

Accelerated Vesting of Employee Stock Options in Anticipation of FAS 123-R

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Abstract:

The Financial Accounting Standards Board (FASB) recently mandated the expensing of the fair value of employee stock options (ESOs) via FAS 123-R. In anticipation of FAS 123-R, between March 2004 and November 2005, several firms accelerated the vesting of ESOs to avoid recognizing a fair value based ESO expense in future financial statements. We find that the likelihood of accelerated vesting is higher if (i) firms can save more of future ESO compensation expense, especially related to underwater options; and (ii) firms suffer greater agency problems, proxied by fewer block-holders, lower pension fund ownership and top five officers holding a greater share of ESOs. We also find a negative stock price reaction around the announcement of the acceleration decision, especially for firms with greater agency problems.

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Accelerated Vesting of Stock Options in Anticipation of FAS 123-R

1. Introduction

In March 31, 2004, the Financial Accounting Standards Board (FASB) issued an exposure draft FAS 123-R followed by a formal standard on December 12, 2004 that requires firms to expense the fair value of employee stock options (ESOs) in fiscal periods ending after June 15, 2005. Public firms were required to apply such new accounting rules to (i) all ESO awards granted after June 15, 2005; and (ii) for ESO awards granted after 1994 but not vested as of June 15, 2005. Subsequent to the issuance of exposure draft, several firms accelerated the vesting of unvested ESOs with an apparent intention to avoid recognizing an expense for these unvested options.¹ This voluntary decision by firms to accelerate the option vesting period presents a natural setting to examine two research questions. First, we investigate why some firms structure transactions in response to an accounting standard while others do not. In other words, we examine the characteristics that describe firms that accelerate the vesting of options prior to the effective date of FAS 123-R. While, at first blush, it appears that the decision to accelerate is driven primarily by financial reporting benefits, firms argue that there are other optimal economic reasons to accelerate the option vesting. For example, a firm might accelerate the vesting to (i) hasten the inflow of cash from option exercise if the firm is liquidity constrained; or (ii) retain employees and improve employee morale. The second question we ask is how does the stock market perceive managers' attempts to structure transactions (in our setting, what is the market response to the acceleration decision?).

To answer these questions, we collect a sample of 355 firms that announced the accelerated vesting of options from March 2004 to November 2005 and a set of 665 control firms to identify systematic factors associated with the firms' decision to accelerate vesting of options. Our empirical tests indicate that the accounting motivation is a significant factor behind the acceleration of ESO vesting. That is, firms that "save" a greater magnitude of stock option expense to be recognized in the future are more likely to accelerate. Moreover, the firms with significant proportion of underwater options are more

¹ The SEC postponed the implementation date of FAS 123-R by six months for calendar year companies. However, this postponement will not affect firms whose fiscal year ends after June 15th. Our sample ends with accelerated vesting announcements as of November 18, 2005 to allow enough time for data gathering and analysis.

likely to accelerate because they reap considerably more financial reporting benefits. This is because firms are required to expense the intrinsic value of accelerated options immediately at the time of acceleration; and unlike in-the-money options, underwater options have no intrinsic value and hence, do not incur any immediate financial statement impact. We also find that accelerators are less likely to be firms that voluntarily expense the fair value of options as they already incur the “cost” of recognizing option expense in their books. Although such voluntary expensers will enjoy the same reporting *benefit* of reduced future expenses through acceleration, they will incur the additional *cost* of recording an immediate increase in the reported option expense for the accelerated options. Finally, we find that firms active in the equity markets or with greater stakeholder claims are more likely to accelerate because such firms are more likely to be interested in managing financial reporting perceptions with investors and stakeholders such as customers, suppliers and employees.

We do not find much empirical support for the economic arguments that (i) cash constrained firms will accelerate vesting to reap cash inflows on the exercise of the option; and (ii) firms whose stocks have under-performed relative to their industry are more likely to accelerate vesting to boost employee morale and prevent employee flight to industry competitors.

Turning to agency motivations, we find that firms with significant managerial ownership and where the top five executives hold a greater proportion of options are more likely to accelerate vesting. This is consistent with recent claims (e.g., Jensen, Murphy and Wruck 2004) that equity incentives induce managers to increase stock prices in the short run through financial reporting choices. Conversely, firms whose shareholder base consists of more block holder ownership and public pension fund ownership are less likely to accelerate vesting, consistent with the hypothesis that boards of firms with better governance structures are less likely to approve of such changes in compensation contracts mostly to avoid a charge to future accounting earnings. For example, consultants such as the Corporate Library, who advise institutions on how to vote on proxy proposals, have criticized accelerated vesting of options (The Washington Post, 2005). Moreover, active institutional investors are generally reluctant to allow firms to reset or change the terms of employee stock options (e.g., The Wall Street Journal, 1999).

The above analysis related to the determinants of accelerated vesting suggests that a combination of financial reporting motivations and agency factors drives the acceleration decision. However, it is unclear *ex ante* whether the decision is value-increasing or value-destroying, on average. Boards of several firms state that avoiding a future accounting charge via accelerated vesting is value-increasing.

The following statement is quite typical:

“The Board believes it was in the best interest of the shareholders to accelerate these options, as it will have a positive impact on the earnings of the Company over the previously remaining vested period of approximately 3 years.” (Source: Central Valley Community Bancorp, 8k filed on February 23, 2005).

But, it is plausible that investors may perceive such transaction structuring as managerial intent to deceive and capture economic rents primarily for managers’ private benefit at the expense of shareholders. To investigate this issue, we examine the market reaction to firms’ acceleration decisions. We find that the average market reaction to the decision is -0.98% over the five-day period surrounding the announcement. This negative reaction is more prominent for firms where the top five officers hold a greater proportion of stock options and less so for firms with greater block holder and pension fund ownership. Taken together, the results suggest that acceleration announcements are interpreted more unfavorably by the stock market, especially when top five managers have more options and less unfavorably when firms have better governance structures.

Our paper makes two contributions to the extant literature. First, we provide archival evidence consistent with Graham, Harvey and Rajgopal (2005) and Nelson, Elliott and Tarpley (2002) who find that CFOs are willing to alter real economic transactions (terms of compensation contracts in this paper) purely to manage financial reporting perceptions. We add to a small but growing stream of archival research that offers evidence on such behavior. For example, Imhoff and Thomas (1988) document a substitution from capital to operating leases and non-lease sources of financing following adoption of the lease accounting standard, FAS 13. Lys and Vincent (1995) show that AT&T spent between \$50 million and \$500 million more to gain pooling of-interests accounting in its acquisition of NCR. Mittelstaedt, Nichols and Regeir (1995) report that a significant number of firms cut health care benefits after the

passage of FAS 106 even though the accounting standard only requires an accounting charge of health care costs to reported income without any direct cash flow effects. Carter and Lynch (2003) find that firms strategically time option repricing to avoid reporting a related accounting expense around the FASB's 1998 announcement regarding accounting for repriced options. Finally, Marquardt and Weidman (2005) show that the likelihood of firms issuing contingent convertible bonds, which are often excluded from diluted EPS calculations under FAS 128, is significantly associated with the reduction that would occur in diluted EPS if the bonds were traditionally structured.

Our second contribution is that we provide timely evidence that the stock market is not misled by managers' attempts to structure transactions for achieving favorable financial reporting outcomes. Rather, our data suggest that the stock market penalizes managers who structure transactions to report higher earnings, especially if such managers hold more stock options relative to the average firm, and are thus subject to greater agency problems.

The remainder of the paper is organized as follows. Section 2 discusses the background and hypotheses. Section 3 describes the data and empirical results related to factors associated with the likelihood that a firm will accelerate the vesting of options. Section 4 presents evidence related to our tests relating to abnormal returns at the acceleration announcement. Section 5 summarizes and concludes.

2. Background and Hypotheses

2.1 Background

Until recently, the accounting for stock options was governed by FAS 123 and Accounting Principles Board (APB) Opinion 25. This opinion was issued in 1972, one year before the Black-Scholes (1973) option valuation model was published. APB 25 specifies that the cost of stock option compensation to be expensed in the income statement is based on the intrinsic value of the option (excess of the market price over the exercise price) on the option granting date. Most firms reported no option expense by issuing at-the-money options on the grant date because for such at-the-money options, the intrinsic value at the grant date is zero.

While at-the-money options have zero intrinsic value, they likely have substantial economic values as measured by fair value under either Black-Scholes or binomial models. Hence, the FASB, in October 1995, issued FAS 123 that requires firms to disclose (not recognize) the fair value based Black-Scholes model modified for non-tradability of an employee stock option.² The FASB stopped short of requiring mandatory recognition of the fair value of options in light of vociferous political opposition against expensing stock options.

The Enron scandal in late 2001, and subsequent accounting irregularities unearthed at other companies, caused a widespread perception that excessive stock option grants caused managers to massage accounting numbers and shore up stock prices to lock in gains on their exercisable stock options (e.g., Bartov and Mohanram 2004, Cheng and Warfield 2004; Burns and Kedia 2005, and Bergstresser and Phillipon 2005). In an effort to restore investor confidence, several companies voluntarily decided to expense stock options under FAS 123. Furthermore, in February 2004, the International Accounting Standards Board issued a standard that required companies using international accounting standards to expense stock options in their books. With muted political opposition from Congress and continued support from auditing firms, the General Accounting Office and Federal Reserve Board Chairman Alan Greenspan, the FASB issued FAS 123-R in December 2004.

FAS 123-R requires companies to measure the “fair” value (as opposed to the intrinsic value under APB 25) of options at the grant date using a valuation method such as Black-Scholes (B-S) or a binomial model, and then expense the fair value of the award over the vesting period of the option. FAS 123-R was originally scheduled to be effective for public companies after June 15, 2005. The SEC postponed the implementation date of FAS 123-R on April 14, 2005 stating that firms will have to comply with FAS 123-R beginning with the first interim or annual reporting period of the firms’ first

² Although FAS 123 did not require recognition of option expense, it encouraged firms to recognize as the FASB believed that the preferred treatment was to recognize the option expense in the income statement.

fiscal year beginning on or after June 15, 2005 - i.e., the first quarter of 2006 for most public companies.³ Once a company is subject to FAS 123-R, all stock options to employees that vest or become exercisable after the effective date must be accounted for using the fair value method. Options already vested (even if unexercised) prior to the effective date, are *not* required to be expensed as the services pertaining to those options have already been rendered.

For example, if a calendar year public company granted an option to an employee on December 31, 2003 that vests (i.e., is exercisable) in three equal annual installments, then a third of the award (i.e., the third that is exercisable on December 31, 2006) will have a FAS 123-R expense associated with it in fiscal 2006. However, that company can avoid this expense by accelerating the vesting of the final third of the award to a date before December 31, 2005.

SEC Professional Fellow, Chad Kokenge, stated on December 6, 2004 that firms choosing to accelerate vesting of stock options must not only disclose any and all modifications to outstanding awards but also must provide the reason for accelerating the vesting. We rely on such disclosures to identify 355 firms who accelerated vesting of unvested stock options as of November 18, 2005. While most firms appear to accelerate vesting of underwater options, 65 of our sample firms reported that they accelerated the vesting of some in-the-money options as well.

2.2 Motivations for accelerated vesting

One of the objectives of the paper is to investigate the factors associated with firms' decisions to accelerate the vesting of options prior to the FAS 123-R's effective date. We identify three sets of factors: (i) accounting; (ii) economic; and (iii) agency factors that we hypothesize to influence firms' decisions to accelerate the vesting period. We discuss them in turn, and describe the measurement of variables that we use to proxy for these factors.

³ Consequent to the extension granted by the SEC, calendar-year companies receive a six-month reprieve. However, several technology companies (e.g., Cisco, JDS Uniphase, Sun Microsystems) and other companies with fiscal year-ends in June 30th and July will not benefit from this delayed implementation.

Accounting factors

2.2.1 Extent of underwater options

Under the current accounting rules (i.e., APB 25) firms accelerating the vesting period of options are required to recognize an option expense equal to the intrinsic value of the option at grant date.⁴ In other words, accelerating the vesting period of out-of-the-money options does not result in recognition of option expense under APB 25 because out-of-the-money options have a zero intrinsic value on grant date. However, they have a non-zero Black Scholes value on grant date, which needs to be recognized after FAS 123-R becomes applicable.⁵ In fact, some managers appear outraged that they have to book an expense for underwater options (Washington Post, December 19, 2005). Hence, we hypothesize that the probability that a firm accelerates vesting is greater if the firm has under-water options.

Our empirical proxy for the extent of underwater options is obtained from the *Execucomp* database. Note that the *Execucomp* database contains detailed data on option grants to only the top five officers of the firm.⁶ Therefore, we estimate the extent of underwater options for the entire firm by grossing up the number of options granted to top five executives using the proportion of options granted to these executives relative to that granted to all employees. For firms that were not in *Execucomp* we hand collected option grant data and percentage of options granted from the annual proxy statements. We use the number of options granted to top executives drawn from *Execucomp* to capture the extent of out-of-the-moneyness of the options granted to all employees. We follow Hall and Knox (2004) and compute the percentage of unvested options held by the senior officers that are underwater as of December 2004 (the latest date for which the *Execucomp* database is available). In particular, we assume that the top five executives' options vest over a four-year period and then calculate the proportion of unvested options that are underwater as a percentage of shares outstanding. For example, all options

⁴ If a firm, however, had voluntarily chosen to expense stock options then accelerating the vesting period results in an immediate recognition of the change in the fair value of those options at the time of acceleration.

⁵ Note that the compensation expense that would be recognized post FAS 123-R is based on the fair value at the grant date, not at the effective date of FAS 123-R.

⁶ Note that data on option grants for the year 2004 was not available in the *Execucomp* database for 162 of our treatment firms. For those firms we hand-collect option information from proxy statements.

granted in the year 2004, three-fourth of the options granted in 2003, half of the options granted in 2002, and one-fourth of the options granted in 2001 are considered unvested for an officer of a firm with fiscal year ending in December 31, 2004. To determine whether the granted options are underwater we compare the strike price of the option to the stock price of the firm as of December 31, 2004 (for acceleration firms we use the stock price at the end of the day before acceleration). We then scale the estimate of the total number of underwater options by shares outstanding and label such variable as UNDER%. We expect the probability of accelerating the vesting period to increase with UNDER%.⁷

Note that the hypothesized positive association between accelerated vesting and UNDER% has another interpretation as well. One could argue that accelerating the vesting of underwater options has a positive effect on employee morale and perhaps provide incentives for employees to stay with the firm. To disentangle this morale explanation from a desire to reduce financial reporting expense, we consider another variable that captures the likelihood that managers will make efforts to retain employees in section 2.2.7.

2.2.2 Future expense saved

Most of the accelerating firms cite the magnitude of the future expense avoided as one of the key benefits of accelerating the vesting of options. By accelerating the vesting date, companies will record the unamortized fair value of those options only in the footnote disclosure as per FAS 123 to their financial statements in the period in which options' vesting is accelerated. We predict that the greater the impact of the accelerated vesting on future income, the more likely the firm is to accelerate the vesting of the options. A hypothesis based on a “saving” in financial reporting expense such as this, without an accompanied cash flow effect of much significance, raises the question of why managers undertake actions to cosmetically affect income in efficient capital markets. We offer three possible explanations. First, Graham, Harvey and Rajgopal (2005) find that several CFOs they interviewed believe that stock markets are efficient, *on average*, but that they would rather not take the chance that the market

⁷ Because *Execucomp* contains data from company proxy statements (which follow fiscal years), the entries show the number of options at the end of the company's fiscal year, not calendar year.

inefficiently prices reported income of their firm. Second, recent findings in Sloan (1996) and Xie (2001) question market efficiency with respect to the pricing of earnings' components. For example, Hirshleifer and Teoh (2003) model an equilibrium in which partially attentive investors might care more about recognized rather than disclosed charges to income such as stock option expense. The existence of such investors might create incentives for firms to keep future accounting expenses off the financial statements. Finally, even if the stock market is efficient at unraveling the effects of structuring transactions on reported income, managers might manage reported income to signal to the managerial labor market (see Graham et al. 2005) or to manage the perceptions of other stakeholders such as suppliers, employees and creditors (see Matsumoto 2002) whose views might be affected by reported earnings numbers.

In our sample, 228 out of the 355 accelerating firms report the amount of future stock option expense saved as a result of the acceleration. Of the 228 firms, several report the after tax effect on income. Some firms indicate the before tax impact, and in such instances we multiply the before tax impact by 0.65 (assuming a 35% tax rate) to estimate the after tax effect. For the 127 accelerators who did not disclose the amount of stock option expense saved and for the control firms, we estimate the financial statement effect by assuming that the tax adjusted B-S value of the unvested options represents the future FAS 123-R expense that is avoided. When estimating this financial statement effect, we include the option fair value for both underwater and in-the-money options. However, if an accelerating firm indicated that they accelerated only out of the money options then in such instances we consider the option fair values for only underwater options.⁸

To construct the empirical proxy for the amount of expense saved, we compute the sum of the estimated grant date B-S value of options *unvested* as at the end of fiscal 2004 for each top five executive,

⁸ One might argue that the acceleration phenomenon is a more significant issue for underwater options. Also, acceleration of in-the-money options imposes an immediate financial reporting cost in that it would require recording an option expense under APB 25 at the time of acceleration. Therefore, as a sensitivity check, we ignore in-the-money options when estimating the financial statement impact for all control firms and treatment firms that did not report the financial statement impact. Empirical results using this alternative measure of financial statement impact does not alter the tenor of our conclusions.

as determined under section 2.2.2. We scale this by the percentage of options granted to top five executives in each year to estimate the options granted to all employees. To determine the B-S value we use a database compiled by Equilar that contain the input assumptions that firms report in their 10K filings. Note that the exact grant dates of options are not easily available from public filings. Hence, we assume the last day of the fiscal year in which options are granted to be the grant date and we accordingly compute grant date B-S value. If the firm is missing from the Equilar database, we assume the following input parameters: a seven year holding term, monthly stock return volatility estimated from CRSP for the past seven years, a zero dividend rate, and risk-free rate used is the ten year Treasury bill rate as of December of each year. We compare the exercise price to the stock price as of December 31, 2004 (for treatment firms as of the day before acceleration) to determine whether the option is in-the-money or out-of-the-money. If the option is in-the-money we subtract the current intrinsic value because this amount will have to be recognized at the time of acceleration under APB No. 25. Next, we approximate the grant date B-S value of *all* unvested options held by grossing up the B-S value of both in-the-money and out-of-the-money options held by the top five executives for the proportion of ESOs granted to the top five executives (this proportion is reported in *Execucomp* and hand collected from proxy statements for firms missing from *Execucomp*). To compute the after tax effect we multiply the grant date B-S value by 0.65. The resultant measure is scaled by absolute value of net income and constitutes the expected future saving in expense attributable to underwater and unvested options (IMPACT).⁹

We have made several assumptions to estimate this saving in future expense. First, we assume the grant date to be the last day of the granting fiscal year and that the top five managers are awarded options on the same day as the other employees. Second, we assume that the holding period of the option (i.e., time till exercise date) for the non-senior employees is the same as that of senior executives i.e., seven years or as disclosed in the 10K filing. Third, we assume a four-year vesting period for all firms. Fourth, for those firms that voluntarily expense options we set IMPACT to zero. Note that 1% of the

⁹ Technology firms are likely to have lower reported assets, *ceteris paribus*, because U.S. GAAP requires expensing of R&D and internally developed intangibles. In untabulated analyses, we scale option expenses by firm sales and find unchanged inferences.

treatment sample and 19% of our control sample voluntarily expense options. Given these assumptions, it is plausible that our measure of IMPACT contains considerable measurement error. To validate this measure, we compute an as-if IMPACT for firms that have disclosed expected savings in future expense in their announcements and correlate such as-if IMPACT with the reported savings in future expense. We find that the Spearman rank correlation is 0.72 ($p < 0.01$) giving us some assurance about the reliability of our measure. To be clear, we use the actual reported savings wherever available and estimated as-if IMPACT measure for the remaining firms, in our empirical tests.¹⁰

2.2.3 Voluntary expensers

In anticipation of the stock option expensing rule, several firms voluntarily started expensing stock options beginning in 2002 (see Aboody, Barth and Kasznik 2004). These firms have already taken the costly accounting step of expensing the fair value of options in their income statements. Hence, they are unlikely, on the margin, to accelerate vesting of options to save the future expenses associated with such a decision. Furthermore, accelerating the options would likely entail a short-term increase in current option expense under FAS 123.¹¹ Therefore, we hypothesize that firms that voluntarily recognize option expense are less likely to accelerate vesting of options. We code EXPENSER, a dummy variable, as one if the firm expenses options voluntarily as per the Bear Stearns report dated December 14, 2004.¹²

2.2.4 Reported income and capital markets

Section 2.2.3 discusses the magnitude of reported income affected by accelerated vesting. In this section, we discuss the broad incentives that firms have to manage reported income. We argue that firms that value reporting higher accounting income on the margin relative to others are more likely to engage in accelerated vesting of options. We employ several empirical proxies to capture the importance of

¹⁰ As a sensitivity check, we use the estimated IMPACT measure for all firms and find that using this alternative variable does not affect the tenor of our conclusions. We also consider other scalars such as total assets and book value of equity with no qualitative change in our findings.

¹¹ According to FAS 123, once a firm elects to use the fair value method of valuing stock options, they may not change the valuation method back to the intrinsic value method at any point in the future. Therefore, a voluntary expenser that accelerates vesting would be forced to expense an amount equal to the unrecognized portion of the fair value of the accelerated options.

¹² It is likely that subsequent to the Bear Stearns Report, some of the accelerating and the control firms announced decisions to voluntarily expense stock options, leading to misclassification of the EXPENSER variable. However, such misclassification would only bias against finding results in support of our hypothesis.

accounting income to firms. We assume that firms that are active in the equity markets via seasoned issues of equity have more incentives to manage their reported income numbers. Our proxies for seasoned equity offers is EQ_ISSUE, a dummy variable that is set to one if the firm issued equity in the last three fiscal years and zero otherwise.

Graham et al. (2005) present survey evidence that CFOs structure transactions to be able to meet or beat earnings targets set by equity analysts. We hypothesize that the greater the propensity of the firm to meet or beat analyst forecasts in the past, the greater the incentive to accelerate the vesting of underwater options. Unfortunately, for significant number of our sample firms analyst forecasts are unavailable. Therefore, we use a different earnings benchmark to determine a firm's propensity to meet or beat earnings targets. Specifically, we use the reported earnings of the same fiscal quarter from the previous year as the earnings benchmark. Our proxy for target orientation, MEET_BEAT, is the proportion of times a firm manages to meet or exceed this quarterly earnings benchmark over the last three years.

We also use a dummy variable, LOSS, which captures the percentage of times the firm reported negative net income during the four recent fiscal years prior to the acceleration decision. We hypothesize that a firm that experiences losses has greater incentive to accelerate the vesting of options to save the reporting of future stock option expense. To account for the traditional debt covenant based motivation to avoid reducing future reported income, we introduce the debt-equity ratio (D/E), measured as the book value of debt scaled by the market value of equity. Both book value of debt and market value of equity are determined at the end of the most recent fiscal year.

2.2.5 Reported income and stakeholders

Bowen, DuCharme and Shores (1995) show that firms that have more ongoing implicit claims with stakeholders such as employees, suppliers and customers choose relatively aggressive accounting methods to influence stakeholders' assessments of the firm's reputation. Graham et al. (2005) find survey evidence that CFOs view stakeholder concerns as an important determinant of financial reporting practices. Even if the stock market is fully efficient in processing earnings information, managers might

accelerate the vesting of options and reduce future reported expenses to extract better terms of trade with their stakeholders. Consistent with Bowen et al. (1995) and Matsumoto (2002), we conduct a factor analysis to identify a single factor (STCLAIM) for the following three variables to capture stakeholder claims: (i) D_{DUR} if a firm belongs to a durable goods industry; (ii) R&D/Sales and (iii) LABOR intensity [1-(property, plant and equipment/ adjusted total assets)]. STCLAIM represents the factor scores for each of the firms capturing the combined elements of all three variables described above. The factor retains considerable variation (over 75%) in the input variables suggesting that combining the three variables does not result in loss of information due to aggregation. A higher factor score indicates higher implicit claims by stakeholders, and hence we expect a positive association between the probability of accelerated vesting and STCLAIM.

Economic factors

2.2.6 Cash flow constraints

Prior research (e.g., Core and Guay 2001) finds that firms with greater financial constraints tend to use stock options to provide incentives and retain employees. Accelerated vesting of options accelerates the inflow of cash into the firm due to the exercise of the option, if the option is in-the-money at the time of exercise and the employee decides to exercise the option. Hence, we hypothesize that firms that have higher cash flow constraints will have greater incentives, on the margin, to hasten the vesting of options. We compute a firm's free cash flow (FCF) scaled by current assets and use that as a measure of the firm's cash constraints. We define FCF as the difference between cash flow from operations for year $t-1$ and the past-three year average ($t-1$, $t-2$, $t-3$) of the firm's capital expenditures, scaled by current assets at $t-1$. We set a dummy variable (D_{CAPITAL}) to one if the free cash flow measure (FCF) is less than minus 0.50 and zero otherwise.¹³ This variable also captures a firm's ex-ante demand for external capital. Such demand for external capital, in turn, provides managerial incentives to engage in actions that

¹³ Note that for firms with negative FCF, the absolute value of $1/\text{FCF}$ indicates the number of years for which the firm can service its cash flow requirements through current assets, absent any external financing. Hence, if the FCF measure is -0.5, it suggests a firm can use current assets to fund its current level of operating and investing activities for approximately two years.

influence reported income. In either case, we expect a positive association between the acceleration decision and D_CAPITAL.

2.2.7 Improving employee morale and retention

Several firms argue that they accelerate the vesting of options to improve employee morale and retain employees. Hodge, Rajgopal and Shevlin (2005) present survey evidence that employees attach significant value to earlier vesting of stock options. Firms appear to view the acceleration of especially underwater options as a symbolic action that communicates the firm's concern to employees about their options being out of the money. Moreover, acceleration of underwater options can be viewed as a signal that managers expect future stock price to rise and thus bring the underwater options in-the-money. Hence, we argue that firms may choose to boost employee morale and increase the chance of retaining employees, on the margin, by accelerated vesting.¹⁴ Following Carter and Lynch (2001) and Oyer (2004), we argue that firms that under-perform relative to their industry will find it harder to retain demoralized employees as such employees have better outside employment opportunities within the industry. Under the retention story, we expect the likelihood of acceleration to be negatively associated with BHAR_INDADJ, which represents the firm's prior year industry adjusted buy and hold return. Industry returns are based on the three-digit NAICS code to which the treatment firm belongs but exclude the treatment firm. BHAR_INDADJ for firms that accelerated vesting in 2004 (2005) is computed over the year ending June 2004 (December 2004). For control firms, we compute BHAR_INDADJ over the calendar year 2004.

However, one could legitimately question whether the accelerated vesting of options, especially underwater options, promotes employee retention.¹⁵ We offer two explanations in support of the retention argument. First, employees have to continue to work hard even after early vesting to boost the stock price and thus bring their options into the money. It is plausible that if these vested underwater options were to

¹⁴ In fact, 51 of the 355 accelerating firms in our sample that accelerate the vesting of underwater options sometimes constrain employees from selling the stock until the original exercise date.

¹⁵ This is especially the case with accelerating the vesting of in-the-money options. However, only 65 of the 355 accelerating firms involve acceleration of some in-the-money options.

come into the money at a future point of time, employees are perhaps more likely to quit the firm and exercise their newly in-the-money options. But, such accelerated vesting need not necessarily promote immediate employee turnover. Second, most firms force employees to exercise vested options within six months after resignation. Hence, employees who feel that the stock price would continue to rise in the future are more likely to delay their exit from the firm.

Agency factors

2.2.8 Managers' private incentives

We first consider a set of factors relating to the private incentives of firms' senior managers that influence financial reporting choices. Murphy (2000) documents widespread use of earnings based annual bonus plans in compensation contracts. Moreover, prior research (e.g., Matsunaga and Park 2001) shows that earnings based bonus plans influence financial reporting choices. To the extent management bonuses are based on reported earnings and compensation committees do not fully adjust for the effect of structuring transactions on reported income, we predict firms that compensate managers more with bonus based plans are more likely to accelerate the vesting of options. We use the ratio of CEO cash bonus to total cash compensation (BONUS) as our proxy for earnings-sensitive bonus plans.

We also include two additional proxies to capture managers' private incentives for making income increasing financial reporting decisions. First, we consider a CEO's equity ownership, CEO_OWN, calculated as the equity shares held by the CEO as a percentage of shares outstanding obtained from *Execucomp*. Agency theory suggests that greater ownership of shares held by the CEO results in better alignment of interests between managers and shareholders and hence, lower agency problems. Thus, firms with greater managerial ownership are less likely to indulge in earnings management activities (Warfield, Wild and Wild 1995). Based on this argument, we would predict that the propensity to accelerate will decrease with CEO_OWN. However, recent evidence (Bartov and Mohanram 2004, Bergstresser and Phillipon 2005, Burns and Kedia 2005, and Cheng and Warfield 2005) suggests that managers with significant equity incentives (i.e., managers with significant managerial ownership and stock options) are more likely to manage earnings. They argue that managers with

considerable wealth tied up in the firm's stock and options have more incentives to sell shares in the near term. Their findings indicate that managers with high equity incentives sell more shares in subsequent periods as well as manage earnings in the short run to improve the stock prices. Consequently, we entertain the possibility that the relation between the acceleration decision and CEO_OWN is positive.

Second, we use the number of options granted to the top five executives as a percentage of shares outstanding, TOP5_OPT%, as a proxy for manager's personal incentives. Dechow, Hutton and Sloan (1995) find that firms with more options granted to top five executives are more likely to lobby the FASB against expense recognition. They argue that if stock options granted to top five executives represent a measure of excess compensation paid then managers with significant option portfolios will attempt to reduce the political costs associated with reporting a high stock option compensation expense. Because accelerating the vesting of options is another mechanism to avoid expense recognition, we expect a positive association between the acceleration decision and TOP5_OPT%.¹⁶

2.2.9 Governance quality

We expect a strong governance structure to counteract the private incentives of senior managers and directors to accelerate the vesting of options and avoid expense recognition. We use two proxies to capture the quality of governance: (i) equity ownership by the largest blockholder (BLOCK) compiled by Dlugosz, Fahlenbrach, Gompers and Metrick (2004); and (ii) equity ownership by public pension funds (PP) identified by Cremers and Nair (2005).

Pension funds and block holders usually oppose resetting the terms of employee stock options (Wall Street Journal March 10, 1999; Pollock, Fisher and Wade 2001). Moreover, in the post-Enron environment, block holders and public pension funds are unlikely to view structuring transactions purely for financial reporting purposes in a favorable manner. Several consultants such as the Corporate Library, who counsel institutional investors on investment decisions or on how to vote on proxy proposals, have been critical of accelerated vesting. For example, Paul Hodgson of the Corporate Library states: "It's

¹⁶ A more direct way to proxy for agency issues might be to check how many accelerations exclude senior managers, including the CEO. Unfortunately, firms' disclosures on restricting accelerations to only rank and file workers are patchy and unreliable.

lying. It may be legitimate lying, but it is nevertheless lying to shareholders about the cost of options." (Washington Post, December 19, 2005). Nell Minow, founder of the Corporate Library calls accelerated vesting "appalling." She adds "institutional investors are already saying that the issue could encourage them to withhold votes from corporate directors. It shows bad faith and bad judgment on the part of [corporate] boards." (The Street.com, April 12, 2005). Therefore, we expect the probability of accelerating the vesting of options to decrease with BLOCK and PP.

2.2.10 Control variables

Smith and Watts (1992) argue that a firm's size and investment opportunity set are important determinants of compensation contracts. Moreover, Watts and Zimmerman (1990) argue that firms subject to political costs and public scrutiny are more likely to care about reported profits and hence, take actions to manage them. However, such firms may refrain from taking visible actions such as accelerated vesting with intent to manage reported earnings because such actions by itself would subject them to public scrutiny. Firm size is commonly used as a proxy to capture political vulnerability. Therefore, we include two control variables SIZE and Market to book ratio (M/B). We measure SIZE as the logarithm of market value of equity and M/B as the ratio of market value of equity to book value of equity.

2.3 The Model

Based on the discussion above, we estimate the following logit model (firm subscripts suppressed):

$$\begin{aligned} \text{Pr}(\text{Accelerated vesting}) = & \beta_0 + \beta_1 \text{UNDER\%} + \beta_2 \text{IMPACT} + \beta_3 \text{EXPENSER} + \beta_4 \text{EQ_ISSUE} \\ & + \beta_5 \text{MEET_BEAT} + \beta_6 \text{LOSS} + \beta_7 \text{D/E} + \beta_8 \text{STCLAIM} + \beta_9 \text{D_CAPITAL} \\ & + \beta_{10} \text{BHAR_INDADJ} + \beta_{11} \text{BONUS} + \beta_{12} \text{CEO_OWN} + \beta_{13} \text{TOP5_OPT\%} \\ & + \beta_{14} \text{CEO_OWN} + \beta_{15} \text{BLOCK} + \beta_{16} \text{PP} + \beta_{17} \text{SIZE} + \beta_{18} \text{M/B} + \varepsilon \end{aligned} \quad (1)$$

3. Data and Results

3.1 The sample

We identify firms that disclose their decision to accelerate vesting of options via a Lexis-Nexis search beginning March 2004 using the following keywords "accelerat! w/10 vest!." We began our search in March 2004 because the FASB issued an exposure draft for share based payment on April 13, 2004. This exposure draft states that "the intrinsic value method would be repealed (except in limited

circumstances) and replaced with a requirement that generally all equity awards be accounted for at the fair value.” We believe this draft was the first public document from the FASB that indicated the imminent arrival of mandatory expensing of fair value of employee stock options. According to our data search, the first acceleration decision in response to FAS 123-R occurs in July 2004.¹⁷ We supplemented our search using lists provided by three stock market analysts (Buck Consultants dated July 7, 2005; Bear Stearns dated Nov 21, 2005, and Analyst’s Accounting Observer dated Oct 12, 2005). The time-series distribution of acceleration announcements is provided in Figure 1. Although there were a few acceleration announcements prior to October 2004, firms’ decision to accelerate picked up steam from November 2004. Interestingly, this coincides with the FASB decision on October 6, 2004 regarding a staff proposal to consider the acceleration of vesting period prior to the adoption of the standard as “nonsubstantive”.¹⁸ The FASB staff (in anticipation of such acceleration announcements) recommended that any modification of out-of-the money option awards to accelerate vesting of those options be viewed as nonsubstantive and hence, any remaining unrecognized compensation cost of those options will continue to be recognized over its original vesting period. In other words, this recommendation essentially eliminates the financial reporting benefit of acceleration. However, the FASB voted 4-3 against this proposal thereby ensuring that the financial reporting benefits accrue to firms that accelerate the option vesting period prior to adopting FAS 123-R.

The FASB originally stated that June 15, 2005 would be the official date of FAS 123-R implementation. On April 14, 2005 the SEC postponed the implementation date by six months from June 15, 2005 for calendar year companies. That is, FAS 123-R is now applicable for all fiscal years commencing after June 15, 2005. Hence, there is no unique date for all firms when FAS 123-R will go into effect. Firms may be subject to FAS 123-R as early as June 2005 or as late as May 2006, depending on their fiscal year ends. We terminated our search as of November 18, 2005 to allow us adequate time to code the data and perform our analyses.

¹⁷ We do not consider routine accelerations that occur as a result of mergers and acquisitions, change of control in the firm, separation of employees or performance vesting.

¹⁸ http://www.fasb.org/board_meeting_minutes/10-06-04_ebc.pdf

The control firms are drawn from *Execucomp* as of December 2004. As is well known, *Execucomp* provides compensation data reported in proxy statements for the top five officers of firms in the S&P 500 large capitalization, S&P 400 mid capitalization, and S&P 600 small-capitalization indices. The control sample consists of 665 firms and includes firms that (i) had not accelerated vesting of options as of November 18, 2005; and (ii) have all data available to perform our analysis. A complete description of data computations and sources is provided in Table 1. Our final usable sample that passes the required data filters consists of 355 firms that accelerate and 665 control firms (see Table 2, Panel A).

Table 2, panel B reports the industry classification, using NAICS codes, for the accelerating firms. The table indicates that accelerating firms represent several industries although technology firms (defined as per Francis and Schipper 1999) constitute 39.7% of the accelerating firms but only 16.2% of the control firms.¹⁹ Manufacturing firms and finance and insurance firms are under-represented in the accelerator sample relative to the control group.

Panel A of Table 3 presents the descriptive statistics for the variables used in estimating equation (1), separately for accelerated vesting firms and the control firms. The table also reports t-test and the Wilcoxon signed rank test statistics that determine whether there are significant differences in means and medians between these samples. We find that most of our predictions are borne out in the univariate comparisons. As expected, UNDER%, IMPACT, and TOP5_OPT% are significantly larger for the accelerating firms than the control firms. However, contrary to expectations, accelerating firms have lower BONUS and D/E than the control firms. These results indicate that firms without earnings based bonus plans and lower leverage are more likely to accelerate vesting of options. One reason for this unexpected finding might be that a large proportion of the sample of accelerating firms comes from the technology industry where compensation packages tend to be tilted in favor of equity and have low levels of debt financing. Nevertheless, we wish to caution readers that the comparisons thus far are merely univariate in nature. A more formal examination of the multivariate relations wherein we consider all

¹⁹ Francis and Schipper (1999) define firms in the 14 three-digit SIC codes (283, 357, 360-368, 481, 737 and 873) as technology-intensive industries. We use a similar industry classification except that we use NAICS codes instead of SIC codes and treat firms in the corresponding NAICS codes (32, 33, 51, and 54) as technology-intensive.

factors together is presented in the next section. In Panel B of Table 3 we present Pearson correlations between various factors that affect firms' acceleration decision. Note the strong 0.74 correlation between UNDER% and IMPACT. This large correlation suggests that most of the "saving" in future stock option expenses due to acceleration of vesting is attributable to underwater options.

3.2 Results related to likelihood of accelerating vesting

Table 4 presents results from estimating equation (1). Because of the significant correlation between UNDER% and IMPACT we do not consider these variables together in estimating equation (1) to avoid multicollinearity problems. Rather, we estimate equation (1) by including only one of these variables. In addition, we also combine the two variables using factor analysis into a single factor and use the factor scores in the logit estimation. To help appreciate the incremental explanatory power provided by each of the factors, we also estimate equation (1) with only the variables that capture each of the three factors: accounting, economic and agency factors. However, for brevity we present results from estimating the full model but indicate the explanatory power provided by each of the factors in explaining the acceleration decision.

The results are generally consistent with our predictions. In particular, we find that proxies for several accounting motivations are positively associated with the acceleration decision. Column (1) shows that firms that have more underwater options (UNDER%) are more likely to accelerate vesting (p-value <0.01). Consistent with incentives to avoid taking a fair value expense for stock option compensation after FAS 123-R comes into effect, column (3) shows that firms with greater IMPACT are more likely to accelerate the vesting of options (p-value < 0.01). When we consider the factor scores that combine UNDER% and IMPACT variables we find a significant positive association as well (see column (5)). Given the similarity in our findings across different proxies for the financial statement impact of the acceleration decision we restrict our discussion of results for the remaining variables primarily to that presented in column (5). To provide a meaningful interpretation of the effect of the various variables on the likelihood of the acceleration decision, we present the marginal effects in column (7) that captures the

partial derivative with respect to the independent variable of the probability of acceleration, evaluated at the mean of the independent variables.

Firms that voluntarily expensed options earlier are less likely to accelerate, as indicated by the negative coefficient on EXPENSER (p-value < 0.01). This result is consistent with Aboody et al.'s (2003) finding that voluntary expensers try to separate themselves from other firms by demonstrating their willingness and ability to take a charge to earnings. As expected, firms that have conducted recent equity issuances (EQ_ISSUE coefficient = 0.41; p-value < 0.05) and ones with greater stakeholder claims (STCLAIM coefficient = 0.26; p-value < 0.05) are more likely to be worried about managing reporting perceptions and are hence more likely to be accelerators.

Several of the traditional proxies for such financial reporting incentives also influence the acceleration decision, but the coefficients do not always load in the expected direction. In particular, firms that more frequently report losses (LOSS) are more likely to accelerate vesting (coefficient = 0.38, p < 0.10). We find that an increase in the frequency of losses by 10 percentage point increases the probability of acceleration by 0.8 percentage points. However, the coefficient on MEET_BEAT does not attain statistical significance. When we consider the univariate comparisons and Spearman correlations in panels A and B of Table 3, we find that accelerators have a lower tendency to MEET_BEAT than control firms, inconsistent with our predictions. We also find, inconsistent with the predictions, weak support for firms with lower debt equity ratios (D/E) to be more likely to accelerate the vesting period. The Pseudo R-squared of estimating model (1) with just the accounting factors is a reasonable 26.3%. With respect to the control variables, we find that firm size plays a major role in the acceleration decision. Smaller firms appear more likely to accelerate perhaps consistent with larger firms avoiding a highly visible action to manage reported earnings. Furthermore, many of the larger firms may have already chosen to voluntarily expense stock options and hence, acceleration is unlikely to benefit such firms.

Turning to the economic motivations, we find a positive coefficient on D_CAPITAL (p-value < 0.10) only when we consider the specification that includes the IMPACT variable (see column (3)), providing weak evidence that cash constrained firms are more likely to accelerate vesting. Similarly, the

coefficient on BHAR_INDADJ is negative and significant (p-value < 0.10 in column 3) only in one of the specifications. These two variables together have very low explanatory power (Pseudo- $R^2 = 1\%$) for the acceleration decision. Thus, we conclude that economic factors have very little influence on the acceleration decision.

Turning to the agency explanations, we unexpectedly find that BONUS is positively related to the accelerated vesting decision, inconsistent with our predictions. A plausible alternative explanation for this finding is that a lower level of BONUS implies a lower reliance on bonus contracts, which in turn, suggests over-reliance on equity compensation and consequently provides incentives for managers to manage earnings. With respect to the CEO_OWN variable we document a strong positive relation (coefficient = 5.73; t = 3.84) suggesting that firms with greater managerial ownership have more incentives to manage financial reporting outcomes, consistent with findings in Cheng and Warfield (2005). Consistent with managerial incentives to avoid expense recognition, we find that managers with significant option compensation are more likely to accelerate, i.e., the coefficient on TOP5_OPT% is positive and significant (coefficient = 22.69; p-value < 0.01). This variable is also economically significant in that if the option compensation of top five managers increase by 1% the probability of acceleration increases by about 4.5 percentage points.

With respect to governance variables, we find a negative and statistically significant coefficient on BLOCK and PP, consistent with expectations that block holders and pension funds are generally averse to resetting terms of employee stock options. The governance variables together with other proxies that capture agency motivations have significant explanatory power for the likelihood of acceleration (Pseudo R = 29.2%).

In sum, we conclude that a firm is more likely to accelerate the vesting of options when the firm (i) can avoid reporting a future accounting expense for options; ii) has a shareholder base less likely to be dominated by block-holders and pension funds; (iii) has higher levels of option compensation for its top five managers and (v) is smaller in size. Thus, a combination of accounting and agency factors appear to motivate a firm to hasten the vesting of options in anticipation of FAS 123-R. Whether agency

considerations explain the cross-sectional variation in the stock market reaction to the acceleration announcement is discussed next.

4. Market reaction to accelerated vesting

4.1 Design and results

In this section, we investigate the economic consequences of the accelerated vesting decision by examining the stock market reaction surrounding the firms' announcement of accelerated vesting of options. If investors perceive such accelerated vesting as merely for accounting considerations and as such view this event as a value decreasing proposition we would expect a negative reaction surrounding the acceleration announcement. In contrast, if the market perceives that economic considerations such as improving employee morale and retention dominate in the decision to accelerate we would expect a positive reaction.

To conduct this test, we obtain returns data from www.yahoo.com. We estimate a firm's cumulative five-day risk-adjusted stock return (CAR), measured around the announcement date (day 0). We use a five-day window to allow sufficient time for market participants to process the information as several of the acceleration announcements are made in an SEC filing (10K/10Q/8K). We use traditional market model betas to adjust for risk using Russell 2000 index as the market return, estimated over a 250-day period from day -20 to day -270.²⁰ The event date is assumed to be the trading day on which the firm first issues a press release or files 10K/10Q/8K that contains a disclosure of the accelerated vesting. The SEC filing date is obtained from the EDGAR database.²¹

Panel A of Table 5 presents summary statistics relating to the stock market reactions to acceleration announcements. Note that we have 366 accelerated vesting announcements pertaining to 355

²⁰ The results are insensitive to using market returns based on either the Dow Jones Index or the S&P 500 index.

²¹ In an untabulated robustness check, we compute a time-series based version of CAR and find that we obtain qualitative similar results to those reported in the text. In particular, we estimate the following equation over the period January 2004 through November 2005 separately for each firm: $RET_{jt} = \beta_0 + \beta_1 MRET_t + \beta_1 EVENT_{jt} + \varepsilon_{jt}$ where RET_{jt} is the firm j 's daily stock return; $MRET$ is the daily market return; and $EVENT_j$ is an indicator variable equal to 1 for each of the five days surrounding firm j 's accelerated vesting announcement date, and 0 otherwise and t denotes the trading day.

distinct firms as 11 firms reported accelerating twice.²² The mean announcement return is -0.98% and is statistically significant from zero (t-statistic = -2.92). Most of the negative reaction occurs on the day before (-1) and the two days ($+2$) after the announcement. Untabulated results suggest that 56% of the events report a negative reaction and a ranked sign test rejects the null of no reaction at $p = 0.02$ level. The negative announcement return, albeit small, is consistent with the stock market viewing the acceleration decision as a value-decreasing proposition. We explore potential cross-sectional determinants of this CAR in the following sections.

4.2 Confounding events

The results presented in panel A do not control for concurrent announcements or differentiate among the alternative ways in which the acceleration decision is disclosed. To address this we first analyze abnormal returns for the following three sets of firms: (i) firms whose acceleration announcements are filed via 8Ks; (ii) firms that announce acceleration via press releases issued; and (iii) firms that announce acceleration as part of 10Ks or 10Qs. The results reported in panel B suggest that all three groups have negative abnormal returns. The 8K group, which forms the largest and perhaps the least contaminated sub-group, has a negative reaction of -0.67% (t-statistic = -1.75).

Next, we conduct a Lexis Nexis search to examine press releases surrounding the announcement dates with a view to identifying concurrent announcements such as mergers, acquisitions, substantial contracts, earnings releases, management earnings forecasts, dividend announcements or share repurchases. Because 10Ks and 10Qs by definition contain a significant amount of financial and nonfinancial information, we restrict our analysis of confounding events to the sample of firms that disclose the acceleration decision in the 8Ks or press releases. Findings (unreported) for the sub-sample of firms with uncontaminated acceleration announcements are significantly negative. Thus, we conclude that confounding announcements do not appear to be a first-order concern in our analyses.

²² Eliminating multiple announcements by the same firm does not alter any of our inferences.

4.3 Announcement information

We read through the information in firm's press releases and SEC filings to identify motivations disclosed by accelerators to justify their decision to accelerate the vesting of options. Of the 366 accelerated vesting announcements, 83% of announcements contained one or more of the following six key pieces of information associated with the decision to accelerate the vesting of options: (i) the accelerating firm wants to eliminate stock option expense; (ii) employees are to refrain from selling vested shares on option exercise until the original date of vesting; (iii) the firm is accelerating vesting to improve employee retention and morale; (iv) stock options are not achieving their original objectives at the firm; (v) the acceleration is in the best interest of the firm's shareholders; and (vi) options have limited economic value.

Panel A of Table 6 reports the frequency distribution of the six key pieces of information that firms disclose along with their acceleration announcement. The most common reason appears to be a desire to eliminate stock option expense (286 instances). A firm could potentially give multiple reasons and hence the sum total of instances exceeds the sample size.

It is interesting to note that despite explicit guidance by the SEC Professional Fellow, Chad Kokenge, on December 6, 2004 that accelerators must provide the reason for their decision, we find that 17% of the announcements are silent about their motives. To examine whether the returns to the acceleration announcements vary cross-sectionally depending on the reasons disclosed, we first assess whether voluntary disclosure of a reason is correlated with the cross-sectional distribution of CARs. We create a dummy variable, DISCLOSER, and set it to one if a firm reports any of the reasons discussed above, zero otherwise. Panel A of Table 6 shows that the coefficient on DISCLOSER is positive and weakly significant suggesting that the market penalizes firms that do not report any reason for accelerating vesting of stock options.

An analysis of the association between CARs and the stated reasons reveals that the stock market appears to favorably value the two reasons for accelerated vesting: (i) elimination of the stock option expense; and (ii) employees are refrained from selling the vested shares, on option exercise. We

conjecture that reason (ii) reflects a desire to curtail abuse of the early vesting. We interpret the positive reaction to reason (i) as evidence that the stock market expects elimination of option expense as a sign that such firms intend to cut perhaps previously excessive option grants in the future.

4.4 Cross sectional analysis of CAR

In this section, we analyze whether the cross-sectional variation in CARs can be explained by the accounting, economic and governance factors discussed in section 2. It is not obvious *ex ante* whether we should expect any association between CAR and the accounting factors hypothesized to affect early vesting. We expect the stock market to react positively or less negatively to the acceleration announcement if such acceleration is driven by economic considerations such as retaining employees. Thus, we expect a positive coefficient on D_CAPITAL, as more cash constrained firms (i.e., D_CAPITAL is one) are likely to accelerate for economic reasons. Also, we expect a negative coefficient on BHAR_INDADJ, as firms with poor performance relative to industry are more likely to accelerate with an intention to retain employees. We hypothesize that firms with greater agency costs (low BLOCK, low PP, low CEO_OWN, high BONUS, high TOP5_OPT%) are likely to accelerate the vesting of options more to benefit senior executives and less for genuine economic reasons.

As before, we consider three specifications, where we include only of the variables that capture the financial statement impact of the acceleration decision: UNDER%, IMPACT or a factor variable that captures both UNDER% and IMPACT. Again, we restrict our discussion to the results in Column (3) of Table 7. The results suggest that accounting factors, with the exception of the factor score that incorporates both UNDER% and IMPACT, are unrelated to the cross-sectional distribution of CAR. Turning to the economic factors, we surprisingly observe a positive association between CAR and BHAR_INDADJ. That is, better a firm's prior industry adjusted performance, the less negative the stock price reaction at the announcement of the accelerated vesting. One way to rationalize this unexpected result is to argue that employee retention on accelerated vesting is likely to be effective only if the stock price of the firm is expected to rise in the future so that the under-water options, whose vesting has been accelerated, can come into the money. Hence, the stock market might interpret accelerated vesting by a

better performing firm as a signal that management expects better future stock price performance.

Ideally, we would like to validate this interpretation by examining the BHAR_INDADJ for the firm *after* the acceleration announcement but the absence of future stock return data restricts such an analysis.

Finally, turning to the agency variables in column (4), we find that firms with lower CEO_OWN, higher TOP5_OPT% and lower BLOCK are associated with negative CARs. Recall that Dechow, Hutton and Sloan (1996) found that that firms where top five officers had more option grants were more likely to lobby the FASB against expense recognition before FAS 123 was passed. Hence, we interpret the negative CAR associated with TOP5_OPT% as evidence that acceleration announcements are interpreted unfavorably by the stock market, especially when top five managers get more options. The positive coefficients on CEO_OWN and BLOCK indicate that firms that accelerate vesting of options and are perceived as better governed as per these measures, are associated with a smaller negative reaction on the vesting announcement. Thus, agency proxies explain some of the cross-sectional variation in the announcement returns. The explanatory power of models that explain such cross-sectional variation in announcement returns is modest and ranges from 0.74% to 1.53%. For some perspective on this explanatory power, recall that unexpected earnings tend to typically explain a very small portion of the variation in earnings announcement date returns (e.g., Kinney et al. (2002) report R-squareds ranging from 0% to 1.79% in their Table 2, page 1312).

5. Conclusions

We investigate the factors associated with firms' decisions during March 2004-November 2005 to accelerate the vesting period of stock options in anticipation of June 15, 2005, the date on which FAS 123-R becomes effective. We also investigate the stock market reaction associated with the accelerated vesting announcements.

We find that firms accelerate the vesting of options to capture the accounting benefit associated with recognizing option compensation expense under the older APB 25 "intrinsic" value regime as opposed to the upcoming FAS 123-R "fair value" regime. Further, firms with stronger institutional

monitors such as block holders and public pension funds are less likely to accelerate vesting. The stock market reaction to the announcement of the vesting decision is, on average, negative and is seen as more value-destroying for firms that are subject to larger agency problems: firms that (i) grant more options to the top five senior executives of the firms; (ii) have smaller CEO share ownership and (iii) have smaller blockholder and public pension fund ownership.

The evidence presented in this study adds to our understanding of how and why firms structure real transactions to achieve financial reporting goals. Further, it offers evidence on the debate over “principles-based” versus “rule-based” accounting standards where proponents of principles-based accounting standards have criticized existing rule-based standards that allow firms to structure transactions with a view to circumvent unfavorable financial reporting outcomes. Our evidence, however, suggests that investors are not misled by managers’ attempts to evade “rules-based” accounting standards such as FAS 123-R to protect bottom line income via accelerated vesting. We have admittedly focused on only one, albeit interesting, contracting choice made by firms to avoid financial reporting costs associated with the passage of FAS 123-R. In future work, as proxy disclosures become available, we intend to examine whether firms attempt other changes to their compensation arrangements, besides accelerated vesting, due to FAS 123-R (e.g., cuts in rank and file option programs and employee stock purchase plans).

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Figure 1
Time series trends in Accelerated Vesting Announcements

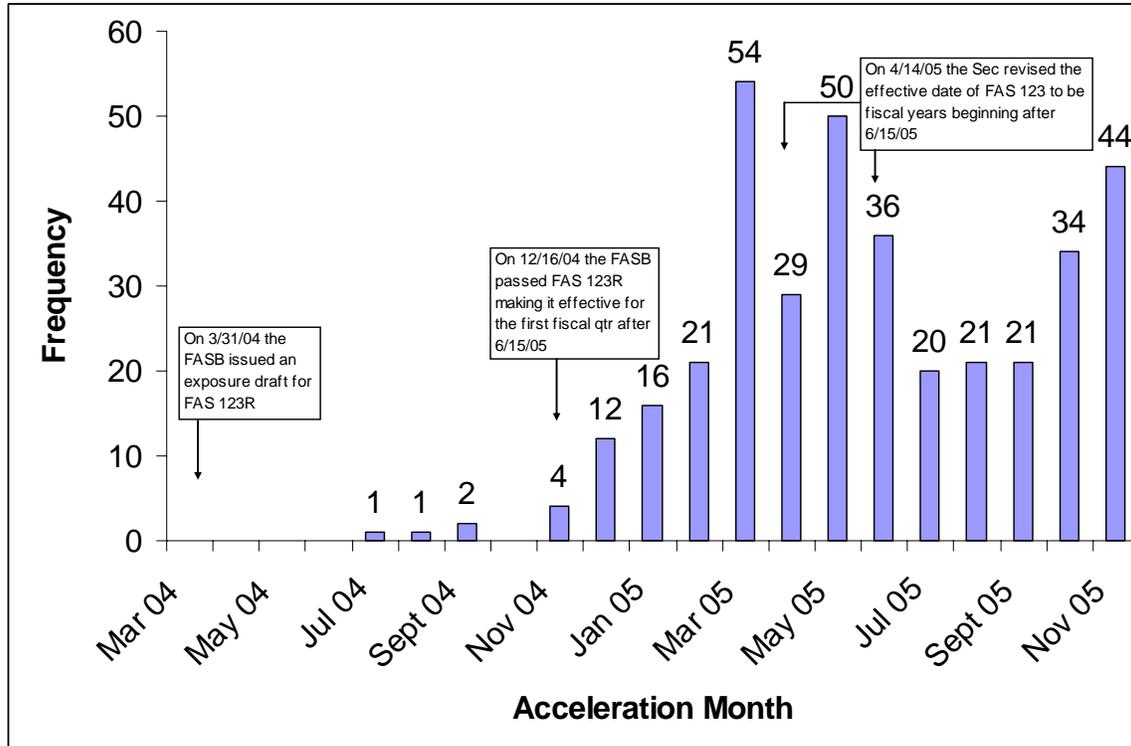


Table 1
Variable Definitions and Data Sources

Variable	Measurement	Data Source	Notes
UNDER%	Total number of options held by Top 5 executives that are out of money scaled by shares outstanding	EXECUCOMP where available otherwise hand collected	Out-of-the-money determined by comparing exercise price to December 31, 2004 price for control firms and to the price the day before acceleration in the case of firms that accelerate.
BHAR_INDADJ	One year industry adjusted buy and hold return (Firm return – corresponding industry return)	CRSP and www.yahoo.com	For firms that accelerated in 2004 (2005) returns are computed over the year ending June 2004 (December 2004). For control firms, returns are computed over the calendar year 2004. Industry returns are computed based on three-digit NAICS code matching after excluding the firm for which industry return is computed.
IMPACT	After tax income effect of accelerating out-of-the-money and in-the-money options	Execucomp, Press releases, 10K, 10Q, 8K, CRSP, Equilar data	Some accelerating firms disclose the income statement effect. For firms that do not disclose and for the control firms we compute after tax income effect by determining the Black Scholes value (see Whaley [2005]) of the unvested underwater options. Assume options issued in past 4 years are unvested and issued at the money. Input assumptions to Black Scholes are taken from a database purchased by Equilar, collected from annual 10K filings. When data is missing, we calculate input assumptions using a 7 year assumed holding term, 7 Year T-Bond rate, dividend rate = 0, and volatility computed from a minimum of 30 months price data from CRSP. We sum ¼ of 2001, ½ of 2002, ¾ of 2003, and all of 2004 options to determine outstanding expense. We find a correlation of 70% for firms that disclose impact and our calculated impact.
EXPENSER	Dummy variable =1 if firm voluntarily expenses options, 0 otherwise	Bear Stearns Report 4/28/2004	Value = 1 if firm voluntarily adopted FAS 123-R (is currently or intends to start expensing options as of May 2004) as of 2004.
EQ_ISSUE	Dummy variable = 1 if firm issued equity in the past 3 years, 0 otherwise	COMPUSTAT	Firm is assumed to have issued equity if DATA108 > 0.
MEET_BEAT	% times firm has met or exceeded prior year same quarter net income in past 12 quarters	COMPUSTAT	

Table 1 (continued)

Variable	Measurement	Data Source	Notes
LOSS	Percentage of times in the last 4 years the firm had a loss after deducting the option expense amount disclosed in the 10K	COMPUSTAT	Firm has a loss if DATA18-DATA399 < 0; Loss = (number of times Loss=1)/4
D/E	Total debt / Market value of equity	COMPUSTAT	Total debt = (DATA34+DATA9) Market Value of Equity = DATA25 * DATA199
STCLAIM	A single factor determined from three variables: 1) dummy indicator for durable goods industry 2) R&D/Sales 3) labor intensity (1-PPE/adjusted total assets);	COMPUSTAT	Durable good industry (SIC codes 150-179, 245,283,301,250-259,324-399), R&D (data 46), sales (data 12), PP&E (data 7), adjusted total assets (data 6 + data 196 + data 240).
D_CAPITAL	If FCF < -0.5 then D_capital =1, 0 otherwise	COMPUSTAT	FCF is the difference between cash flow from operations (#308) for year t-1 and the past-three year average (t-1, t-2, t-3) of the firm's capital expenditure (#128) scaled by current assets (#4) at t-1.
BONUS	Bonus / Total cash compensation	EXECUCOMP Where available otherwise hand collected	BONUS/TCC.
CEO_OWN	Shares owned by CEO scaled by shares outstanding	EXECUCOMP Where available otherwise hand collected	SHROWN / SHROUT.
TOP5_OPT%	Total stock options granted to top 5 executives scaled by shares outstanding	EXECUCOMP Where available otherwise hand collected	$\Sigma(\text{SOPTGRNT to top 5 executives})/\text{SHRSOUT}$
BLOCK	Equity ownership by the largest block holder	Dlugosz et al. (2004)	
PP	Equity ownership by public pension funds	Cremers and Nair (2005)	
SIZE	Logarithm (Market value of equity) for the previous fiscal year	COMPUSTAT	MVE = DATA 25 * DATA199
M/B	Market value of equity / Book value of equity	COMPUSTAT	MVE = DATA25* DATA199 Book value of equity = DATA216
CAR	Cumulative abnormal return, risk adjusted	www.yahoo.com	Returns are cumulated for 5 days surrounding the acceleration announcement date (-2,-1,0,1,2). For risk adjustment traditional market betas are computed over a 250 day period from -20 to -270 days prior to the announcement day.

Table 2
Sample Selection and Industry Classification

Panel A: Sample selection

	Accelerating Firms	Control firms
Hand collected accelerated sample and control sample based on EXECUCOMP as of 12/31/2004	427	690
<i>Less:</i> firms that do not have adequate data on CRSP tapes volatility estimates or returns data (firms with less than 30 months of pricing data in CRSP) and firms missing necessary COMPUSTAT data	(62)	(23)
<i>Less</i> firms without adequate data for returns analysis	(10)	(2)
Total Sample Size	355	665

Panel B: Industry Classification

Industry	NAICS code	Accelerating Firms		Control Firms	
		N	%	N	%
Agriculture, Forestry, and Fishing	11	0	0.0%	1	0.1%
Mining	21	3	0.8%	28	3.9%
Utilities	22	1	0.5%	40	5.7%
Construction	23	2	0.0%	13	2.0%
Manufacturing	31-33	93	26.2%	245	36.8%
Wholesale	42	14	3.9%	18	2.7%
Retail Trade	44,45	13	3.6%	18	2.7%
Transportation and Warehousing	48,49	6	1.7%	16	2.4%
Information	51	13	3.7%	11	1.7%
Finance and Insurance	52	36	10.1%	107	16.1%
Real Estate and Rental Leasing	53	1	0.3%	6	0.9%
Professional, Scientific and Technical Services	54	6	1.7%	6	0.9%
Administrative, Support, Waste Management, and Remediation	56	8	2.3%	14	2.1%
Education	61	3	0.8%	3	0.5%
Health Care and Social Assistance	62	8	2.0%	7	1.1%
Arts, Entertainment, and Recreation	71	2	0.6%	1	0.2%
Accommodation and Food Services	72	4	1.1%	14	2.1%
Other Services	81	1	0.3%	5	0.8%
Technology	AC*	141	39.7%	108	16.2%
Unclassified	99	0	0.0%	4	0.6%
Total		355	100.0%	665	100.0%

*AC – Technology industry coded by the authors based on Francis and Schipper (1999)

Table 3
Descriptive Statistics, Correlation Matrix, and Announcement Information

Panel A: Descriptive Statistics

	Accelerating Firms (n = 355)			Control Firms (n = 665)			Accelerating – Control t-test/wilcoxon test	
	Mean	Median	Std Dev	Mean	Median	Std Dev	t-statistic	Wilcoxon Z
Market Value of Equity (Mil)	1684.500	409.710	4922.000	12883.964	3011.870	31597.872	-8.94	-16.87
Total Assets (Mil)	1865.300	424.300	6755.000	24246.729	3256.540	98458.638	-5.84	-16.91
Net Income (Mil)	29.723	10.324	224.680	671.879	146.086	1704.049	-9.56	-16.79
UNDER%	0.090	0.057	0.103	0.027	0.005	0.066	11.57	15.24
BHAR_INDADJ	-0.159	-0.201	0.392	-0.100	-0.134	0.371	-2.32	-3.46
IMPACT	0.230	0.042	0.572	0.000	0.000	0.003	7.58	23.63
EXPENSER	0.011	0.000	0.106	0.190	0.000	0.392	-10.99	-8.12
EQ_ISSUE	0.558	1.000	0.497	0.335	0.000	0.473	6.92	6.87
MEET_BEAT	0.611	0.583	0.202	0.691	0.667	0.203	-5.97	-5.84
LOSS	0.410	0.250	0.393	0.141	0.000	0.264	11.57	11.72
D/E	0.310	0.089	0.632	0.490	0.205	1.114	-3.29	-6.68
STCLAIM	0.350	0.270	1.248	-0.187	-0.187	0.777	7.39	7.28
D_CAPITAL	0.130	0.000	0.336	0.194	0.000	0.396	-2.74	-2.60
BONUS	0.275	0.259	0.246	0.494	0.550	0.240	-13.72	-12.63
CEO_OWN	0.056	0.017	0.105	0.016	0.003	0.044	6.85	12.14
TOP5_OPT%	0.039	0.029	0.037	0.020	0.014	0.026	4.33	3.94
BLOCK	0.020	0.000	0.044	0.058	0.064	0.066	-8.68	-10.72
PP	0.011	0.000	0.016	0.025	0.029	0.014	-10.94	-12.64
SIZE	6.125	6.061	1.583	7.969	7.829	1.646	-17.48	-15.43
M/B	3.569	2.481	3.672	3.526	2.327	3.851	-0.17	0.58

Table 3 (continued)

Panel B: Spearman Correlation Matrix

	ACCELERATE	UNDER%	IMPACT	EXPENSER	EQ_ISSUE	MEET_BEAT	LOSS	D/E	STCLAIM
UNDER%	0.52								
IMPACT	0.74	0.74							
EXPENSER	-0.25	-0.50	-0.37						
EQ_ISSUE	0.22	0.25	0.27	-0.12					
MEET_BEAT	-0.18	-0.24	-0.21	0.03	-0.03				
LOSS	0.37	0.45	0.47	-0.15	0.21	-0.26			
D/E	-0.21	0.22	-0.26	0.22	-0.34	-0.09	-0.15		
STCLAIM	0.23	0.27	0.32	-0.13	0.18	-0.01	0.28	-0.32	
D_CAPITAL	-0.08	-0.17	-0.16	0.26	-0.20	0.10	-0.17	0.33	0.04
BHAR_INDADJ	-0.11	-0.21	-0.17	0.05	-0.08	0.14	-0.07	0.07	-0.05
BONUS	-0.40	-0.37	-0.36	0.21	-0.08	0.31	-0.26	0.07	-0.04
CEO_OWN	0.38	0.17	0.23	-0.15	-0.03	0.02	0.05	-0.08	0.02
TOP5_OPT%	0.39	0.55	0.39	-0.27	0.21	-0.10	0.37	-0.19	0.19
BLOCK	-0.34	-0.21	-0.29	0.07	-0.14	0.06	-0.14	0.08	-0.12
PP	-0.40	-0.23	-0.28	0.14	-0.14	0.12	-0.21	0.12	-0.04
SIZE	-0.48	-0.39	-0.35	0.31	-0.10	0.25	-0.35	0.12	-0.09
M/B	-0.02	0.00	0.09	-0.07	0.23	0.28	-0.07	-0.35	0.21

Table 3 (continued)

Panel B: Spearman Correlation Matrix (continued)

	D_CAPITAL	BHAR_INDADJ	BONUS	CEO_OWN	TOP5_OPT%	BLOCK	PP	SIZE
BHAR_INDADJ	0.10							
BONUS	0.04	0.22						
CEO_OWN	-0.01	0.00	-0.25					
TOP5_OPT%	-0.16	-0.04	-0.25	0.28				
BLOCK	-0.06	0.05	0.19	-0.17	-0.17			
PP	-0.02	0.00	0.31	-0.30	-0.26	0.50		
SIZE	0.12	0.00	0.48	-0.46	-0.58	0.25	0.47	
M/B	-0.13	-0.08	0.16	-0.09	-0.07	0.04	0.05	0.31

Notes: All correlations significant at $p < 0.05$, two-tailed level are presented in bold. See Table 1 for variable definitions.

Table 4

Likelihood of Accelerated Vesting of Stock Options

$$\begin{aligned} \text{Pr}(\text{Accelerated vesting}) = & \beta_0 + \beta_1 \text{ UNDER\%} + \beta_2 \text{ IMPACT} + \beta_3 \text{ EXPENSER} + \beta_4 \text{ EQ_ISSUE} + \beta_5 \text{ MEET_BEAT} + \beta_6 \text{ LOSS} + \beta_7 \text{ D/E} \\ & + \beta_8 \text{ STCLAIM} + \beta_9 \text{ D_CAPITAL} + \beta_{10} \text{ BHAR_INDADJ} + \beta_{11} \text{ BONUS} + \beta_{12} \text{ CEO_OWN} + \beta_{13} \text{ TOP5_OPT\%} \\ & + \beta_{14} \text{ CEO_OWN} + \beta_{15} \text{ BLOCK} + \beta_{16} \text{ PP} + \beta_{17} \text{ SIZE} + \beta_{18} \text{ M/B} + \varepsilon \end{aligned} \quad (1)$$

	Pred. Sign	Coefficient Estimate (1)	Z-Statistic (2)	Coefficient Estimate (3)	Z-Statistic (4)	Coefficient Estimate (5)	Z-Statistic (6)	Marginal Effect (7)
Intercept	?	2.88	4.92**	2.76	3.82**	3.89	6.02**	
<i>Accounting Factors:</i>								
UNDER%	+	35.83	4.42**					
IMPACT	+			166.40	6.41**			
FACTOR(UNDER,IMPACT)						2.00	8.06**	0.40
EXPENSER	-	-1.81	-2.98**	-2.07	-2.20*	-1.90	-2.64**	-0.38
EQ_ISSUE	+	0.53	2.72**	0.38	1.53^	0.41	2.02*	0.08
MEET_BEAT	+	0.07	0.14	0.03	0.05	0.24	0.47	0.05
LOSS	+	0.81	2.61**	0.19	0.49	0.38	1.43^	0.08
D/E	+	-0.35	-2.31*	-0.29	-1.57^	-0.58	-3.22**	-0.12
STCLAIM	+	0.35	3.03**	0.33	2.24*	0.26	2.15*	0.05
<i>Economic Factors:</i>								
D CAPITAL	+	0.22	0.77	0.45	1.33^	0.36	1.19	0.07
BHAR_INDADJ	-	-0.18	-0.80	-0.40	-1.49^	-0.11	-0.48	-0.02
<i>Agency Factors:</i>								
BONUS	+	-1.35	3.43**	-1.69	-3.34**	-1.17	-2.81**	-0.24
CEO_OWN	+/-	6.22	4.15**	5.87	3.62**	5.73	3.84**	1.15
TOP5_OPT%	+	12.81	2.95**	3.27	0.89	22.69	4.58**	4.56
BLOCK	-	-6.57	-3.44**	-6.36	-2.54**	-5.31	-2.72**	-1.07
PP	-	-17.91	-2.73**	-18.73	-2.04*	-18.58	-2.65**	-3.73
<i>Controls:</i>								
SIZE	?	-0.43	-5.73**	-0.50	-4.89**	-0.47	-5.77**	-0.09
M/B	?	0.03	1.11	0.02	0.74	0.03	1.41	0.01
Pseudo-R ² (Total)		40.14%		55.25%		44.52%		
Pseudo-R ² (Accounting)		26.26%		26.26%		26.26%		
Pseudo-R ² (Economic)		1.17%		1.17%		1.17%		
Pseudo-R ² (Agency)		29.23%		29.23%		29.23%		

Note: Sample consists of 355 accelerating firms and 665 control firms. For variable definitions see Table 1. **, *, ^ represents statistical significant at the 1%/5%, 10% level one-tailed (two-tailed) if the coefficient sign is predicted (not predicted).

Table 5
Abnormal Returns surrounding Accelerated Vesting Announcement

Panel A: Summary statistics from firm-specific estimation of abnormal returns

Event date	Accelerated Sample	
	CAR	t-statistic
-2	-0.03%	-0.28
-1	-0.29%	-2.16
0	-0.11%	-0.68
1	-0.01%	-0.07
2	-0.55%	-3.52
(-2,2)	-0.98%	-2.92

Panel B: Summary statistics of abnormal returns by disclosure type

	All	10K/Q	8K	Press release
Abnormal return	-0.98%	-1.57%	-0.67%	-2.18%
t-statistic	-2.92	-2.15	-1.75	-1.38
N	366	96	252	17

Note: Sample consists of 366 acceleration announcements comprising 355 unique firms. CAR represents cumulative abnormal returns. See Table 1 for variable definitions.

Table 6
Cross-sectional differences in Abnormal Returns surrounding Accelerated Vesting Announcement
Examining Reasons for Accelerated Vesting

Panel A: Frequency Distribution of reasons for accelerated vesting

Reason	N
Reason 1 – Eliminate stock option expense	286
Reason 2 – Refrain from selling until original vesting date	51
Reason 3 – Improve morale or retention	52
Reason 4 – Options not achieving original objectives	52
Reason 5 – Best interest of shareholders	46
Reason 6 – Have limited economic value	19

Panel B: Summary statistics from regression of announcement abnormal returns on the reason for accelerated vesting

Variable	Coefficient Estimate							
Intercept	-0.021 (-2.59)	-0.020 (-2.83)	-0.012 (-3.33)	-0.008 (-2.34)	-0.010 (-2.83)	-0.011 (3.07)	-0.011 (-3.14)	-0.021 (-2.93)
Discloser	0.019 (1.52)							
Reason1		0.013 (1.65)						0.011 (1.38)
Reason2			0.016 (1.65)					0.013 (1.28)
Reason3				-0.009 (-0.95)				-0.014 (-1.25)
Reason4					0.003 (0.34)			0.005 (0.47)
Reason5						0.010 (0.98)		0.010 (0.99)
Reason6							0.0020 (1.30)	0.018 (1.17)
Adj. R ²	0.36%	0.47%	0.47%	-0.02%	-0.24%	-0.01%	0.19%	0.72%

Note: Sample consists of 366 acceleration announcements comprising 355 unique firms. t-statistics in parenthesis. Abnormal returns computation defined in Table 1.

Table 7
Cross-sectional differences in Abnormal Returns surrounding Accelerated Vesting Announcement
– Examining Accounting, Economic and Agency Factors

	Pred. Sign	Coefficient Estimate (1)	Coefficient Estimate (2)	Coefficient Estimate (3)
Intercept	?	-0.015	-0.009	-0.008
<i>Accounting Factors:</i>				
UNDER%	?	0.413*		
IMPACT	?		0.007	
FACTOR(UNDER,IMPACT)	?			0.005*
EXPENSER	?	0.016	0.006	0.004
EQ_ISSUE	?	0.007	0.007	0.007
MEET BEAT	?	0.001	-0.008	-0.006
LOSS	?	-0.003	-0.004	-0.006
D/E	?	-0.003	-0.004	-0.004
STCLAIM	?	0.000	0.000	0.000
<i>Economic Factors:</i>				
D_CAPITAL	+	0.006	0.009	0.008
BHAR_INDADJ	-	0.022**	0.018*	0.019*
<i>Agency Factors:</i>				
BONUS	-	0.009	0.006	0.007
CEO_OWN	+	0.053*	0.051^	0.054*
TOP5_OPT%	-	-0.247*	-0.062	-0.147^
BLOCK	+	0.167*	0.163*	0.174*
PP	+	0.089	0.104	0.078
Technology Stocks	-	-0.009	-0.009	-0.009
Adj. R ²		1.53%	0.74%	1.37%

Note: Sample consists of 366 acceleration announcements comprising 355 unique firms. Technology Stocks represents a dummy variable set to 1 for firms in the technology industry, 0 otherwise. For other variable definition see Table 1. **,*,^ represents statistical significant at the 1%/5%,10% level two-tailed.