Testimony of

Erik Lie
Associate Professor of Finance
Henry B. Tippie College of Business
University of Iowa

Before the U.S. Senate Committee on Banking, Housing, and Urban Affairs

September 6, 2006

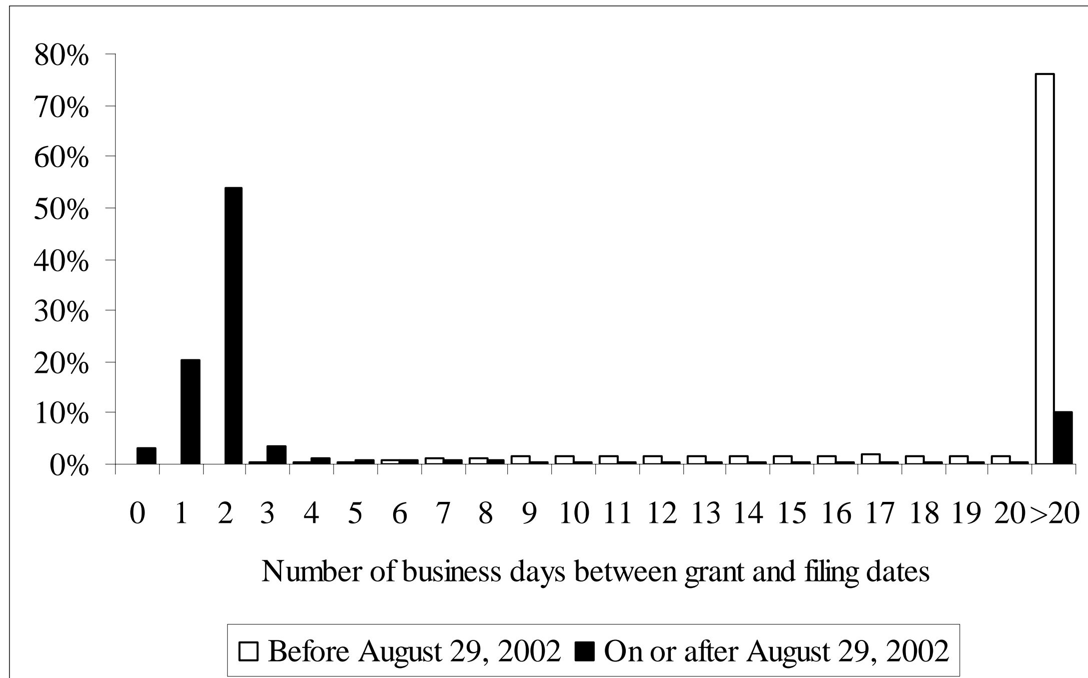
Chairman Shelby, Ranking Member Sarbanes and Members of the Committee:

Thank you for inviting me to testify today about stock options backdating. In theory, stock options can be used to motivate executives and other employees to create value for shareholders. However, they have also been used to (i) conceal true compensation expenses, (ii) cheat on corporate taxes, and (iii) siphon money away from shareholders to option recipients. I will take this opportunity to offer some background on stock options and stock option grants, describe the practice of backdating, and make some recommendations for the future.

BACKGROUND ON STOCK OPTIONS AND STOCK OPTION GRANTS

Let me first provide some background on and mention some key aspects of executive stock options and option grants.

- A stock option gives its owner the right to buy the stock of the company in the future.
- Stock options are granted to executives at various intervals. It is common to grant options once a year, though it is also possible for executives not to be granted options in a year or to be granted options numerous times in a year. In most cases, there is no fixed schedule to these grants, meaning that they do not occur on the same date (e.g., on July 1) in consecutive years.
- Before August 29, 2002, executive option grants had to be filed anywhere from 10 business days to more than a year after the grant, depending on (i) when a grant occurred within a calendar month and fiscal year and (ii) whether a Form 4 or Form 5 was used when filing the grants with the SEC. Under the current regulations that took effect on August 29, 2002 as part of the Sarbanes-Oxley Act, option grants to executives have to be filed with the Securities and Exchange Commission (SEC) within two business days. Distributions of the number of days between the official grant date and the filing date based on a sample of about 40,000 grants to top executives between 1996 and 2005 are given in the graph below. The new filing requirement dramatically reduced the lag between the grant date and the filing date. Importantly, about 22% of grants since August 29, 2002 were filed late, and almost 10% were filed at least one month late.



- Most options granted to executives expire after exactly 10 years.
- The price at which the stock can be bought is determined at the time of the grant and generally does not change. It is called the "exercise price" or the "strike price."
- Most executive stock options are granted "at-the-money," i.e., the exercise price is set to equal the stock price on the day of the grant. ("In-the-money" means that the exercise price is below the stock price, and "out-of-the-money" means that the exercise price is above the stock price.)
- In a sample of 40,000 grants from 1996 to 2005, the exercise price matches the closing price on the grant day in 50% of the cases and the closing price on the day before the grant day in 12% of the cases.
- There are several reasons why options are granted at-the-money:
    - Accounting Principles Board (APB) Opinion No. 25, which was phased out in 2005, allowed companies to expense options according to the intrinsic value method, whereby the expense equals the difference between the fair value of the underlying stock and the exercise price of the option. Under this rule, at-the-money options did not have to be charged against reported earnings. (Under FAS 123R, which replaced APB 25, companies have to expense the fair market value of the options at the time of the grant.)
    - Unlike in-the-money grants, at-the-money grants qualify as performance-based compensation. As such, at-the-money grants receive favorable tax treatment under Section 162(m) of the Internal Revenue Code, which limits the deductibility of nonperformance-based compensation for tax purposes to one million dollars per executive.
    - Incentive stock options (ISOs), which are often a part of broad-based option plans that could qualify for more favorable tax treatment than non-qualified options at the individual level, cannot be granted in-the-money. Note, however, that most options granted to executives are non-qualified options

    - (NQOs), and not ISOs, as ISOs are limited to a value of $100,000 per employee per calendar year and also count as income in the determination of the Alternative Minimum Tax (AMT).
    - At-the-money grants might be perceived as a better incentive mechanism than in-the-money options, because executives are only rewarded if the stock price increases.
- The practice of granting options at-the-money provides the incentives to time the grant to occur on a day when the stock price was particularly low and/or to manipulate the information flow around the grant date. (Note that these incentives would be present for in-the-money and out-of-the money grants also, provided that the exercise price is a function of the stock price, e.g., 90% or 110% of the stock price.)
- Some potential strategies that might be used to inflate the value of option grants include the following:
    - *Spring-loading/Bullet-dodging*: The terms "spring-loading" and "bullet-dodging" refer to the practices of timing option grants to take place before expected good news or after expected bad news, respectively. They have also been referred to as "forward dating."
    - *Manipulation of the information flow*: This refers to the practice of timing corporate announcements relative to known future option grant dates. For example, if a firm will soon announce a share repurchase plan that is expected to raise the stock price, this announcement might be postponed until after the option grant.
    - *Backdating*: This refers to the practice of cherry-picking a date from the past when the stock price was relatively low to be the official grant date.

RESEARCH ON OPTION GRANT TIMING

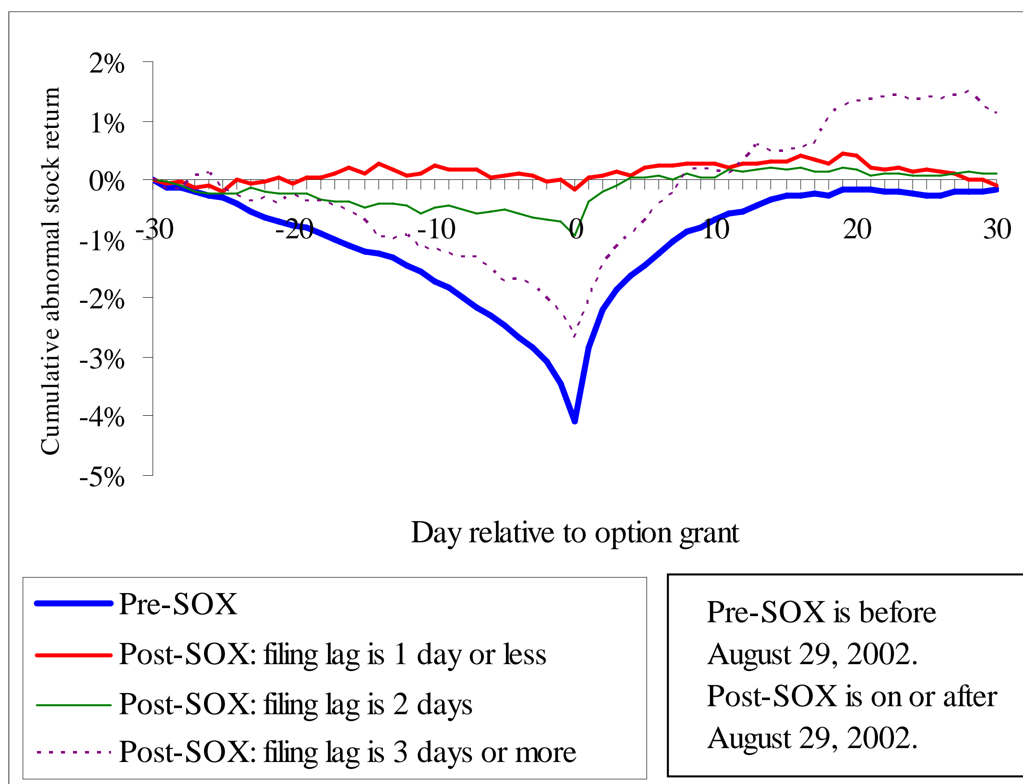
In a 1997 study entitled "Good timing: CEO stock option awards and company news announcements," David Yermack of New York University reported that the average abnormal stock return during the months after option grants to CEOs between 1992 and 1994 exceeds 2%, which he interpreted as evidence that the grants are timed to occur before anticipated stock price increases (i.e., spring-loading).

In a 2000 study entitled "CEO stock option awards and the timing of corporate voluntary disclosures," David Aboody of UCLA and Ron Kasznik of Stanford University reported that the average abnormal stock return is positive even for a subsample of grants between 1992 and 1996 that appear to be scheduled. They interpreted this as evidence that the information flow around grants is manipulated.

In my 2005 study entitled "On the timing of CEO stock option awards," I documented negative abnormal stock returns before and positive returns after CEO option grants between 1992 and 2002, and these trends intensified over time. I further reported that the portion of the stock returns that is predicted by overall market factors exhibits a similar pattern, prompting my conclusion that "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).

In a soon-to-be-published study entitled "Does backdating explain the stock price pattern around executive stock option grants?" that I coauthored with Randy Heron of Indiana University, we found further evidence in support of my earlier backdating argument. As noted earlier, a provision in Sarbanes-Oxley reduces the SEC filing requirement for new option grants to two days from the earlier requirements that allowed executives to report grants up to several months after the grant date. To the extent that companies comply with this new requirement, backdating should be greatly curbed. Thus, if backdating explains the stock price pattern around option grants, the price pattern should diminish following the new requirements. Indeed, we found that the stock price pattern is much weaker since the new reporting requirements took effect. Any remaining pattern is concentrated on the couple of days between the reported grant date and the filing date (when backdating still might work), and for longer periods for the minority of grants that violate the two-day reporting requirements. I replicated these results in the figure below using a sample of about 40,000 grants to top executives during the period 1996-2005. We interpreted the findings as strong evidence that backdating explains most of the abnormal price pattern around option grants.



In an unpublished study entitled "What fraction of stock option grants to top executives have been backdated or manipulated?" Randy Heron and I used a sample of 39,888 grants to top executives across 7,774 companies between 1996 and 2005 to estimate the following:

- 14% of all grants to top executives dated between 1996 and 2005 were backdated or otherwise manipulated.
- 23% of unscheduled, at-the-money grants to top executives dated between 1996 and August 2002 were backdated or otherwise manipulated.
- This fraction was more than halved to 10% as a result of the new two-day reporting requirement that took effect in August 2002.
    - Among the minority of unscheduled, at-the-money grants after August 2002 that were filed late (i.e., more than two business days after the purported grant dates), 20% were backdated or otherwise manipulated.
    - Among the majority of unscheduled, at-the-money grants after August 2002 that were filed on time, 7% were backdated or otherwise manipulated. (The benefit of backdating is naturally greatly reduced in such cases.)
- The prevalence of backdating differs across firm characteristics; backdating is more common among
    - tech firms,
    - small and medium firms (i.e., those with a market capitalization less than $1 billion), and
    - firms with high stock price volatility .
- The auditing firm is only modestly associated with the incidence of backdating.
    - PricewaterhouseCoopers is associated with a slightly lower fraction of backdated grants after controlling for other factors.
    - Non-big-five auditing firms are associated with a higher fraction of both late filings and unscheduled grants, which appear to result in more backdating.
- 29% of firms that granted options to top executives between 1996 and 2005 manipulated one or more of these grants in some fashion.

IS OPTION GRANT TIMING ILLEGAL?

There is an ongoing debate regarding whether spring-loading and bullet-dodging are illegal. These practices have been compared to insider trading of stock. The debate hinges on the definition of the "harmed party." In regular insider trading cases, one party in the transaction possesses inside information that the other party (the harmed party) does not possess. In cases of option grants, some have argued that both parties, i.e., the option recipient and the Board of Directors of the firm that grants the options, have access to the same inside information, so it is not the case that the option recipient exploits an informational advantage. The other point of view is that insiders, with the consent of the Board of Directors, are using their informational advantage to extract additional compensation from the firm's owners (shareholders). Under this viewpoint, the harmed party would be the firm's existing shareholders, who do not possess the same information, and whose ownership value is reduced to a greater degree than would otherwise be the case.

Backdating is less ambiguous. If options purported to be at-the-money on the backdated grant date were in-the-money on the actual grant date (which should be the measurement date for financial and tax reporting purposes) and not properly accounted for, then

- the firm's reported earnings were too high according to the accounting regulations (under both APB 25 and FAS 123R),
- the firm's taxes might have been too low (due to IRC § 162(m), and because the deductible spread between the exercise price and the stock price at the time of the actual option exercises is artificially inflated),
- if the options are ISOs, one of their requirements for their favored tax-status have been violated, and
- any requirement in the option plan that the options should be granted at the fair market value is violated.

In addition, to implement the backdating strategy, documents might have been forged, which is a federal offense.

CONCLUSION

Backdating of option grants was a pervasive practice among publicly traded corporations in the U.S. in the late 1990s and the beginning of this century. My own research suggests that spring-loading, bullet-dodging, and manipulation of the information flow was either significantly less prevalent or less successful in the aggregate in producing immediate gains for the option recipients during the same period.

The problem of backdating can be eliminated by requiring grants to be filed electronically with the SEC on the same day that they are granted. Given that (i) the form for filing this information is very simple and (ii) the forms can be filed online, this is a reasonable requirement, and, in fact, some grants are already filed on the grant date. Of course, this requirement has to be strictly enforced with appropriate penalties for any violation, such that the frequency of late filing that is evident for the last few years is greatly reduced.

As the problem of backdating is eliminated, the problems of spring-loading, bullet-dodging and manipulation of the information flow might become more prominent. Thus, it is critical to clarify whether these alternative strategies are legal. If so, restrictions to minimize their occurrence should be developed. In particular, options should not be granted near major corporate announcements. Further, there should be timely and complete disclosure of grants.

Finally, to eliminate timing relative to recent stock prices, the benchmark stock price should be the price on the grant date. For example, if the options are granted at-the-money, the exercise price should be set to equal the stock price on the grant day rather than the stock price on the prior day, which is a fairly common practice (see earlier statistics). This eliminates the possibility that options are granted on a day when the price has increased significantly but the prior day's lower price is used for contracting purposes.