measure of "cheap talk", we prove that (i) managerial contracts do indeed incentivize executives to attract analyst attention through mechanisms like stock split announcements. In particular, it turns out that 10% increase in the share of managerial variable compensation increases the odds of split announcements by 4% and (ii) CEOs get punished for an improper use of cheap talk. 10% decrease in abnormal returns following stock split announcements leads to an increase of 10% in the odds of the CEO getting fired.

1. INTRODUCTION

Corporate finance literature, starting with Modigliani and Miller, studies how managerial decisions can increase firm value. However, separation of ownership and control gives rise to the agency problem between shareholders and managers: manager may pursue maximization of his own utility rather than maximization of share value. This problem can be solved by making manager's utility depend on share value, but since the true share value is difficult to observe, managers have to focus on market value. A typical managerial contract provides both explicit and implicit incentives for managers so that they will care about stocks' market value. Explicit incentives can be achieved through stocks-related compensation packages, whereas implicit incentives include both the threat of dismissal and the reputational loss that may follow bad stock market performance.

In this setting, transmission of information from managers (inside the firm) to investors (outside the firm) becomes an integral part of executives' jobs and a strategic tool for them to use.

Managers have to deal with two types of information: hard and soft information. On the one hand, there are hard facts or information about the company that can be verified, so called *hard information*, such as sales volume or board appointments. To deal with hard information manager has to determine general disclosure policy of the firm, (e.g. whether to list a company, to set up an investor relations department, to choose an auditing firm, to set up an internal auditing committee, to report monthly, quarterly or annually etc.). On the other hand, there are knowledge, opinions, and valuations of the company that cannot be verified i.e. *soft information*, such as growth expectations or employees' morale etc. Managers enjoy large discretion for the disclosure of the later type, but they face the problem of how to transmit positive soft information credibly to the market. Credibility can either be obtained through the use of costly signals about firm value, such as leverage, or also by engaging in "cheap talk" so as to attract analysts and investors' attention to correct a potential undervaluation problem. For this mechanism to work as a credible way to

communicate soft information to the other party two things must happen. First, managers should have incentives to disclose soft information and attract attention in order to increase share price, thus their remuneration must be linked to market prices. Second, "cheap talk" must not be cheap for CEOs. After attracting investors' attention, managers have to fulfill their expectations. In case they do not and the firm performs badly after the implementation of a cheap talk strategy, there should be an increase in their probability of being fired.

In this paper we study empirically how managerial incentives determine strategic transmission of soft information from managers to investors through the use of "cheap talk" and the effect that such transmission may have on managerial survival. Using a sample of 1,363 US firms for the 1992-2008 period, and taking stock splits as our measure of "cheap talk", we prove that (i) managerial contracts do indeed incentivize executives to attract analyst attention through mechanisms like stock split announcements. In particular, it turns out that 10% increase in the share of managerial variable compensation increases the probability of split announcement by 4 % and (ii) CEOs get punished for an improper use of cheap talk. 10% decrease in abnormal returns following stock split announcements leads to an increase of 9.5% in the probability of the CEO getting fired. In addition, we were also able to identify positive long run effects of stock split announcements on the probability of CEO firings.

The rest of the paper is organized as follows. Section 2 covers the related theoretical and empirical literature. Section 3 discusses data and methodological issues. Section 4 presents results and Section 5 concludes.

2. LITERATURE REVIEW AND PROPOSED CONTRIBUTION

General disclosure policy of a firm will determine how much and how fast information reaches the market. A firm will be considered more transparent (opaque) when it delivers more (less) information or more (less) timely information to the market.

Managers can credibly transmit positive soft information to the market by using signals. In an asymmetric information world where the amount of bad projects exceeds the good ones, the role for signaling is paramount for the markets not to fail. The topic of costly signaling has been first addressed by Spence (1973) who explains that good employees distinguish themselves from bad ones by giving costly signals - like education - to the employers. The bad employees will not mimic the good ones because according to the setting the cost of signaling is higher for them. Thus the signal will convey valuable information to the interested parties and the equilibrium will be reached. Later Leland and Pyle (1977) extended Spence's job market signaling model to the manager and investor dimension, where one measure to signal is for the manager to invest in his project which obviously involves costs for him by undertaking more equity position than it is socially optimal. On the other hand, it will be much more costly for the manager with bad project to mimic the former. Ross (1977) introduced a new type of signal for a better firm. He claimed that financial structure – in particular higher debt – signals higher value of the firm to the market.

All the signaling literature is based on the idea that signals are credible because they are costly. But there is evidence that markets also react favorably to costless announcements ("cheap talk"). The role of managerial voluntary disclosure in shareholder value creation has long been researched in financial literature. Grinblatt et al. (1984) show that costless signaling has valuation effects on companies. In particular, stock splits and stock dividend announcements are usually followed by favorable stock price changes. Lakonishok and Lev (1987) try to find out the reason why firms split stocks. The data for 1963-1882 suggest that stock splits are mostly targeted at restoring increased stock prices and only second to that do the authors find some support for signaling role of stock splits. They document three to five percent abnormal returns around the date of stock split announcement. Ikenberry et al. (1995) also test whether managerial voluntary information disclosure has any valuation effect on stock price and find that share repurchase announcements (which very often are not implemented after the announcement) have indeed

favorable effect only if the firm is undervalued and needs analyst attention to increase stock value. Ikenberry, Rankine and Stice (1996) recheck managers' motivation behind stock split announcements and once again, they find the proof of its informational value. The authors find that managers self select to stock split announcements based on their expectance of firm's future performance. Besides, though they find positive short term market reaction to stock splits, it turns out to be an underreaction; testing stock split valuation effects in the long run (one and three year periods) proves to bring about even higher stock returns. Conroy and Harris (1999) address to the informational content of stock split announcements as well. The authors claim that usually managers' goal for splitting stock is to move down the price to the reasonable trading range to boost liquidity which is in accordance with the previous findings. As for the effects of split announcements on stock prices they find positive abnormal returns around stock split announcement dates. Besides, they report that bigger split factor leads to more earnings forecasts by the analysts, which according to the authors is a direct confirmation of an informational context of stock split announcements.

There are other papers that use different measures to evaluate the value of costless information. Cooper et al. (2001) check the effect of name changes of internet related companies on their stock value and find striking effect of 74% abnormal returns around the day of announcement and, most importantly, the effect is not temporary but seems to prevail for a longer time. Chan (2003) analyze the issue of media attention by comparing two sets of data, first, that comprises firms with extensive news coverage in the headlines and other sources and the second, consisting of firms with large price movements but without news coverage. He finds that firms with bad news show negative abnormal returns, though the drift for good news is smaller. Also, firms with no information but big price movements show reversal after a month. So once again, voluntary news is associated with abnormal returns.

To sum it all up, we found that according to the traditional signaling literature the cost of signal makes it credible to the market. Thus, costless signal will not convey any valuable information. However, empirical literature on the effects of costless announcements proves the opposite: measures like stock splits and name changes have important effects. The intuition behind this result is that good firms can attract attention of analysts by making costless announcements and bad firms will not mimic them for the fear of being discovered (Bhattacharya and Dittmar, 2004). Bhattacharya and Dittmar (2004) state the conditions under which firms choose between costly vs. costless signals. They claim that only the more undervalued and more ignored firms will use costless signals because it is more profitable for analysts to investigate these firms compared to the less undervalued and less ignored ones from which speculators cannot extract much rents. As a consequence the latter firms have to use costly signals to separate themselves from their counterparts.

Almazan et al. (2008) discuss cheap talk in close relation to the agency problem between managers and shareholders. They show that managers who have positive information about their firms can use cheap talk in order to attract attention of analysts, who in turn investigate the firm and produce new information. If this information is positive they will buy the stock and this will increase the value of the firm. The authors prove that the optimal incentive contract that shareholders can offer to managers includes both a bonus for price increases following "cheap talk" and dismissal if price does not increase following "cheap talk". This contract makes the use of costless announcements credible (since they are costly for the manager) and results in lower remuneration costs and higher firm value in equilibrium. Following this line we claim that standard managerial contracts do in fact induce CEOs to engage in cheap talk (because of the use of bonuses, stocks and stock options as part of CEO remuneration) and punish them if they misuse it (boards are more likely to fire CEOs after bad performance if they have engaged in cheap talk, since it increases their legal risk). This is the starting point of our proposed contribution.

In this paper we will study how managerial incentives determine managerial choices regarding transmission of soft information to the market. More specifically, our research will rely on the connection between managerial contracts and CEO cheap talk.

Two empirically testable hypotheses can be derived from Almazan et al. (2008) paper:

Hypothesis 1: The more variable CEOs' compensations (bonuses, shares and stock options) are the more likely they will engage in cheap talk.

Hypothesis 2: CEOs who engage in cheap talk are more likely to be fired following a period of low stock market returns.

Finally, before going to data and variable description we want to briefly refer to CEO turnover literature since we are going to depend on existing methods for testing hypothesis 2. Jenter and Kanaan (2008) use a hand collected data on CEO forced removals in 1993-2001 and find that managers are more likely to be fired after firm's bad performance. Kaplan and Minton (2008) also study the effect of performance on CEO turnover. They employ three measures of performance – overall market performance, relative industry and firm performance. They show that all the three measures of performance are negatively related to CEO turnover. Coates IV and Kraakman (2010) study the relationship between CEO tenure and turnover. They distinguish between internal (by the board) and external (through acquisitions) turnovers. Their findings are: CEO age and company size covary positively with the probability of CEO internal turnover, whereas compensation and options granted are negatively correlated with CEO firings. On the other hand, CEO age, total compensation and leverage are positively and size, Tobin's Q and growth rate negatively correlated with external turnovers. Finally, the authors find that poor firm performance has significant negative effect on internal (but not external) turnovers. We follow this paper closely in testing hypothesis 2 and find very similar results.

3. DATA AND VARIABLES

We gather data from different datasets. First, we address to EXECUCOMP database as it contains most of the main CEO specific information central to the study. The period to be analyzed covers 1992-2008. We filter executive data by the flag CEO indicating that the person served as an executive for all or most of the fiscal year. We obtain information for 5 818 CEOs of 3 188 firms. The total firm-year panel sum up to 27 657 observations. Second, we employ COMPUSTAT which, after matching with EXECUCOMP, produces the sample of 25 200 firm-year observations. Finally, we add stock split announcements ever recorded for the firms in the sample in the given period. Data comes from CRSP dataset and reaches 2 341 splits for 1 363 firms in total.

CEO Specific Variables. The main dependent variables in the study are stock split announcements made by the CEOs (which we use as a proxy for cheap talk like many other researchers do) and CEO firings, both of which are dummies. CEO firings are supposed to cover only the forceful removals of CEOs, though because of the difficulty associated with identifying the true reason behind CEO replacements, we consider all CEO removals as firings for the study. We will conduct some robustness checks accounting for the age of CEOs as a true indication for retirement later in the paper. There are 1 378 CEO replacements in the sample.

The dates of stock split announcements are available for 2 044 cases solely; for the rest of 297 cases we used stock split recording dates (as an alternative to split announcement date in the database) which usually coincide with the years of announcements so that this problem should not bias the main annual stock split dummy variable. In addition, we check that all the splits and firings are consistent with each other; meaning that the current year CEO could not get fired before the announcement of stock split in the same year (both dates are available in the dataset). So in the abovementioned cases we transfer the dummy for splits to the next year when the possibly true announcing CEO (the successor of the previous one) appears in the sample (there are 12 such cases in total).

One of the main explanatory variables for testing the hypotheses is a portion of variable compensation in CEO remuneration package. Total compensation, as well as the components of it, is retrieved from EXECUCOMP database. We use TDC1 which contains (among others) the value of options *granted* contrasted to TDC2 which contains the value of options *exercised*, as executives' total compensation. The variable part of the total remuneration is constructed by adding up bonuses, options and stocks granted to CEOs in a given fiscal year.[1] The final variable to be used in the study is the share of the variable part in CEO's total compensation.

Figure 1 depicts the composition of mean CEO variable compensations. The share of bonuses in the total variable compensation decreases substantially in these 17 years whereas the share of stocks granted to the CEOs increase more than 5 times from 10% in 1992 to 51% in 2008. The average share of options in CEO compensation packages did not change dramatically in the past years, though there has been some cycle marking increase starting from the beginning of our dataset and decrease from 2002.

[Insert Figure 1 about Here]

Figure 2 shows trends of the three main variables – Stock Splits, CEO Firings and CEO variable compensation. Panel A depicts absolute values and Panel B – values relative to the annual number of firms (this correction might be important due to the fact that there are much less number of firms present in the beginning of the sample than in the end). At a glimpse, all three of the variables seem to move similarly.

[Insert Figure 2 about Here]

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[1] We use BONUS+ OPTION_AWARDS_BLK_VALUE (Total Value of Stock Options Granted-using Black-Scholes) + RSTKGNT (Value of Restricted Stock Granted) as variable compensation for 1992-2005 and – BONUS+ OPTION_AWARDS_FV (Grant-Date Fair Value of Option Awards) + STOCK_AWARDS_FV (Grant-Date Fair Value of Stock Awards) - in 2006-2008 observations, as stated in the definition of TDC1 variable.

There are two opposite market conditions accommodated into our sample – cycles of increase (1992-2000) and decrease (2001-2008) of returns and splits, which we will address separately in robustness check chapter to disentangle different processes supposedly prevalent in each period exclusively. Figure 3 shows annual split announcements and excess market returns for the entire sample[2].

[Insert Figure 3 about Here]

There are two other CEO specific variables – *CEO age* and *CEO tenure* - in the sample, both of which are retrieved from EXECUCOMP database. Tenure is calculated as the current year minus the year the person became CEO.

Firm Specific Variables. The main sources of firm specific data are COMPUSTAT and CRSP databases. The choice of the variables were mainly inspired by CEO compensation and turnover literature, as well as theoretical papers on information disclosure, as to our best knowledge there are quite few publications covering stock splits as a dependent variable. Leverage ratio is often used as one of the explanatory firm specific variables while studying CEO remuneration contracts and turnover (Brick et al. (2006), Kaplan and Minton (2008), Garvey and Milbourn (2006), Coates IV and Kraakman (2010)), which gives us possibility to think that it might also be related to the firm's decision of splitting stock. We are going to use a conventional measure - total debt of the firm divided by its total equity- as leverage ratio. Market to book ratio - a measure of firm undervaluation, also very commonly used in the literature (Ikenberry et al. (1995), Bhattacharya and Dittmar (2004), Lakonishok, Shleifer, and Vishny (1994)), is computed as total market value of a firm (total debt + total equity) divided by the book value of firm's equity.

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[2] Data used to construct benchmark excess market returns (market returns minus risk free rate) are from French's website - http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#HistBenchmarks. File used is annual F-F benchmark factors.

Total assets (in logs) are used as proxy for firms' size (Coates IV and Kraakman (2010)), data comes from COMPUSTAT. *Volatility* is computed as standard deviations of daily stock returns within the given year, as taken from CRSP. Firm *returns* are annual returns (stock price changes) at the end of each year. The returns used in the regression analysis are computed as the ratio of firm's annual returns to the average returns in its two digit industry (Coates IV and Kraakman (2010).

A*nalyst following* comes from I/B/E/S (DATASTREAM) database and measures the number of analysts issuing earnings per share predictions of a firm in a given year. In particular, we are going to employ the cumulative annual number of estimates that have been lowered and increased over the last month, since we believe that changing the number of estimates issued represents a more qualitative measure of analyst following than the total number of analysts that have been following the firm.

And finally, we divide industries in 10 aggregate sectors (1 digit SIC codes) to account for the specific policies and practices possibly prevalent in each industry.

Detailed summary statistics of all variables are given in table 1 (with number of missing observations also reported).

[Insert Table 1 about Here]

It might also be interesting to pay attention to the characteristics of the firms which announce stock splits in comparison to the ones which do not; also the firms that fire CEOs vs. the ones that do not. Comparative statistics are provided in Table 2. Panel A covers firm/CEO specific information of announcing vs. non-announcing companies (one year before announcements vs. the rest of the years, respectively). For example, statistically firms that tend to announce stock splits show less leverage and more market-to-book ratios, are slightly smaller in size, are usually followed by analysts more often (attract more attention) and tend to have higher stock returns

compared to the firm-years when there are no announcements. In addition, more variable compensation and less CEO firings, together with higher CEO tenure seem to also be a better characterization of the announcing firms. CEO age and volatility of stock returns show more or less the same pattern in both cases.

As for the comparison between the years before firms fired CEOs vs. the years of no firings, we see the following pattern: on average, slightly less levered firms tend to fire CEOs more often, also their sizes and market to book ratios are a bit lower. Stock return volatilities, analyst following and CEO tenure are practically the same for both types. CEO variable compensation and stock returns seem to be smaller for firing firms. Finally, as it seems older CEOs get to be replaced more often (this might also be due to retirement age bias in the sample).

[Insert Table 2 about Here]

4. RESULTS

4.1 CEO's remuneration and cheap talk

Our first testable hypothesis is that CEOs with more variable compensation seem more likely to engage in cheap talk i.e. address to stock split announcements more often.

In order to test this hypothesis we are going to estimate the following LOGIT model:

$$P(Y/X) = F(X'\beta)$$

Where Y stands for stock split announcements and X for lagged control variables. The left hand side of the equation states the probability of Y (i.e. stock split announcements) taking the value of 1 conditionally on Xs. F stands for logistic distribution of independent variables assumed

by the model. We consider lagged variables as predetermined ones, implying that the type and characteristics of a firm today determine its future decisions. The regression includes year and industry dummies, together with firm random effects.

The results of the regressions are provided in Table 3. As can be seen CEO variable compensation has a positive and significant effect on the probability of stock split announcements. Equations (1) and (2) present the results with a single independent variable in the regression with and without industry and year dummies. Both results are very similar and significant, but once including all the relevant explanatory variables in equation (3) we can see that the magnitude of the variable compensation decreases almost twice, though it stays positive and significant. The last column of Table 3 gives us the odds ratios of stock split announcements. In particular, 10% increase in the share of executives' variable compensation leads to 4 % increased odds of stock split announcements, ceteris paribus. Thus we can conclude that variable part in CEO compensation seems to provide anticipated incentives for them to act in the interest of shareholders, at least in the field of transferring favorable soft information to the market.

Other CEO characteristics are also important. The effect of CEO age on the probability of stock split announcements is negative and statistically significant, though very small in economic terms (e.g. being a CEO of 10 years older decreases the odds of stock splits by 1.2%), probably due to the fact that older CEOs might have less career concerns. CEO tenure seems to favorably affect the probability of splits, the intuition being that more entrenched CEOs might have more incentives (or need) to attract attention compared to the newcomers who already attract some kind of attention by joining the firm, thus making it less fruitful for them to use additional attention attracting measures, ceteris paribus. Interestingly, this may also be related to the options vesting period, since usually the possibility of exercising options increases with tenure.

[Insert Table 3 about Here]

Regarding firm characteristics, leverage seems to affect the probability of using cheap talk negatively though the effect is very small. This is consistent with Bhattacharya and Dittmar (2004), who argue that cheap talk and traditional costly signals, such as leverage, are alternative ways to convey soft information to the market.

The impact of size, returns and market to book ratio are positive and significant, implying that increase in the values of these variables increases the probability of stock split announcements. In particular 10% increase in firm's market to book ratio is associated with 0.6% increase in the odds of CEO addressing to stock splits. This finding seems somewhat counterintuitive, since theory claims that undervalued firms (low market to book ratio is usually considered as a proxy for undervaluation) are better off using cheap talk measures; though Lakonishok and Lev (1987) also find positive relationship between firm's market to book ratio and stock split announcements. As it seems relative stock returns also increases the odds of stock split announcements. According to the theory there are two distinct motivators behind stock split announcements, to decrease stock prices to the reasonable range to boost stock liquidity and already discussed informational context. The former is usually implying that the prices of stocks might have been higher before stock splits (meaning that returns also could have been high), thus calling for measures to split.

Before switching to testing the second hypothesis we would like to wrap up how the theory behind cheap talk communication works. In the first place, we have proposed that manager incentives determine in a large part whether they engage in cheap talk communication with the markets or not. As the results from Table 3 suggest the more variable compensation CEOs have the more the probability of addressing to cheap talk is. So we could argue that empirically CEO incentives work through their compensation packages as also suggested by theory. The final step of the theory is the consequences of CEO actions. In particular, if the actions lead to undesired results, like low stock market returns, CEOs get punished by replacement.

Now it is very interesting to see whether the middle chain works in practice. In particular, as we stated in previous chapters one of the possible channels through which cheap talk operates is the following – after designing a desired structure of compensation for CEOs in order for them to transfer soft information to the markets, two types of actions are expected: i) firms attract attention of analysts who follow them to investigate; ii) following this excess attention and investigation market prices of firm shares start to react either by increasing or decreasing; in the latter case, as already stated, CEOs get punished.

So in order to check whether this intermediate chain of action works in practice, we ran the following regression using the variable – *analyst following (up) & analyst following (down)*.

$$\text{Analyst following (up)} = \alpha + \beta_1 * CheapTalk + \beta_2 * CheapTalk_{(t-1)} + \sum \beta_i * X_{i(t-1)} + \varepsilon_i$$

$$\text{Analyst following (down)} = \alpha + \beta_1 * CheapTalk + \beta_2 * CheapTalk_{(t-1)} + \sum \beta_i * X_{i(t-1)} + \varepsilon_i$$

Where, *analyst following (up)* stands for the cumulative annual number of estimates that have been increased over the last month and *analyst following (down)* - the cumulative annual number of estimates that have been lowered over the last month, respectively. *Cheap talk* is proxied by stock split announcements. X_i represents the set of other lagged explanatory variables.

The results of the regressions are provided in Table 4. In the first two regressions we received positive and significant estimates for cheap talk variable i.e. more cheap talk (stock split announcements in our case) leads to more analysts starting to increase EPS forecasts for the firm. Besides, not only does attracting attention lead to increase in EPS forecasts by analysts, but it is also associated with less lowering of EPS forecasts for the same firm, ceteris paribus. The results can be seen in the last two regressions of Table 4.

[Insert Table 4 about Here]

4.2 CEO's turnover following cheap talk

We can now go on with testing our second hypothesis stating that cheap talking CEOs have higher chances of getting fired after attracting attention if this action is followed by bad stock performance, so that executive remuneration contracts account for the misuse of information transmission by punishing them. The techniques and methodologies for analyzing Hypothesis 2 will be the same as the ones used in testing the previous hypothesis i.e. we will be using LOGIT model:

$$P(Y/X) = F(X'\beta)$$

Where Y stands for CEO firings and X for lagged control variables. F is a logistic distribution of independent variables assumed by the model. The regression includes year and industry dummies, together with firm random effects.

In order to accurately test the hypothesis 2, first we have to identify the effect of stock splits on CEO firings through bad stock performance. This can be done by measuring abnormal returns after stock split announcements and including them in the regression as a control variable together with stock splits. For obtaining the variable we conduct a conventional event study analysis (following MacKinlay, 1997), where we first estimate normal stock return performance for each firm within the two years before stock split announcements (thus using 24 months estimation window). Then we take actual stock returns in an event window of months 0 (announcing month) and 1 after the split announcement to calculate abnormal returns as actual returns (in an event window) minus predicted normal returns for the same period (using the last 24 month performance). By summing up the two values we get cumulative abnormal returns (CARs). In addition we calculate t-statistics for each of abnormal return for testing their significance.

We get 1418 CAR values for 943 firms. After filtering the values by their significance at 10% level (i.e. keeping only the values with more than 1.65 or less than -1.65 of t-statistics), we end up with only 525 significant CARs following stock split announcements. The average CAR across all firms is 1.2% (the average of positive CARs is 18.8% and negative CARs - -17.3 %, respectively).

The results of the regressions regarding the probability of CEOs gets fired are presented in Table 5. Equations (1) and (2) include solely the two main independent variables – stock splits and significant CARs – with and without industry and year dummies, as indicated. The outcome is in accordance with Hypothesis 2 i.e. the higher the cumulative abnormal returns following stock split announcements the lower the probability of CEO getting fired and vice versa. Thus we can argue that "cheap talk" is not a free lunch for the manager. Managers that engage in cheap talk and obtain negative market reaction are punished through the increased probability of getting fired. Equation (11) provides more intuitive numerical odds ratios of dependent variable taking value of 1 with 1 unit change in independent variables. We can see that 10% increase in abnormal returns following stock split announcements leads to almost 9.5% decreased odds of firings. Interestingly, stock split announcements by themselves seem to have negative effect on the probability of CEO getting fired, probably implying that stock splits are not solely the means of transmitting information, but rather their primary goal is to decrease previously inflated stock prices to the efficient range in order to boost liquidity as stated by previous researchers. Thus we should not be surprised to see that stock splits alone do not lead to CEO firings without respective stock price reaction.

The inclusion of other explanatory lagged variables decreases the significance (though not magnitude and sign) of CARs, most likely because of the fact that before being realized in CEO firings, significant CARs following stock splits might already have found response in other firm specific variables like stock returns, leverage, market to book ratio etc and are affecting firings through these variables.

Executive variable compensations seem to work in favor of CEOs. Presumably, more performance based remuneration is supposed to work on CEOs incentives better, thus leading them to act in the best interest of shareholders and consequently reducing the probability of a situation so bad that they get fired (Coates IV and Kraakman (2010) also find this negative effect of stock options granted to CEO on his chances of getting fired). Stock returns logically have an alleviating effect on the probability of CEO replacement. Firm leverage seems to decrease the probability of CEO forceful removals, though the magnitude is not economically significant. The rest of the explanatory variables show no significant effect on the dependent variable except for the CEO age and CEO tenure, the latter seems to decrease the chances of CEO getting fired probably due to entrenchment, whereas the former contributes to executive replacement, though this might also be the effect of natural retirement rather than forceful removals.

[Insert Table 5 about Here]

4.3 Robustness Checks

The previous regressions naturally use contemporaneous variables of splits and firings. Though it is often the case that stock splits' effect on firm environment lasts for as long as two years following the announcement. In order to check the long run effects of splits on CEO replacement, we use splits and related cumulative abnormal returns that take place within two years (24 months) prior to firings as contemporaneous[3]. In this way, all the firings, either short term (taking place the same year as splits) or long term (taking place within 24 months of split announcements) are treated equally, as contemporaneous to the splits, notwithstanding the splits' true recording dates.

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[3] Technically we do the following: we start with splits entries in the sample and mark the ones which take place within 24 months prior to firing. Later, we move these splits into the subsequent firing years (together with respective cumulative abnormal returns). The rest of the splits are left unchanged. There are 102 such replacements in total.

Thus we think we can capture the aggregate short and long term effects of stock splits on CEO replacements.

The results of these corrections are provided in Table 6, where the dependent variable Firings_24 stands for the CEO replacement within two years of stock split announcement. The coefficient of stock splits is completely different from the results presented in Table 5, now it is positive and significant. Thus the long run effect of stock splits seems to lead to more CEO firings. As already discussed short term effects of stock splits on CEO turnover proved to be negative, probably implying that stock splits are not solely the means of transmitting information, but its primary goal is to decrease previously inflated stock prices to the efficient range; but on the other hand, once the CEO announces stock splits, the situation of being in the center of attention lingers around for a longer term. So we could think that managers face higher probability of replacement in the long run when they address to more attention attracting actions compared to the ones who do not do anything, ceteris paribus.

Cumulative abnormal returns following stock splits decreases significantly in magnitude and in significance as well, though the sign remains the same – more abnormal returns following stock splits lead to less firings of CEOs even in the long run. The effect of the rest of the variables does not change much either in sign or magnitude.

[Insert Table 6 about Here]

As additional checks of the results we restrict sample to CEO age <63 in the regressions of Table 5 in order to remove the bias of retirement from CEO turnover. The results are provided in table 7. The signs of the estimates are mostly the same or similar to the ones from the previous analysis, though magnitudes and significance are slightly smaller. Thus, including retired CEOs in

the sample in the same category as forcefully removed ones overestimate our results by meaningless amount.

[Insert Table 7 about Here]

Another issue which we want to address in this section is the composition of CEO variable compensation. A big number of researchers agree that stock and stock option ownerships present the biggest performance incentives in CEO pay contracts compared to the other parts of compensation. Murphy (1999) claims that "pay-performance sensitivities are driven primarily by stock options and stock ownership and not through other forms of compensation". So it seems interesting to check the results using the components of variable compensation separately. Table 8 presents aggregate results of the two hypotheses with all three components – bonuses, stocks and stock options - of variable compensation included separately in the regressions. It is clear from our sample that the major driver of CEO incentives is incorporated in bonuses and stock options and not in stock holdings. As for the contribution to CEOs' immunity from getting fired, here the major role belongs to bonuses and stocks i.e. having more bonuses and stocks tend to lessen the probability of CEOs getting fired. Basically, stock holdings represent CEOs' ownership in the firm, so it is not surprising that CEOs' probability of getting fired decreases with ownership.

[Insert Table 8 about Here]

An interesting check could be dividing our sample in two subsamples and testing hypotheses separately as already mentioned earlier, since we clearly see on figure 3 that stock splits have been very frequent before 2000 during so called boom market and relatively infrequent in the period of decline afterwards. So we separate the sample in 1992-2000 and 2001-2008 subsamples. The

results of hypothesis 1 are provided in Table 9. What we see is that, indeed the effect of CEO incentives has been more powerful in 1992-2000 where most of the splits were happening.

[Insert Table 9 about Here]

On the other hand, the effect of stock splits on CEO firings has been stronger in the second period. Probably boards have become more conservative with worsening market conditions (See Table 10).

[Insert Table 10 about Here]

Table 11 presents the effects of CEO compensation components in both subsamples. As it seems, options played much bigger role in providing cheap talk incentives to CEOs in the first period compared to the later one, which is very much intuitive, since before 2000 almost two thirds of CEO compensation comprised of stock options.

[Insert Table 11 about Here]

An interesting robustness check would be to test the theory on alterative measures of cheap talk like stock dividends, also used by Grinblatt et al. (1984). We were able to identify 561 stock dividend announcements of the firms present in our data, out of which only 230 firm-year entries were suitable for the existing sample (due to missing years on some firms). Data on stock dividend announcements comes from CRSP database. We also calculate cumulative abnormal returns around stock dividend announcement months. We run regressions similar to the ones present in Tables 4 and 5. The results are provided in Table 12. The first two regressions represent the testing

of hypothesis 1 and the remaining two - of hypothesis 2. As can be seen variable compensation positively affects the probability of stock dividend announcements, though the estimate is insignificant. Stock dividend announcements are also insignificant in the other two regressions, though the signs of coefficients are in line with intuition. The insignificance is probably due to the fact that stock dividends have not been as popular recently as stock splits also mentioned by Lakonishok and Lev (1987). Thus lack of information prevents us from getting reliable results.

[Insert Table 12 about Here]

5. SUMMARY AND CONCLUSIONS

The problem that the interests of CEOs and shareholders do not often coincide has long been researched in agency theory literature. Different measures have been suggested to alleviate such a problem. The main one is to achieve an alignment of interests between managers and shareholders by linking CEOs' compensation to market returns (e.g. offering managers a proportion of their compensation in stock-related instruments like shares or stock options).

Remarkably, managers can affect, at least in the short term, market performance by transferring relevant firm information to stock markets. So shareholders should take into consideration the effect of information disclosure in their design of managerial compensation packages.

This paper addresses this issue and studies whether the design of CEO compensation contracts affects the transfer of unverifiable firm-specific information to the markets in order to attract attention of analysts. These analysts will in turn monitor the firm and produce new information that eventually will increase firm value, at least in the short term. In order to trigger this process managers have to receive motivating contracts (i.e. contracts with a significant proportion of variable compensation), otherwise it might be too costly for them to attract investors' attention that increases the pressure from stock markets. More specifically, managers whose compensation

packages are related in a significant proportion to stock market performance will have more incentives to attract investors' attention by implementing cheap talk initiatives like stock splits. The result we find is that 10 % increase in CEO variable compensation increases the probability of stock split announcements by 4 %.

However, for cheap talk to be effective and attract investors' attention it must have some cost for the manager, such that the CEO engaging in cheap talk is expected to be penalized more if his action is not followed by favorable market reaction. In order to test accurately such contention we have distinguished between stock split announcements that have generated positive abnormal returns from those that have not. Once we use CEO firings as proxy for managerial punishment we find out that 10 % more abnormal returns following splits decrease the probability of CEO replacement by almost 10 % and vice versa for negative abnormal returns. Besides, we were also able to identify positive long run effects of stock split announcements on the probability of CEO firings.

An additional result is that, contrary to some findings that pay-performance sensitivities of CEOs are mainly driven by the shares of stocks and stock options in their compensation packages, this statement is only partly true. After dividing CEO variable compensation into its parts our results suggest that mostly bonuses and then options, not stocks themselves, determine incentives of CEOs to voluntarily disclose information.

Finally, an interesting topic for future research could be to explore the connection between implicit and explicit managerial incentives and firm's disclosure policies in general and not focusing on the use of soft information. Also, modeling the design of optimal managerial compensation packages for desired levels of disclosure by taking into account the specific characteristics of firms could be an interesting topic to be considered.

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Figure 1. Composition of CEO Variable Compensation
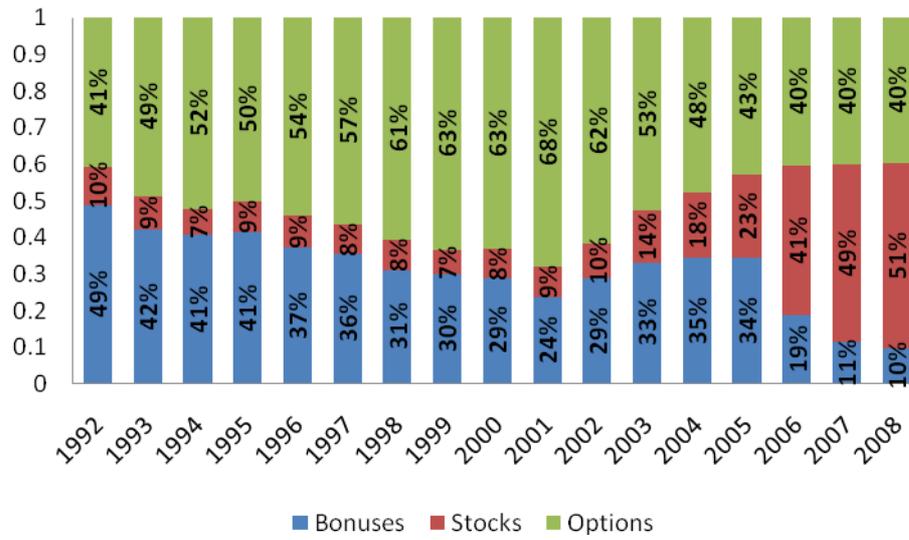
Figure 2. Splits, Firings and Variable Compensation in 1992-2008
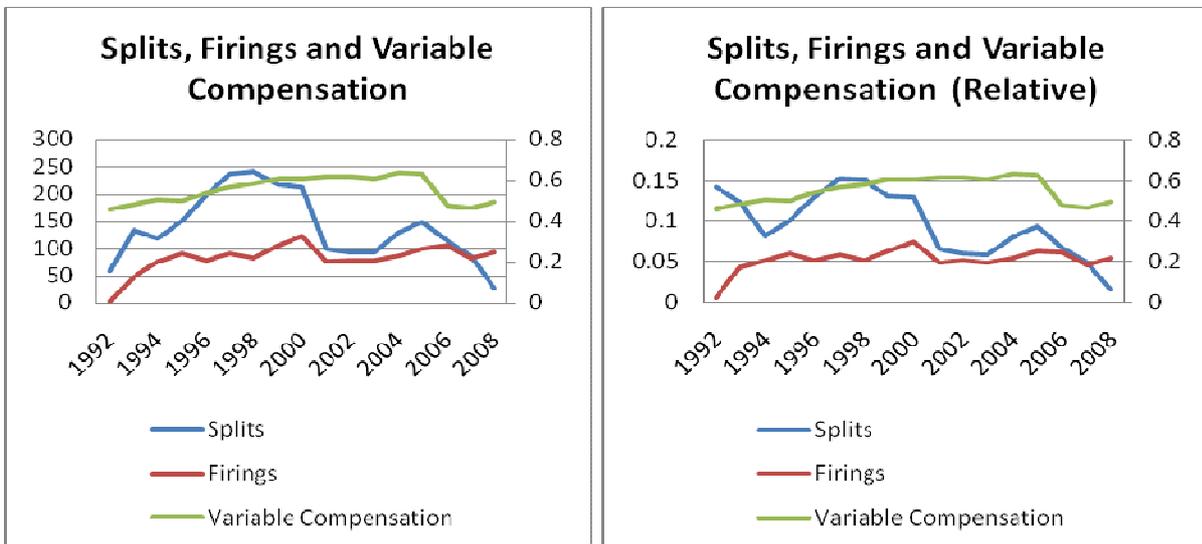
Figure 3. Mean Annul CARs, Splits and Market Returns in 1992-2008
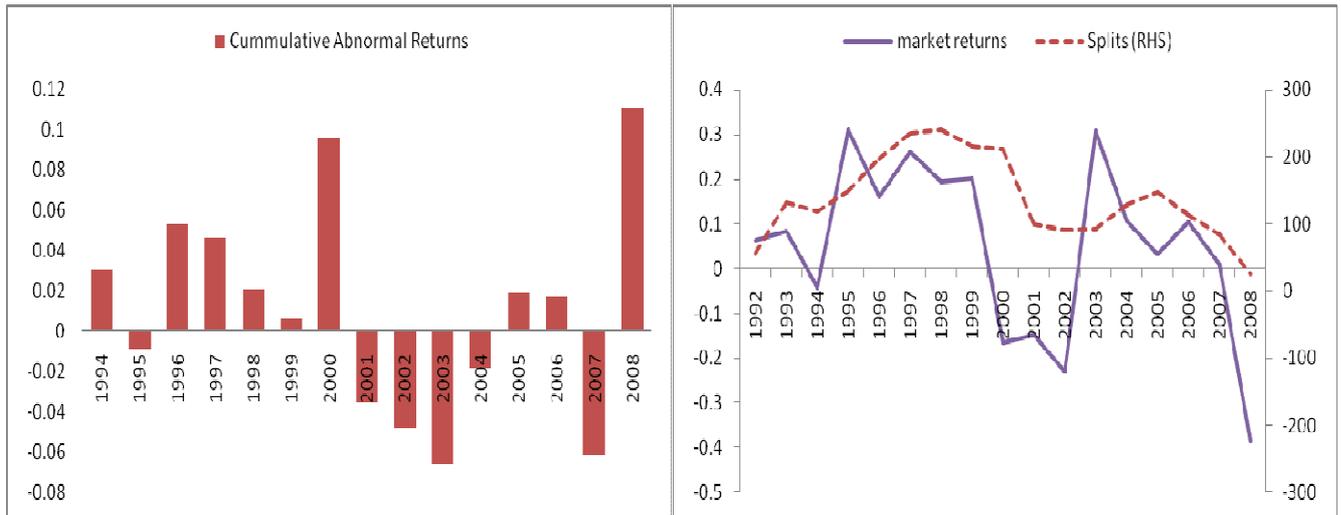
Table 1. Summary Statistics

Variables	Max	Min	Mean	25-th Percentile	50-th Percentile	75-th percentile	St. Dev.	Missing Values
Leverage	1000	0	85	13	51	107	116	1034
Market-to-Book	99	0	3	1	2	4	5	8232
Assets	2187631	0.5	11134	476	1431	5196	58877	43
Stock Return Volatility	0.08	0.01	0.04	0.02	0.02	0.03	0.02	4565
Analyst Ups	235	0	21	5	13	27	24	10168
Analyst Downs	229	0	21	5	13	28	25	10414
Industry Adjusted Returns	52	-55	1	-1	0.58	2.53	4.5	4577
Stock Split Ann.	1	0	0.09	0	0	0	0.29	0
Variable Compensation	1	0	0.56	0.38	0.61	0.78	0.28	64
Bonuses	1	0	0.17	0	0.13	0.26	0.18	63
Stocks	1	0	0.10	0	0	0.12	0.18	63
Stock Options	1	0	0.30	0	0.25	0.50	0.28	63
CEO Age	92	25	55	50	56	60	8	67
CEO Tenure	57	0	7	2	5	10	7	240
CEO Firings	1	0	0	0	0	0	0	0
CAR	1.06	-0.71	0.01	-0.13	0.03	0.15	0.23	0

Table 2. Comparative Statistics

Panel A of the table reports statistical characteristics of firms and their CEOs in the years of stock split announcements vs. to the rest of the years the firm is present in the sample. Panel B represents the same characteristics only in the years when the CEOs were fired vs. the years of no firings.

Panel A. Stock Split Announcements	Announcing Years (No. Obs.=2 341)		Non-Announcing Years (No. Obs.=22 858)	
	Mean	Median	Mean	Median
Leverage (t-1)	73.3	38.2	86.7	52.9
Market-to-Book (t-1)	5.1	3.1	3.2	2.2
Log Assets (t-1)	7.36	7.22	7.43	7.27
Stock Return Volatility (t-1)	0.05	0.02	0.05	0.02
Analyst Following (t-1)	11.4	9.0	10.5	9.0
Industry Adjusted Returns (t-1)	0.44	0.32	0.11	0.05
Variable Compensation (t-1)	0.61	0.65	0.55	0.60
Bonuses (t-1)	0.21	0.18	0.16	0.13
Stocks (t-1)	0.08	0	0.10	0
Options (t-1)	0.32	0.28	0.29	0.25
CEO Age	55	55	55	56
CEO Tenure	7.7	6.0	6.8	4.0
CEO Firings	0.03	0	0.06	0

Panel B. CEO Firings	Firing Years (No. Obs.=1 378)		Non-Firing Years (No. Obs.=23 821)	
	Mean	Median	Mean	Median
Leverage (t-1)	82.8	50.0	85.6	51.6
Market-to-Book (t-1)	3.3	2.1	3.4	2.2
Log Assets (t-1)	7.38	7.023	7.42	7.27
Stock Return Volatility (t-1)	0.03	0.02	0.05	0.02
Analyst Following (t-1)	10.7	9.0	10.6	9.0
Industry Adjusted Returns (t-1)	0.07	0.01	0.14	0.08
Variable Compensation (t-1)	0.53	0.59	0.56	0.61
Bonuses (t-1)	0.15	0.11	0.17	0.13
Stocks (t-1)	0.09	0	0.10	0
Options (t-1)	0.29	0.24	0.30	0.25
CEO Age	58	59	55	55
CEO Tenure	6.9	5.0	6.8	5.0
Stock Split Announcements	0.06	0	0.10	0

Table 3. CEO Variable Compensation and Stock Split Announcements

The table reports estimation results for hypothesis 1. Dependent variable represents stock split announcements. All independent variables are one year lagged values except for CEO Age and CEO Tenure. The last equation represents Odds Ratios for Equation (3) estimates to make them easily interpretable. In Particular, ORs measure the proportional drop/increase in the odds of split announcement (value equal to 1) for a unit change in independent variable. All estimates are interpreted relative to one i.e. the relationship between dependent and independent variables are negative if ORs<1, positive if ORs>1 and no relationship if ORs=1. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

Splits	(1)	(2)	(3)	Odds
Variable Compensation (t-1)	**0.678**** (7.79)	**0.696**** (7.58)	**0.340**** (2.59)	**1.405**** (2.59)
Age	-	-	-0.012** (-2.56)	0.988** (-2.56)
Tenure	-	-	0.030** (6.33)	1.030** (6.33)
Leverage (t-1)	-	-	-0.002** (-4.52)	0.998** (-4.52)
Market-To-Book (t-1)	-	-	0.060** (8.02)	1.062** (8.02)
Log Assets (t-1)	-	-	0.066** (2.85)	1.069** (2.85)
Industry Adjusted Returns (t-1)	-	-	0.065** (10.30)	1.067** (10.30)
Volatility (t-1)	-	-	0.066* (1.71)	1.068* (1.71)
Industry Dummies	NO	YES	YES	YES
Year Dummies	NO	YES	YES	YES
No. Obs	25134	25134	14242	14242

Table 4. Cheap Talk and Analyst Following

The table reports estimation results using analyst following (as change (up or down) in the number of EPS estimates issued by analysts) as dependent variable. All independent variables with sign (t-1) represent one year lagged values. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10%(*),respectively.

Analyst Estimate Changes	UPS (1)	UPS (2)	DOWNS (3)	DOWNS (4)
Splits	8.89** (18.96)	9.64** (15.46)	-12.44** (-22.19)	-10.41** (-14.04)
Splits (t-1)	1.49** (3.18)	1.34** (2.18)	-1.35** (-2.43)	-0.63 (-0.87)
Industry Adjusted Returns (t-1)	-	0.25** (6.07)	-	-0.56** (-11.31)
Leverage (t-1)	-	-0.01** (-3.90)	-	-0.01** (-3.08)
Market-To-Book (t-1)	-	0.08 (1.10)	-	0.49** (5.85)
Log Assets (t-1)	-	1.14** (4.67)	-	2.51** (8.58)
Volatility (t-1)	-	-0.69** (-2.47)		0.29 (0.86)
Fixed Effects	YES	YES	YES	YES
No. Obs	15031	9638	14785	9486

Table 5. The Effect of Split Announcements on CEO Turnover

The table reports estimation results for hypothesis 2. Dependent variable represents CEO Firings. All independent variables with sign (t-1) represent one year lagged values. The table provides gradual inclusion of independent variables to check the sensitivity of CARs. The last equation represents Odds Ratios for Equation (10) estimates to make them easily interpretable. In Particular, ORs measure the proportional drop/increase in the odds of split announcement (value equal to 1) for a unit change in independent variable. All estimates are interpreted relative to one i.e. the relationship between dependent and independent variables are negative if ORs<1, positive if ORs>1 and no relationship if ORs=1. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

CEO Firings	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Odds
Splits	-0.609**	-0.638**	-0.615**	-0.615**	-0.612**	-0.633**	-0.636**	-0.635**	-0.615**	-0.560**	0.549**
	(-4.95)	(-5.15)	(-4.96)	(-4.29)	(-4.22)	(-3.39)	(-3.40)	(-3.35)	(-3.19)	(-3.12)	(-3.12)
CARs	**-2.853****	**-2.678****	**-2.673****	**-3.017****	**-2.967****	**-2.564****	**-2.583****	**-2.815****	**-3.014****	**-3.043****	**0.048****
	(-2.99)	**(-2.89)**	**(-2.87)**	**(-3.11)**	**(-3.05)**	**(-2.25)**	**(-2.25)**	**(-2.42)**	**(-2.47)**	**(-2.50)**	**(-2.50)**
Variable Compensation (t-1)	-	-	-0.365**	-0.425**	-0.433**	-0.489**	-0.554**	-0.544**	-0.363**	-0.361**	0.697**
			(-3.61)	(-3.66)	(-3.64)	(-3.52)	(-3.86)	(-3.75)	(-2.35)	(-2.34)	(-2.34)
Industry Adjusted Returns (t-1)	-	-	-	-0.023**	-0.022**	-0.030**	-0.030**	-0.033**	-0.033**	-0.033**	0.967**
				(-2.95)	(-2.83)	(-3.19)	(-3.15)	(-3.36)	(-3.28)	(-3.29)	(-3.29)
Leverage (t-1)	-	-	-	-	-0.001**	-0.001	-0.001*	-0.001**	-0.001**	-0.001**	0.999**
					(-1.95)	(-1.44)	(-1.88)	(-1.97)	(-1.99)	(-2.01)	(-2.01)
Market-To-Book (t-1)	-	-	-	-	-	0.009	0.010	0.007	0.010	0.010	1.010
						(0.05)	(0.99)	(0.53)	(0.76)	(0.78)	(0.78)
Log Assets (t-1)	-	-	-	-	-	-	0.047*	0.047*	0.033	0.029	1.029
							(1.73)	(1.72)	(1.12)	(0.98)	(0.98)
Volatility (t-1)	-	-	-	-	-	-	-	-0.306	-0.189	-0.189	0.827
								(-0.44)	(-0.40)	(-0.41)	(-0.41)
Volatility *Splits (t-1)	-	-	-	-	-	-	-	-1.747	-0.905	-0.749	0.472
								(-0.40)	(-0.20)	(-0.17)	(-0.17)
AGE	-	-	-	-	-	-	-	-	0.061**	0.066**	1.068**
									(10.38)	(10.56)	(10.56)
Tenure	-	-	-	-	-	-	-	-	-	-0.012**	0.988**
										(-2.03)	(-2.03)
Industry Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Obs	25199	25199	25109	20573	19957	14589	14589	14364	14325	14242	14242

Table 6. Long Run Effects of Split Announcements on CEO Turnover

The table reports estimation results for hypothesis 2. Dependent variable represents CEO Firings taking place within 24 months after stock split announcements. All independent variables with sign (t-1) represent one year lagged values. The table provides gradual inclusion of independent variables to check the sensitivity of CARs. The last equation represents Odds Ratios for Equation (11) estimates to make them easily interpretable. In Particular, ORs measure the proportional drop/increase in the odds of split announcement (value equal to 1) for a unit change in independent variable. All estimates are interpreted relative to one i.e. the relationship between dependent and independent variables are negative if ORs<1, positive if ORs>1 and no relationship if ORs=1. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(*) and 10 %(**), respectively.

CEO Firings_24	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Odds
Splits	0.381**	0.370**	0.389**	0.456**	0.479**	0.580**	0.578**	0.602**	0.647**	0.656**	1.927**
	(4.48)	(4.28)	(4.47)	(4.60)	(4.79)	(4.69)	(-4.67)	(4.84)	(5.02)	(5.10)	(5.10)
CARs	-1.202	-1.178* (	-1.161	-1.297*	-1.229	-1.350	-1.138	-1.481*	-1.646*	-1.683*	0.186*
	(-1.64)	-1.68)	(-1.64)	(-1.74)	(-1.64)	(-1.64)	(-1.64)	(-1.77)	(-1.87)	(-1.92)	(-1.92)
Variable Compensation (t-1)	-	-	-0.419**	-0.469**	-0.483**	-0.524**	-0.585**	-0.572**	-0.396**	-0.395**	0.674**
			(-4.13)	(-4.02)	(-4.04)	(-3.75)	(-4.05)	(-3.92)	(-2.55)	(-2.54)	(-2.54)
Industry Adjusted Returns (t-1)	-	-	-	-0.032**	-0.032**	-0.038**	-0.038**	-0.040**	-0.041**	-0.042**	0.959**
				(-4.12)	(-4.07)	(-4.10)	(-4.07)	(-4.21)	(-4.09)	(-4.11)	(-4.11)
Leverage (t-1)	-	-	-	-	-0.001*	-0.001	-0.001	-0.001*	-0.001*	-0.001*	0.999*
					(-1.71)	(-1.15)	(-1.58)	(-1.68)	(-1.69)	(-1.71)	(-1.71)
Market-To-Book (t-1)	-	-	-	-	-	0.001	0.002	-0.003	0.001	0.010	1.001
						(0.06)	(0.19)	(0.19)	(0.05)	(0.07)	(0.07)
Log Assets (t-1)	-	-	-	-	-	-	0.045	0.044**	0.030	0.025	1.025
							(1.64)	(1.61)	(1.00)	(0.84)	(0.84)
Volatility (t-1)	-	-	-	-	-	-	-	-0.326	-0.195	-0.194	0.824
								(-0.45)	(-0.42)	(-0.42)	(-0.42)
Volatility *Splits (t-1)	-	-	-	-	-	-	-	-3.054	-2.224	-2.010	0.134
								(-0.69)	(-0.49)	(-0.44)	(-0.44)
AGE	-	-	-	-	-	-	-	-	0.062**	0.067**	1.070**
									(10.41)	(10.73)	(10.73)
Tenure	-	-	-	-	-	-	-	-	-	-0.014**	0.987**
										(-2.36)	(-2.36)
Industry Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Obs	25199	25199	25134	20573	19957	14589	14589	14364	14325	14242	14242

Table 7. CEO Turnover with Age Correction

The table reports estimation results of robustness check of CEO retirement i.e. CEO Age variable is censored at 63 and more years. Dependent variable represents CEO Firings. All independent variables with sign (t-1) represent one year lagged values. The second equation represents Odds Ratios for Equation (1) estimates to make them easily interpretable. In Particular, ORs measure the proportional drop/increase in the odds of split announcement (value equal to 1) for a unit change in independent variable. All estimates are interpreted relative to one i.e. the relationship between dependent and independent variables are negative if ORs<1, positive if ORs>1 and no relationship if ORs=1. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

CEO Firings	(1)	Odds
Splits	-0.606** (-2.58)	0.546** (-2.58)
CARs	**-2.648*** (**-1.87**)	**0.071*** (**-1.87**)
Variable Compensation (t-1)	-0.378** (-2.05)	0.685** (-2.05)
Industry Adjusted Returns (t-1)	-0.034** (-2.63)	0.967** (-2.63)
Leverage (t-1)	-0.001 (-1.56)	0.999 (-1.56)
Market-To-Book (t-1)	-0.003 (-0.17)	0.997 (-0.17)
Log Assets (t-1)	-0.014 (-0.39)	0.987 (-0.39)
Volatility (t-1)	-0.157 (-0.37)	0.855 (-0.37)
Volatility*Splits (t-1)	-1.272 (-0.24)	0.280 (-0.24)
AGE	0.036** (3.88)	1.036** (3.88)
Tenure	-0.004 (-0.43)	0.996 (-0.43)
Industry Dummies	YES	YES
Year Dummies	YES	YES
No. Obs	12040	12040

Table 8. The Effect of CEO Variable Compensation Components

The table reports estimation results of testing the two hypotheses for breakdown of CEO variable compensation. Dependent variables represent stock split announcements and CEO firings, as indicated. All independent variables with sign (t-1) represent one year lagged values. The second and last equations represent Odds Ratios for Equations (1) and (3) respectively to make estimates easily interpretable. In Particular, ORs measure the proportional drop/increase in the odds of split announcement (value equal to 1) for a unit change in independent variable. All estimates are interpreted relative to one i.e. the relationship between dependent and independent variables are negative if ORs<1, positive if ORs>1 and no relationship if ORs=1. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

Variables	Splits (1)	Odds (2)	Firings (3)	Odds (4)
Splits	-	-	-0.595** (-3.09)	0.552** (-3.09)
CARs	-	-	-3.008** (-2.49)	0.049** (-2.49)
Bonuses (t-1)	**0.997**** **(4.77)**	**2.710**** **(4.77)**	**-0.923**** **(-3.30)**	**0.397**** **(-3.30)**
Stocks (t-1)	**0.010** **(0.05)**	**1.010** **(0.05)**	**-0.518**** **(-2.11)**	**0.596**** **(-2.11)**
Options (t-1)	**0.329**** **(2.36)**	**1.389**** **(2.36)**	**-0.191** **(-1.15)**	**0.826** **(-1.15)**
Industry Adjusted Returns (t-1)	0.062** (9.75)	1.063* * (9.75)	-0.030** (-2.92)	0.970** (-2.92)
Leverage (t-1)	-0.002** (-4.54)	0.998** (-4.54)	-0.001** (-1.96)	0.999** (-1.96)
Market-To-Book (t-1)	0.060** (8.09)	1.062** (8.09)	0.008 (0.63)	1.008 (0.63)
Log Assets (t-1)	0.070** (3.02)	1.073** (3.02)	0.032 (1.09)	1.032 (1.09)
Volatility (t-1)	0.066** (1.71)	1.068* (1.71)	-0.220 (-0.41)	0.802 (-0.41)
Volatility *Splits (t-1)	-	-	-0.748 (-0.17)	-0.473 (-0.17)
AGE	-0.014** (-2.76)	0.987** (-2.76)	0.067** (10.69)	1.069** (10.69)
Tenure	0.028** (6.10)	1.029** (6.10)	-0.011** (-1.95)	0.989** (-1.95)
Industry Dummies	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES
No. Obs	14241	14241	14241	14241

Table 9. Stock Split Announcements in Two Sample Periods

The table reports estimation results for hypothesis 1, where the sample is divided into two subsamples 1992-200 and 2001-2008 respectively. Dependent variable represents stock split announcements. All independent variables with sign (t-1) represent one year lagged values. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

Splits	1992-2000			2001-2008		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable Compensation (t-1)	0.906** (7.72)	0.821** (6.99)	0.615** (2.94)	0.755** (4.89)	0.449** (2.82)	0.186 (1.02)
Age	-	-	-0.028** (-3.69)	-	-	-0.001 (-0.20)
Tenure	-	-	0.037** (4.98)	-	-	0.025** (3.66)
Leverage (t-1)	-	-	-0.002** (-3.15)	-	-	-0.002** (-3.28)
Market-To-Book (t-1)	-	-	0.076** (6.51)	-	-	0.054** (4.77)
Log Assets (t-1)	-	-	0.065* (1.84)	-	-	0.060* (1.70)
Industry Adjusted Returns (t-1)	-	-	0.045** (4.62)	-	-	0.075** (8.43)
Volatility (t-1)	-	-	-0.162 (-0.40)	-	-	0.073* (1.76)
Industry Dummies	NO	YES	YES	NO	YES	YES
Year Dummies	NO	YES	YES	NO	YES	YES
No. Obs	12327	12327	3498	12806	12791	10730

Table 10 . CEO Turnover in Two Sample Periods

The table reports estimation results for hypothesis 2, where the sample is divided into two subsamples 1992-200 and 2001-2008 respectively. Dependent variable represents CEO Firings. All independent variables with sign (t-1) represent one year lagged values. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

CEO Firings	1992-2000			2001-2008		
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Splits	-0.715**	-0.735**	-0.558**	-0.453**	-0.462**	-0.522**
	(-4.59)	(-4.70)	(-2.27)	(-2.24)	(-2.28)	(-2.11)
CARs	**-2.867****	**-2.572****	**-1.492**	**-2.740***	**-2.742***	**-3.806****
	(-2.37)	**(-2.23)**	**(-1.07)**	**(-1.76)**	**(-1.76)**	**(-2.18)**
Industry Adjusted Returns (t-1)	-	-	-	-	-	-0.038**
						(-3.06)
Variable Compensation (t-1)	-	-	-0.460*	-	-	-0.328*
			(-1.82)			(-1.81)
Leverage (t-1)	-	-	0.000	-	-	-0.001
			(0.06)			(-1.40)
Market-To-Book (t-1)	-	-	0.017	-	-	-0.022
			(1.61)			(-1.08)
Log Assets (t-1)	-	-	0.056	-	-	0.004
			(1.22)			(0.10)
Volatility (t-1)	-	-	-	-	-	-0.166
						(-0.37)
Volatility *Splits (t-1)	-	-	-	-	-	-2.720
						(-0.46)
AGE	-	-	0.053**	-	-	0.067**
			(5.62)			(8.94)
Tenure	-	-	-0.015*	-	-	-0.011
			(-1.65)			(-1.59)
Industry Dummies	NO	YES	YES	NO	YES	YES
Year Dummies	NO	YES	YES	NO	YES	YES
No. Obs	12324	12324	3717	12810	12810	10525

Table 11 . Composition of CEO Compensation in Two Sample Periods

The table reports estimation results of testing the two hypotheses for breakdown of CEO variable compensation, where the sample is divided into two subsamples 1992-200 and 2001-2008 respectively. Dependent variables represent stock split announcements and CEO firings, as indicated. All independent variables with sign (t-1) represent one year lagged values. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

Variables	1992-2000		2001-2008	
	Splits (1)	Firings (2)	Splits (3)	Firings (4)
Splits	-	-0.561** (-2.29)	-	-0.509** (-2.05)
CARs	-	-1.514 (-1.10)	-	-3.781** (-2.15)
Bonuses (t-1)	**0.491 (1.38)**	**-1.266** (2.66)**	**1.232** (4.41)**	**-0.810** (-2.49)**
Stocks (t-1)	**0.367 (1.13)**	**-0.348 (-0.80)**	**-0.332 (-1.12)**	**-0.605** (-2.13)**
Options (t-1)	**0.685** (3.13)**	**-0.333 (-1.26)**	**0.143 (0.72)**	**-0.134 (-0.68)**
Industry Adjusted Returns (t-1)	0.044** (4.52)	-	0.070** (7.85)	-0.034** (-2.71)
Leverage (t-1)	-0.002** (-3.12)	0.000 (-0.01)	-0.002** (-3.27)	-0.001 (-1.26)
Market-To-Book (t-1)	0.075** (6.37)	0.016 (1.54)	0.054** (4.81)	-0.024 (-1.20)
Log Assets (t-1)	0.068* (1.93)	0.061 (1.32)	0.066* (1.85)	0.005 (0.13)
Volatility (t-1)	-0.176 (-0.43)	-	0.072* (1.75)	-0.183 (-0.37)
Volatility *Splits (t-1)	-	-	-	-2.641 (-0.44)
AGE	-0.026** (-3.30)	0.054** (5.85)	-0.003 (-0.47)	0.067** (9.03)
Tenure	0.036** (4.87)	-0.014 (-1.58)	0.023** (3.39)	-0.011 (-1.58)
Industry Dummies	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES
No. Obs	3717	4511	10524	10524

Table 12. Stock Dividends As Cheap Talk

The table reports estimation results of testing the two hypotheses where an alternative proxy for cheap talk – *Stock Dividends* - is used instead of Stock Split Announcements. Dependent variables represent Stock Dividends and CEO firings, as indicated. All independent variables with sign (t-1) represent one year lagged values. T statistics are provided in parentheses. Stars indicate significance at levels 5 %(**) and 10 %(*), respectively.

Variables	Dividends (1)	Dividends (2)	Firings (3)	Firings (4)
Stock Dividends	-	-	-0.583 (-1.47)	-0.748 (-1.30)
CARs	-	-	2.579 (0.23)	-2.677 (-0.23)
Variable Compensation (t-1)	0.433 (1.19)	0.624 (1.35)	-	0.377** (-2.45)
Industry Adjusted Returns (t-1)	-	-0.012 (-0.48)	-	-0.036** (-3.58)
Leverage (t-1)	-	0.001 (0.74)	-	-0.001* (-1.93)
Market-To-Book (t-1)	-	-	-	0.007 (0.57)
Log Assets (t-1)	-	-	-	0.026 (0.90)
Volatility (t-1)	-	-	-	-0.194 (-0.41)
Volatility *Splits (t-1)	-	-	-	-0.756 (-0.18)
AGE	-	-	-	0.067** (10.70)
Tenure	-	0.038** (2.08)	-	-0.013** (-2.20)
Industry Dummies	NO	YES	NO	YES
Year Dummies	NO	YES	NO	YES
No. Obs	25134	19808	25199	14242