Stock Option Backdating: Where Are We Now?

By Randall Heron and Erik Lie

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Introduction

Academic researchers have for years been intrigued by the fortuitous timing of executives’ option grants. The genesis of this line of inquiry was a study published in the Journal of Finance in 1997 by David Yermack of New York University.1 Yermack studied the returns surrounding the option grants made to CEOs of Fortune 500 companies during the years 1992 through 1994 and found that abnormal returns cumulated to more than 2 percent in the 50 trading days following the grants. After an exhaustive set of tests, Yermack concluded the likely explanation was that companies timed many of their grants to occur before anticipated stock price increases. This practice is now often referred to in the media as “spring-loading” or “front-running.”

Other studies, including one published in the Journal of Corporate Finance in 2001 by Keith Chauvin and Catherine Shenoy of the University of Kansas and another published in the Journal of Accounting and Economics in 2000 by David Aboody of UCLA and Ron Kasznik of Stanford University, document similar return irregularities. These authors conclude either that options were spring-loaded or that managers manipulated information flows around scheduled grants to depress the stock price before the grant or delay a run-up in the price until after the grant.2 Either way, the grants of a fixed number of shares become more valuable to the recipient.

What we have learned recently is that the vast majority of the puzzling return patterns around option grants are attributable to grants that were “backdated” to earlier dates when the price was known to be much lower than the price at the time the granting decision was actually made. The origin of the backdating hypothesis traces to a study that Erik Lie (one of the authors of this commentary) began in 2002 and ultimately published in the journal Management Science in 2005.3

Lie examined a large sample of executives’ option grants from 1992 to 2002 and found that the abnormal return patterns were getting increasingly pronounced over time, such that by the end of the 1990s stock prices were dropping sharply immediately before options grants and rising immediately afterward, with the lowest point centered exactly on the grant date. Interestingly, this pattern was largely absent for grants that appeared to
be scheduled in advance, suggesting that manipulation of the information flow played, at best, a minor role in explaining the return patterns.

The only remaining possibilities were that executives displayed an uncanny ability to predict future stock price movements or something else explained the results. Based on research on insider trading and other transactions, executives appear to possess only modest ability to predict future stock prices. Thus, Lie introduced the backdating hypothesis.

To provide some more direct evidence on the backdating hypothesis, Lie took a couple of steps back and focused on the portion of stock returns that had been overlooked in other studies. In particular, to estimate abnormal stock returns, researchers weed out the portion of the return that is attributable to overall market movements. The underlying logic is that this is the portion of stock returns that corporate insiders can neither influence nor predict. However, if backdating explains the return patterns, it does not matter whether the stock returns are driven by firm-specific or market-wide factors.

Lie showed that even the portion of the stock returns that is predicted by the overall market movements was particularly low immediately before the grants and particularly high immediately afterward. This prompted him to conclude “unless executives have an informational advantage that allows them to develop superior forecasts regarding the future market movements that drive these predicted returns, the results suggest that the official grant date must have been set retroactively” (p. 811).

While Lie introduced backdating to the list of reasons for beneficial return patterns around executives' option grants, it was not possible to fully disentangle various alternatives (especially spring-loading versus backdating) using only the data for grants made prior to Aug. 29, 2002. On that day, a provision in the Sarbanes-Oxley Act materially changed the reporting requirements for option grants, which proved critical in solving the option grant timing puzzle. Prior to the regulatory change, option grants during a given fiscal year were typically not revealed directly to shareholders until the proxy statement for the upcoming annual meeting. Furthermore, the regulations in place allowed grants to be filed with the Securities and Exchange Commission on Form 5, which was not due until 45 business days after the close of the fiscal year.

Although many companies filed option grants on Form 4 filings, which were due within 10 business days after the month of the transaction, even those allowed options to be backdated between roughly two and six weeks. After Aug. 29, 2002, option grants were required to be reported with the SEC on Form 4 filings, and the due date for Form 4 filings was changed to two business days after the transaction.

In a study to be published in the Journal of Financial Economics, we used this regulatory change to decipher the extent to which the puzzling return patterns around option grants were due to backdating efforts or other alternatives. The intuition underlying the study is simple: With the number of days that a grant could be backdated reduced to two, the price patterns and associated abnormal returns should be greatly diminished in the post-
Sarbanes-Oxley period if backdating was responsible for much of the growing pre-Sarbanes-Oxley stock price patterns surrounding option grant dates.

By contrasting the abnormal return patterns (pre- vs. post-Sarbanes-Oxley) for the same population of firms, we showed that roughly 80 percent of the abnormal return pattern disappeared. The remaining portion of the pattern was concentrated in the couple of days between the reported grant date and the filing date and for longer periods for the minority of grants that were not reporting within the required two-day window. Our interpretation of the results was that the vast majority of the abnormal returns around executives' option grants were caused by backdated option grants.

Although we were able to uncover a few isolated allegations of backdating prior to 2005, the heavy media focus did not begin until the investigations at Mercury Interactive were publicly revealed and mentioned in the Wall Street Journal in November 2005. At that time, the SEC was said to be investigating a dozen or so companies. The issue subsided a bit until the Wall Street Journal’s “Perfect Payday” series began publicly identifying several companies with repeated instances of extremely well-timed option grants to top executives.

Since then, we have witnessed a growing number of companies that have either been identified as under investigation by the Department of Justice or the SEC or disclosed on their own that their internal investigations uncovered “irregularities” in the accounting for their option grants. As of the end of August, the number of companies on this list is approaching 100. In a recent working paper, we estimate that nearly 30 percent of option-granting firms have backdated or otherwise manipulated at least some grants between 1996 and 2005. This amounts to more than 2,000 companies.

But we caution that a relatively modest portion of these companies will become ensnared in the backdating scandal, simply because the circumstantial evidence is often weak, and it would require enormous resources to try to uncover more conclusive evidence for all of the companies that have manipulated option grants.

**The Problem With Backdated Options**

A backdated option grant is one where the grant date is chosen with the benefit of hindsight and dated to when the stock price was lower than the current price. Because the number of options that may be granted is typically a fixed amount, and exercise prices usually equal the market price on the grant date, backdating to a date with a lower price inflates the potential gain to the grant recipient.

Effectively, an option that is backdated in this manner is “in the money.” Although in-the-money options may be granted in some instances, they are tax-disadvantaged relative to options that are "out of the money" or "at the money" for a variety of reasons, including Section 162(m) of the Internal Revenue Code, which limits the tax-
deductibility of non-performance-based compensation for top executives to less than $1 million.

Up until this year, when Financial Accounting Standard 123R went into effect, most companies expensed options for financial reporting purposes using the “intrinsic value method” described in Accounting Principles Board Opinion # 25. The intrinsic value represents the difference between the option’s exercise price and the market price of the stock on the date that the granting decision was made. The date on which the granting decision was made and all terms of the option grant were set is commonly referred to as the “measurement date.” This date is important for both financial reporting and tax purposes.

If an option is granted with an exercise price equal to the market price on the measurement date, under Accounting Principles Board Opinion # 25, its intrinsic value would be zero, so no expense would be required on public financial statements. For tax purposes, nonqualified options create a tax-deductible expense for the corporation at the time that the options are exercised in the amount of the spread between the market price at the time of exercise and the exercise price, multiplied by the number of options that are exercised.

What we are discovering in the backdating scandal is that companies were not accounting for the backdated in-the-money options properly. Instead of using the stock price on the “measurement date” as the appropriate reference point for applying the intrinsic-value method and for tax purposes, most companies were using the stock price on the declared (but backdated) date of the grant in both cases.

For financial reporting purposes, this results in an understatement of compensation expenses and an overstatement of earnings, as the grant of an in-the-money option was concealed from shareholders. For tax purposes, the effect of using the backdated option grant date as the measurement date is that, when the options are exercised, the company experiences a larger tax deduction than what it should have if it used the appropriate date — the one on which the grant terms were actually determined.

The in-the-money portion of the backdated options might also cause problems with Section 162(m), because that portion of the option grant would not be performance-based. The SEC and Department of Justice have taken the position that the concealment of this practice from shareholders through the misrepresentation of financial statements constitutes financial fraud. The Internal Revenue Service will likely pursue the payment of additional taxes and penalties as a result of tax benefits that were inappropriately taken in the past.

**The Fallout**

Although it will take years for the full fallout from the option backdating scandal to become known, we are learning more about the potential ramifications every day. Some
of the companies that come under suspicion for backdating experience large and immediate declines in the value of their stock, whereas others do not.

It appears that the stocks that get hit the hardest are those of smaller firms, because of proportionately higher costs of fixing the problem, and those with more apparent backdating problems. The costs of fixing option-granting problems are not immaterial; it was recently revealed that Mercury Interactive had spent more than $70 million in legal fees and other costs during the nine months it was fixing its option-granting problems. Moreover, as a result of its delisting for not filing its financial statements on time, Mercury had to pay a $7.1 million penalty to creditors and grant them an option to redeem their notes at a premium that would, if exercised, cost the company an additional $40 million.8

The penalties that can be extracted by creditors because of the “technical defaults” caused by the failure of companies that are attempting to remedy backdating problems to file their financial statements on time have not gone un-noticed. In particular, hedge funds are starting to declare technical default on behalf of bondholders to demand either immediate repayment of the debt or significant additional fees in order to grant extensions of default deadlines.9

The costs mentioned thus far do not include costs of ongoing litigation, the damage to the firm’s reputation created by the appearance of managerial self-dealing and the disruption in operations. In terms of litigation, recent estimates suggest that more than 100 cases have been filed alleging that companies backdated option grants.

In many instances, the litigation is likely to lead to settlements paid by insurance companies that provide director and officer liability coverage, and these insurers will in turn be forced to re-assess the extent of and pricing for D&O policies in the future. It is likely that some auditors will also be sued at some point for their role in, or because of their inability to detect, the erroneous accounting for backdated stock options.

We also have learned that, in many of the cases where accounting investigations began with backdating, the inquiries have found additional problems, including forgery of documents to conceal the practice. In these cases, the Department of Justice and SEC have filed both civil and criminal charges against people who were allegedly involved. Many executives have also been fired, and more actions are sure to come.

There is a bright side to all of this. In the future the SEC’s new disclosure rules for executive compensation, coupled with heightened awareness of this issue, should force boards of directors to be more critical of option-granting practices and disclose them to shareholders in a more transparent manner. After all, it is the responsibility of the board to ensure that option grants are made with both the regulatory framework and the best interests of shareholders in mind.

1 David Yermack,, Good timing: CEO stock option awards and company news announcements, 52 J. Fin. 449 (1997).


5 Randall A. Heron and Erik Lie, *Does backdating explain the stock price pattern around executive stock option grants?*, J. FIN. ECON., forthcoming.


