

## Unethical Executives and Corporate Misbehavior

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## **Abstract**

This paper provides evidence that unethical executives (CEOs and CFOs) manage their firms in unethical ways. We identify executives of questionable ethical character as those who appear to have systematically engaged in stock option backdating and test whether these executives lead their firms to engage in other suspect corporate activities. With respect to financial reporting, we find that the firms that unethical executives manage are more likely to just meet or beat analyst forecasts and have larger discretionary accruals. To help establish causality, we implement a difference-in-differences approach and find a significant increase in the propensity to meet or narrowly beat analysts' earnings forecasts after unethical executives join their firms. Unethical executives are also more likely to use corporate resources for personal gain, in that they make more acquisitions and their acquisition announcements are met by lower stock market reactions. The differential market response is concentrated in acquisitions of private targets, whose opaqueness may provide suspect executives with greater flexibility to divert corporate resources or hide accounting irregularities.

*“Once a cheater, always a cheater.” - Anonymous scorned lover*

## **I. Introduction**

Stakeholders in the United States have born staggering losses over the last decade as a result of the ethically repugnant behavior of many corporate executives. Scandals at firms such as Enron, Worldcom, Tyco, and Healthsouth exposed senior executives who were complicit in perpetuating fraudulent activities that ultimately resulted in billions of dollars in shareholder losses. As a result, the topic of business ethics has received a dramatic increase in attention from the U.S. legislature, regulatory bodies such as the Securities and Exchange Commission (SEC), the popular press, and from business schools over the last decade.<sup>1</sup> In contrast, academics have focused relatively little energy on empirical work investigating the affect of senior management ethics on firm operations.

The dearth of empirical work in this area mainly stems from the fact that the ethical character of corporate executives is extremely difficult to empirically quantify. As a result, most prior literature concentrates on a small subsample of senior managers where public allegations of corporate misconduct can be observed (e.g. Karpoff and Lott (1993); Alexander (1999); Murphy, Shrieves, and Tibbs (2009)).<sup>2</sup> One obvious shortcoming of this approach is that it imparts an ex-post selection bias on the sample of managers (and their affect on shareholder value). Only dishonest executives who have been caught are studied.

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<sup>1</sup> According to the Aspen Institute: Center for Business Education, the number of MBA programs that require a course dedicated to societal and/or ethical issues has increased from 34% in 2001 to 79% in 2011.

<sup>2</sup> Karpoff and Lott (1993) examine 132 cases of alleged and actual fraud and find an abnormal return of -1.34% around the initial allegation – translating to approx \$60.8 million loss in market value. Alexander (1999) finds that initial announcements of corporate misconduct resulting in CEO termination have a stock price reaction that is 18.5 percentage points worse than announcements not associated with CEO terminations.

In this paper, we propose a new and innovative way to identify corporate executives of questionable ethical character (i.e., “suspect” executives) and investigate the impact of executive ethics on firm activities and financial reporting. We identify suspect executives as those that appear to be systematically backdating their option grants and/or exercises. Option backdating refers to the manipulation of stock option grant or exercise dates (and therefore grant or exercise prices) in order to maximize the executive’s eventual payout. Executives had considerable flexibility in selecting option grant and exercise dates on an ex-post basis prior to the enactment of the Sarbanes-Oxley Act (SOX) on August 29, 2002.

In addition to maximizing payouts for executives, there are notable consequences of option backdating from the firm’s perspective. Any gains received by an executive as a result of backdating activity are likely to impose a symmetric and offsetting cost that is born by shareholders. Thus backdating, in general, serves as a covert mechanism that executives might employ to expropriate wealth from the firm. Although one recent paper (Gao and Mahmudi (2011)) argues that option grant backdating may serve as an efficient way to contract with risk-averse managers, we continue to argue that option backdating is unethical behavior. This is because option backdating as it was practiced is widely thought to be illegal, and, to our knowledge, had never been disclosed by any executive to shareholders.<sup>3</sup> As such, option backdating should serve as a reasonable mechanism for isolating a subset of executives that have revealed their “suspect” character.

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<sup>3</sup>The S.E.C. brought many cases against executives for backdating stock option grants arguing that the practice represented a fraudulent and deceptive scheme to provide undisclosed compensation to executives. For example, the SEC claimed “that between 1994 and 2005 UnitedHealth concealed more than \$1 billion in stock option compensation by providing senior executives and other employees with “in-the-money” options while secretly backdating the grants to avoid reporting the expenses to investors.” As part of a settlement with the SEC, William W. McGuire, M.D., the former Chief Executive Officer and Chairman of the Board of UnitedHealth agreed an enforcement action totalling \$468 million (see SEC Litigation Release No. 20836 / December 22, 2008). In the case of option exercises, concealed backdating for the purpose of reducing a tax burden is likely actionable under the antifraud provisions of the Internal Revenue Code (Sections 7201, 7206, 7207).

Our study contributes to the literature that examines the relationship between executive characteristics and the economic outcomes of the firms that they manage (Hambrick and Mason, 1984; Bertrand and Schaefer, 2003; Chatterjee and Hambrick, 2007; Hambrick, 2007). Prior academic research has focused on executive characteristics such as overconfidence (Malmendier and Tate (2005), political affiliation (Hutton, Jiang, and Kumar (2010)), gender (Huang and Kisgen (2009)), narcissism (Chatterjee and Hambrick (2007)), personal risk taking (Cain and McKeon (2011)), and personal tax aggressiveness (Chyz (2011)). However, we are not aware of any study that examines the effect of executive ethics (ex-ante) on corporate outcomes. In this paper we identify corporate executives that have an ethically questionable character and find that the firms that these executives manage are more likely to meet or narrowly beat their earnings targets, use more discretionary accruals, and are more likely to make value-destroying acquisitions than matched firm counterparts.

We begin the process of identifying suspect executives by collecting all ‘CEO’ and ‘CFO’ option grants and exercises from the Thompson Financial Network Insider Filing Data Feed. We then classify each option grant/exercise as ‘likely’ backdated if it occurs on the most favorable day of the month. Since approximately 5% of observations should correspond with the most favorable day of the month even when no backdating is present, we impose a more restrictive classification in order to maximize the signal-to-noise ratio in our identification. We require an executive to have at least two likely backdated option observations in order for that executive to be classified as suspect. Our procedure identifies 458 unique executives (CEO or CFO) with questionable ethical standards and asks whether such executives are associated with firms that exhibit greater tendencies to meet or beat earnings expectations, use discretionary accruals, or participate in abnormal levels of acquisition activity.

We match our sample of suspect executive firm years to a corresponding sample of firm years where firm executives have not engaged in option backdating activity. Our results show

that suspect executive firms are 15% more likely than their matched counterparts to meet or narrowly beat (by 1¢ or 2¢) analysts' consensus earnings forecasts. Our results are robust to several alternate measures of analysts' earnings expectations and continue to hold in a multivariate setting after controlling for firm characteristics such as growth opportunities, institutional ownership, and corporate governance characteristics.

If suspect executives strategically meet or beat analyst forecasts, we might expect to find more evidence of earnings management activity in the suspect executive sample. In support of this conjecture, we find that the absolute value of discretionary accruals is more than 14% higher for firm years with unethical executives. However, unlike our earlier analysis of earnings surprises, the elevated levels of discretionary accruals appear to be concentrated with suspect CFOs rather than suspect CEOs. Our results are consistent with those by Jiang, Petroni, and Wang (2009) and are intuitively appealing since financial reporting is primarily the responsibility of the CFO. Again, our results continue to hold in a multivariate setting after controlling for other firm characteristics.

Overall, our findings indicate that suspect executives are associated with firms that exhibit a greater propensity to meet or beat earnings thresholds as well as use discretionary accruals. However, this correlation does not indicate a causal link and it is clearly possible that firms that engage in these types of practices are more likely to attract executives with questionable ethics. To help disentangle the causal relation we employ a difference-of-differences test and find that the propensity to meet or narrowly beat earnings expectations increases significantly in the three years after a suspect executive arrives at the firm. Overall, our financial reporting results provide evidence that executives of suspect character are more likely to break rules to mislead outside capital market participants when it is in their own interest.

We conclude our analyses by investigating the investment activities of unethical executives. Prior studies (Jensen (1986), Lang, Stultz, and Walkling (1991), and Morck, Shleifer, and Vishny (1990)) provide evidence that excessive acquisitions (e.g., empire building) provide numerous pecuniary benefits for bidder firm executives but often damage the welfare of shareholders. We find that in the first six years of a suspect executive's tenure, firms with suspect executives are more likely to make acquisitions than a sample of matched firms. In addition, suspect firm acquisitions are met by significantly lower stock market returns at the time of the acquisition announcement. This differential market response is concentrated in private target acquisitions and is consistent with the idea that private targets allow unethical executives greater flexibility to divert corporate resources or hide accounting irregularities.

The remainder of the paper proceeds as follows. The next section discusses our identification of executives with questionable ethical standards. Section 3 discusses the data and our sample. Section 4 investigates the effect of suspect executives on firm outcomes. Section 5 concludes.

## **II. Identifying Corporate Executives with Questionable Ethical Standards**

Identifying a suitable proxy for the ethical character of corporate executives is not straightforward. Investigations that identify ethically corrupt executives by examining a subsample of managers where public allegations of misconduct can be observed potentially impart an ex-post selection bias, since only unethical executives who have been caught are studied. We propose an innovative way to identify ethically questionable executives ex-ante by examining executive actions that are both unethical and observable: option backdating.

Option backdating was first uncovered in the context of option grants (Lie, 2005; Heron and Lie, 2007). The reporting flexibility afforded to corporate executives prior to SOX gave executives up to 45 days after the company's fiscal year-end to report option grants. Because

executives have private incentives to receive stock option grants at low prices, the pre-SOX reporting environment provided executives with the opportunity to select grant dates with low prices on an ex-post basis. Heron and Lie (2007) find evidence consistent with option grant backdating, and that these patterns are significantly diminished following the stricter reporting requirements that accompanied SOX.

Several more recent studies have uncovered a similar pattern around executive stock option exercises (Dhaliwal, Erickson, and Heitzman (2009), Cicero (2009)). With respect to option exercises, executives' private incentives depend on their disposition of the underlying option shares. When executives exercise their options and hold the underlying shares, they have a personal tax incentive to exercise when prices are low. Alternatively, executives who immediately sell their underlying shares have a straightforward incentive to exercise when prices are high. However, it is unlikely that executives have the ability to backdate option exercises when the underlying shares are sold in the open market since the counterparty would purchase at an artificially elevated price. It is much more likely that executives have the ability to backdate option exercises when the underlying shares are sold back to the executive's own company (see Cicero (2009)). Both Dhaliwal, Erickson, and Heitzman (2009) and Cicero (2009) find evidence consistent with option exercise backdating both when executives exercise their options and hold the underlying shares and when they exercise their options and sell the underlying shares back to the company. Consistent with the evidence on option grant backdating, option exercise backdating activity is significantly reduced in the post-SOX period.<sup>4</sup>

From the firm's (i.e. shareholders') perspective there are important implications for both option grant and exercise backdating. For option grants, any gain that accrues to an executive as

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<sup>4</sup> Prior to the enactment of Sarbanes Oxley, executives had up to 10 days after the month of their exercise decision to report the exercise date. Similar to the reporting change in option grants, this reporting requirement was changed to two business days following the exercise in the post-SOX period.



a result of backdating comes at the expense of shareholders. Furthermore, executives that backdate their option exercises and sell the underlying shares back to the company create an additional company cash outflow that is pocketed by the executive. In cases where an executive backdates an option exercise to a low price and holds the underlying shares, any reduction in the executives' tax liability is likely to increase the firm's tax liability.<sup>5</sup> Thus option backdating merely serves as a tool for executives to covertly expropriate wealth from shareholders. In addition, stealth option backdating violates anti-fraud and tax laws. As such, these actions clearly are unethical, and any executive participating in such activities lacks the ethical character that should be expected of someone in their position.

Consistent with prior literature, we classify option grants and exercises that occur on the most favorable day of the month as 'likely' backdated (see Cicero (2009), Bebchuk, Grinstein, and Peyer (2010)). However, assuming that option grant and exercise dates are randomly distributed across time, one should expect approximately 5% of dates to correspond with the most favorable day of the month. We face a tradeoff between the accuracy of our classification and the number of suspect executives in our sample (i.e. power of our tests). Classifying all executives with at least one likely backdated option grant/exercise introduces significant noise in our identification process, since many lucky executives will be incorrectly identified as suspect. To maximize the signal-to-noise ratio in our identification, we require an executive to have at least two likely backdated option observations in order for that executive to be classified as suspect.

It is clear that executives who backdated options engaged in a stealth inappropriate activity for personal gain, exposing the outside owners of their firms to unexpected risks and in

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<sup>5</sup> For Non-Qualified stock options, a tax deduction accrues to the company on the exercise day equal to the difference between the market and exercise prices. If the exercise is backdated to occur at a low price, the company forgoes a portion of this deduction.

many cases eventual large losses. Backdating should therefore serve as a reasonable mechanism for isolating a subset of executives that have revealed their “suspect” character. In terms of the classic stages of moral judgment proposed by Lawrence Kohlberg (1969), backdating is consistent with stage two development, which is marked by an “egoistic orientation” and ethical judgments that are selfish in nature, and result in actions intended to further personal interests. We consider whether this ethical perspective then drives the actions that these executives take on behalf of their firms. In particular, we test for whether these executives pursue similarly selfish interests in their financial reporting and investment decisions (with a focus on acquisition activity). We find anecdotal support for this conjecture in the case of Peregrine Systems. According to a SEC complaint, Peregrine executives systematically backdated their option grants during the period from 1997 to 2002.<sup>6</sup> The complaint also indicates that Peregrine's publicly reported financial results met or exceeded analysts' expectations during the time that these executives were at the firm, which enabled the firms' share price to climb from \$2.25 to a high of \$79.50. Additionally, during the fraudulent period Peregrine sold equity securities in order to acquire corporations and other assets.<sup>7</sup> Our study aims to investigate whether such an association between executive ethics and corporate outcomes is pervasive.

### **III. Data**

We collect senior executive option grants, option exercises and stock dispositions from the Thompson Financial Network Insider Filing Data Feed (IFDF), which is designed to capture all U.S. insider activity as reported on Forms 3, 4, 5, and 144. For option grants, we investigate the

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<sup>6</sup> Compliant filed by the Securities and Exchange Commission against Peregrine Systems Inc. in United States District Court for the Southern District of California.

<sup>7</sup> Both Peregrine Systems' CFO and CEO have been identified as suspect executives in our sample.

sample period from January 1, 1992 to December 31, 2009.<sup>8</sup> We find 64,706 option grants where the highest *rolecode* for an executive is listed as ‘CEO’ or ‘CFO’ after limiting our sample to those with appropriate cleanse codes as identified by Bebchuk, Grinstein and Peyer (2010).<sup>9</sup> We treat multiple grants to the same executive on the same day as a single observation. Before classifying option grants as ‘likely’ backdated, we exclude all regularly scheduled grants as well as those that occur during an ex-dividend month, at the time of an annual meeting, or are not at the money.<sup>10</sup> We classify the remaining 19,398 option grants as likely backdated if they occur on the most favorable (i.e., lowest stock price) day of the month, and in addition, require that all likely backdated grants in the post-SOX period be reported at least 14 days after the SEC required reporting date. This final requirement is consistent with Cicero (2009) and increases the likelihood of a long look-back period. Our procedure identifies 3,009 option grants to 2,507 unique executives as likely backdated out of the total sample of 19,398 option grants. We report the frequency of grants that occur on the ten most favorable days of the month in Panel A of Figure 1. Consistent with the results of prior literature (Bebchuk, Grinstein and Peyer (2010)), Panel A shows that approximately 14% of option grants in the pre-SOX period occur on the most favorable day of the month.

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<sup>8</sup> The beginning of our sample period corresponds with Lie (2005) who states “*Since 1992, the SEC has required firms to disclose certain information in proxy statements about stock option grants to top executives during the fiscal year.*”

<sup>9</sup> As in Bebchuk, et al (2010) our sample of executive option grants is limited to those with cleanse codes that equal ‘R’, ‘H’, or ‘C’.

<sup>10</sup> Additional filters are consistent with those imposed by Bebchuk, Grinstein, and Peyer (2010). Scheduled grants include those that occur within in a 3-day window around the one year anniversary of a previous grant to the same individual. Ex-Dividend month grants include those that occur during the same calendar month that a stock has an ex-dividend date. Annual meeting grants include any grant that occurs within one trading day of a firm’s annual meeting date. Grants not issued at the money include any grant where the strike price differs by more than 1% from the closest CRSP closing price in the 3-day window around the option grant date.

For option exercises, we investigate the sample period from August 15, 1996 to December 31, 2009.<sup>11</sup> Consistent with our option grant collection procedures, we collect 39,842 option exercises where the highest *rolecode* for an executive is listed as ‘CEO’ or ‘CFO’ after limiting our sample to those with appropriate *derivative codes*, *transcodes*, and *cleanse codes*.<sup>12</sup> We treat multiple exercises by the same executive on the same day as a single observation. Following Cicero (2009), we partition all option exercises into three mutually exclusive categories: i) exercise-and-hold, ii) exercise-and-sell company disposition, and iii) exercise-and-sell open market transaction. Identification for each option exercise into one of these three categories is obtained by merging option exercise data with executive stock sales during the [-1, +1] trading day window around the option exercise date from Table 1 of the Thompson Financial Insider Filers Database. Option exercises with no sales transactions are categorized as exercise-and-hold, option exercises with sales transaction codes marked ‘F’ are categorized as exercise-and-sell company disposition, and option exercises with sales transactions marked ‘S’ and/or with multiple sale transaction codes are categorized as exercise-and-sell open market transaction.

We exclude all exercise-and-sell open market transactions from the pool of option exercises that are potentially backdated because it is unlikely that such counterparties would accept higher than market prices. In addition, we exclude option exercises in the post-SOX period that are reported within 15 days of the option exercise. For the remaining 6,459 option exercises, we classify each as ‘likely’ backdated if it occurs on the most favorable day of the month. For exercise-and-hold transactions, the most favorable date corresponds to the lowest stock price of the month. Out of 4,593 potential exercise-and-hold transactions, we classify 644

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<sup>11</sup>The beginning of our sample period corresponds with the date when data regarding the sale of underlying option shares are first available (Cicero (2009)).

<sup>12</sup> Our sample is limited to those with derivative code equal to ISO (Incentive Stock Option), EMPO (Employee Stock Option), or NONQ (Non-Qualified Options). Transcodes are limited to ‘M’, ‘X’, or ‘J’. We delete observations with cleanse codes equal to ‘S’ or ‘A’.

as likely backdated. For exercise-and-sell company disposition transactions, the most favorable day of the month is the highest stock price day. We classify 212 exercise-and-sell transactions as likely backdated out of the sample of 1,866 observations. We again report the frequency of exercise-and-hold and exercise-and-sell company disposition transactions that occur on the 10 most favorable days of the month in Panels B and C of Figure 1. Our results are again consistent with prior literature (Cicero (2009)) and show that approximately 13% of exercise-and-hold and 11% of exercise-and-sell company disposition transactions occur on the most favorable day of the month in the pre-SOX period.

Our final sample contains 19,398 option grants and 6,459 option exercises of which we identify 3,865 as likely backdated. We require an executive to have at least two likely backdated option grants/exercises in order to identify that executive as suspect. Given that our sample is comprised of 12,736 executives who each have an average of 2.03 option grants and/or exercises, the expected number of executives that would be classified as suspect by random chance should be approximately 32. In our sample, we actually classify 458 unique executives from 358 unique firms as having a questionable ethical character.

We divide our sample into firm-year observations where a suspect executive is present and firm-year observations where a firm does not employ an executive with any likely backdated option grants or exercises. We estimate executive tenure for all executives by taking the first (i.e., start year) and last (i.e., end year) year that an executive is present (in a particular *rolecode* for a firm) using reported transactions from Table 1 and Table 2 of the Thompson Insider database. For the subset of suspect CFOs we obtain starting and ending dates for executive tenure by using EDGAR filings from the Securities and Exchange Commission (SEC) website in

order to improve the accuracy of our tenure windows.<sup>13</sup> Short biographies located in 10-k and DEF 14a filings were used to determine the calendar year that each executive was hired/promoted to the CFO position. The ending year for each suspect executive was then determined using the filing date of the last 10-k that the executive signed in their capacity as CFO (Principal Financial Officer). For each firm-year observation we obtain market-to-book, assets, leverage, cash flow from operations, return on assets, Tobins q, and all necessary data to calculate discretionary accruals from Compustat. We obtain market value of equity and stock returns from CRSP, institutional ownership from 13F filings obtained through Thompson Financial, and information on board of director characteristics and executive ownership from Compact Disclosure. Lastly, we obtain merger and acquisition data from the Securities Data Company (SDC) database.

Summary statistics for the full sample as well as firm years with and without suspect executives are presented in Table 1. Sample firm-years have an average market value of equity of \$3.6 billion, market-to-book value of 3.2, and leverage of 0.22. Firm-year averages across the sample of suspect executives and those without suspect executives are generally similar. For the sample of suspect executive firm-years, the average market value of equity is \$3.3 billion, market-to-book is 3.58, and leverage is 0.17. There is at least one notable difference in the averages across samples. Tobins Q is 2.48 for the sample of suspect executives versus 1.72 for the sample without a suspect executive. However, such differences do not control for potential differences in firm characteristics across the two samples. In the next section we investigate whether the personal traits of ethically challenged executives filter down to firm-level characteristics such as meeting or beating earnings estimates or earnings management.

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<sup>13</sup> We hand collect starting and ending dates for executive tenure for the subsample of CFOs where there is not a suspect CEO at the same firm. Time limitations did not allow us to hand collect all executive tenure dates. We intend to address this deficiency in future versions of the paper.

#### **IV. Empirical Results**

In this section we contrast our sample of firms with unethical CEOs or CFOs to other firms in order to see whether senior executive ethics impacts other areas of firm operations. The upper echelons theory proposed by Hambrick and Mason (1984) and Hambrick (2007) conjectures that senior executives' personal traits influence firm outcomes. Extant literature provides support for this theory by investigating directly observable executive characteristics such as age and education (Betrand and Schaar (2003)), political affiliation (Hutton, Jiang, and Kumar (2010)), and gender (Huang and Kisgen (2009)). Other studies are more creative in identifying executive traits such as narcissism (Chatterjee and Hambrick (2007)) or sensation seeking (Cain and McKeon (2011)). For example, Chatterjee and Hambrick (2007) design a narcissism index which is constructed, in part, by observing the size of the CEO's picture in the annual report and find that more narcissistic CEOs are associated with larger and more frequent acquisitions. In a similar manner, our study investigates whether firms with unethical senior executives exhibit greater tendencies to meet or beat earnings expectations, use discretionary accruals, or are involved in abnormal levels of merger and acquisition activities. On one hand, unethical executives may reduce shareholder welfare by extracting rents from shareholders in order to maximize their own private compensation. On the other hand, unethical executives may inflate a firm's net income and therefore increase firm value by avoiding corporate taxes or manipulating discretionary accruals.

##### *IV.a. Meet or Beat Earnings Expectations*

Executive compensation is increasingly made up of equity-based components, often accounting for more than half of an executives' total compensation package (Murphy (2003)). As such, executives have direct private incentives to meet or exceed the earnings expectations of analysts, since stock prices are sensitive to meeting analysts' forecasts (Bartov, Givoly, and

Hayn (2002)). In addition, it is common for executives to receive bonus compensation for meeting analysts' forecasts (Matsunaga and Park (2001)).

Prior research finds that a disproportionately large number of firms just meet or beat analysts' forecasts (Hayn (1995); Degeorge et al (1999)) and commonly interpret this as evidence that executives opportunistically manage earnings in order to meet or just exceed these thresholds. Earnings management that is solely designed to meet or beat earnings expectations gives shareholders and other investors an incomplete view of a firm's latent fundamentals and is therefore a practice of questionable ethics.

We investigate the frequency with which unethical executives just meet or beat their earnings thresholds. If the ethics of senior executives does influence firm outcomes, then we would expect that firms with suspect executives will meet or narrowly beat their earnings thresholds more frequently than other firms.

To test this hypothesis, we first create a matched sample of firm years without an option backdating executive. We match each suspect executive firm-year observation to all firm-year observations without an option backdating executive (as shown in Table 1) based on year and industry (i.e., 2-digit SIC code). From the pool of possible matches, we then select the closest firm-year match based on market value of equity (MVE), and require that the difference in MVE between matched pairs cannot exceed 50%. We successfully match 2,305 firm year observations out of the total sample of 2,360 suspect executive firm years. Statistics for market value of equity, return on assets, and leverage are similar for both suspect firm years and their matched counterparts. Specifically, for suspect firm years, we find an average market value of equity of \$2.6 billion and return on assets of 0.0002, whereas matched firms have a market value of equity of \$2.5 billion and return on assets of 0.0039. These differences between our suspect and



matched samples are both statistically and economically insignificant, thus confirming the goodness of our match.

For both the suspect and matched samples we obtain analysts forecasts from the Institutional Brokers Estimate System (IBES) unadjusted summary files. Graham, Harvey, and Rajgopal (2005) survey CEOs and find that meeting analysts' forecasts is an important earnings threshold. We therefore take the last analyst consensus mean and median earnings forecast (prior to the earnings announcement) to benchmark earnings expectations.<sup>14</sup> Our measure of earnings surprise is the actual earnings announced minus the mean or median analyst forecast from IBES. We focus on unadjusted earnings surprises as in Kaznik and McNichols (2002) and McVay et al (2004). In order to ensure that our sample distribution of earnings surprises is consistent with prior literature, we plot the distribution of annual earnings surprises between  $-10\text{¢}$  and  $+10\text{¢}$  for our full sample of 38,989 firm-year observations in Panel A of Figure 2. Consistent with Burgstahler and Dichev (1997), Bhojraj, Hribar, Picconi and McInnis (2009), and others, we find a sharp discontinuity in the distribution at  $0\text{¢}$ ,  $1\text{¢}$  and  $2\text{¢}$ .

To investigate whether earnings surprises for our sample of suspect firm years is different than their match sample counterparts, we first plot the distribution of annual earnings surprises for each sample in Panel B of Figure 2. From the figure, it is evident that the frequency of beating earnings estimates by  $1\text{¢}$  is sharply higher for our suspect sample. The frequency of just meet ( $0\text{¢}$ ) and beat by  $2\text{¢}$  is also higher for our suspect sample. We now investigate this difference in both univariate and multivariate settings.

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<sup>14</sup> Our analysis is robust to two alternate measures of analyst expectations. First, we construct a mean and median analyst forecast using the most recent forecast from each analyst in the 90 days prior to an earnings announcement. Second, we use only the last analyst forecast prior to the earnings announcement day (See Ayers, Jiang and Yeung (2006) for an analysis of which benchmark is the most appropriate for earnings targets).

We follow the methodology of McVay, Nagar, and Tang (2004) and Burgstahler and Dichev (1997) by classifying our sample of suspect firm and matched firm earnings announcements into those that just beat (by zero, one, or two cents) or just missed (by one or two cents) analysts' annual or quarterly earnings forecasts.<sup>15</sup> Specifically, we construct an indicator variable *BEAT* if the earnings surprise for an earnings announcement is 0¢, 1¢ or 2¢, and define a similar indicator variable *MISS* for earnings surprises that equal -1¢ or -2¢. We present univariate differences between suspect firms and the matched sample in Table 2.

Panel A of Table 2 shows univariate results for annual earnings announcements. We find that the frequency of *BEAT* surprises is significantly higher for our suspect sample (0.373) than for the matched sample (0.325). The difference of 0.048 is both statistically (p-value < 0.001) and economically significant, demonstrating that our suspect group meets or narrowly beats their earnings expectation approximately 15% more often than the matched sample. Alternatively, we do not find significant differences in the frequency of *MISS* observations between the suspect and matched samples (0.096 vs. 0.092). The difference in *BEAT* and *MISS* frequencies are consistent with our primary result when we measure earnings surprise against the analyst median estimate. We further investigate differences in the frequency of *BEAT* and *MISS* for subsamples of firm years that contain only a suspect CFO or only a suspect CEO. While both subsamples provide at least some evidence that the frequency of beating expectations is higher for our suspect firms, the magnitude of the difference for suspect CFOs only (0.067) is almost 50% larger than that for suspect CEOs only (0.038).

To examine whether our univariate results are robust for quarterly earnings announcements, we repeat our analysis at the quarterly horizon and present results in Panel B of

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<sup>15</sup> We consider alternate measures of just meet [0¢, 1¢] or just miss [-1¢] and also investigate actions in only the fourth quarter. All results are robust to these alternate measurements.

Table 2. While the majority of results are consistent with those presented for annual earnings surprises, there are two notable differences. First, the full sample and CFO only subsample provide evidence that suspect firms just *MISS* their earnings targets approximately 10% less often than matched firms. Second, any evidence of statistically significant differences for *BEAT* or *MISS* are no longer present in the CEO only subsample.

In order to present a complete picture of our earnings surprise findings we investigate earnings surprise results in a multivariate setting. Of particular importance are findings of several extant studies that show a significant relationship between a firm's propensity to meet or beat earnings expectations and corporate governance characteristics or executive ownership of the firm (Healy (1985), Bergstresser and Philippon (2006), Yu (2005, 2008)). If the presence of a suspect executive is correlated with the corporate governance environment, univariate tests will not properly control for these associations.

We proceed by pooling suspect and matched firm years and run the following probit regression:

$$\begin{aligned}
 BEAT_{i,t} = & \alpha_0 + \alpha_1 LnMVE_{i,t-1} + \alpha_2 MTB_{i,t-1} + \alpha_3 Leverage_{i,t-1} + \alpha_4 ROA_{i,t-1} + \\
 & \alpha_5 Board\ Size_{i,t-1} + \alpha_6 Board\ Independence_{i,t-1} + \alpha_7 Institutional\ Own_{i,t-1} + \\
 & \alpha_8 Officer\ Own_{i,t-1} + \alpha_9 Suspect_{i,t} + \alpha_{10} Suspect\_CFO_{i,t} + \varepsilon_{i,t}
 \end{aligned} \tag{1}$$

Where  $i$  and  $t$  index the firm and quarter of observation. *BEAT* is an indicator variable that equals 1 if the firm just meets or beats analysts' mean quarterly earnings estimates by 0¢, 1¢, or 2¢. We control for firm characteristics such as size (*LnMVE*), growth opportunities (*MTB*), *Leverage*, and profitability (*ROA*) as in Davis, Soo, and Trompeter (2009). In addition, the regression controls for corporate governance characteristics such as the number of people on the board of directors (*Board Size*), the percentage of independent directors on the board (*Board Independence*), and the percentage of outstanding shares that are owned by institutional investors (*Institutional Ownership*). Our final control variable measures the percentage of shares owned by

senior executives in the firm (*Officer Ownership*), this is included to capture executive incentives, which Jiang et al. (2010) show to be an important determinant for the probability that a firm meets or beats its earnings expectations.

The independent variables of interest in our regression are *Suspect* and *Suspect CFO*. *Suspect* is an indicator variable that is set to 1 if there is a suspect executive (CEO or CFO) at the firm during the quarter of earnings surprise measurement. *Suspect CFO* is an indicator variable that equals 1 if the suspect executive at the firm is a CFO. Thus, *Suspect CFO* measures the marginal effect of the CFO and potentially allows us to disentangle whether the suspect CEO or CFO sample is driving our findings.

Results for our regression are presented in Panel A of Table 3. We find a positive and significant coefficient on *LnMVE* and *ROA* indicating that larger and more profitable firms are more likely to meet or narrowly beat their earnings targets. The coefficient on *leverage* is uniformly negative suggesting that firms with higher levels of leverage are less likely to beat earnings thresholds. Our coefficient estimates for corporate governance and executive ownership variables are largely consistent with prior literature and suggest that firms with smaller boards, higher levels of institutional ownership, or higher levels of executive ownership are more likely to meet or beat their earnings thresholds.

Coefficient estimates for *Suspect* and *Suspect CFO* are consistent with univariate results. When including only *Suspect*, we find the coefficient estimate is 0.115 (in column 1) and 0.071 (in column 3), indicating that the presence of a suspect executive is associated with a 7.1% to 11.5% greater probability of meeting or narrowly beating earnings expectations. Adding *Suspect CFO* as an additional independent variable confirms prior univariate findings that results are concentrated with the suspect CFO sample. The coefficient estimate on *Suspect CFO* is 0.134 in

column 2 and 0.068 in column 4 and both are statistically and economically significant. In addition, after adding *Suspect CFO*, the coefficient estimate on *Suspect* is significantly attenuated and becomes insignificantly different from zero in the fourth regression specification.

We also investigate firm quarters that miss quarterly earnings thresholds in a multivariate setting. The dependent variable in our regression specification is *MISS*, which is an indicator variable that equals 1 if a firm misses analysts' mean quarterly earnings estimates by  $-1\phi$  or  $-2\phi$ . All independent variables are identical to those presented in equation (1). We present results for our regression in Panel B of Table 3. Our coefficient estimates suggest that smaller, less profitable (*ROA*) firms are more likely to miss their earnings targets. Coefficient estimates for *Suspect* are uniformly negative and range between -0.041 and -0.057. However, the coefficient estimates are insignificant in all regression specifications except in column 1 (statistically significant at the 10% level). Overall, our results present only modest evidence that suspect firms narrowly miss their earnings targets less frequently than other firms.

#### *IV.b. Accrual-Based Earnings Management*

The primary mechanism that senior executives can employ to meet or beat earnings targets is by managing their earnings. Consistent with much of the extant literature on earnings management, we examine such activities by looking at discretionary accruals. We calculate total accruals and its subsequent decomposition into discretionary and non-discretionary components using the modified version of the Jones (1991) model as implemented by Cohen, Dey, and Lys (2008) and Ecker, Francis, Olsson, and Schipper (2011). Specifically, total accruals for a given firm-year are defined as earnings before extraordinary items and discontinued operations less operating cash flows.

In order to determine discretionary accruals for each firm and year, we first run the following cross-sectional OLS regression in each year for all firms in the same industry (i.e., two-digit SIC code) in order to obtain coefficient estimates for  $\alpha_0$ ,  $\alpha_1$ ,  $\alpha_2$ , and  $\alpha_3$ . Such an approach adjusts for changing industry-wide economic conditions that might influence non-discretionary accruals.

$$\frac{TA_{i,t}}{Assets_{i,t-1}} = \alpha_0 + \alpha_1 \frac{1}{Assets_{i,t-1}} + \alpha_2 \frac{\Delta Sales_{i,t} - \Delta AR_{i,t}}{Assets_{i,t-1}} + \alpha_3 \frac{Net\ PPE_{i,t}}{Assets_{i,t-1}} + \varepsilon_{i,t} \quad (2)$$

where  $i$  and  $t$  index the firm and year respectively,  $TA$  equals the total accruals,  $Assets$  are the total assets,  $\Delta Sales$  is the change in sales from the prior year,  $\Delta AR$  is the change in accounts receivable from the prior year,  $PPE$  is the property, plant, and equipment, and  $\varepsilon$  is the error term.

We then use the coefficient estimates  $\hat{\alpha}_0$ ,  $\hat{\alpha}_1$ ,  $\hat{\alpha}_2$ , and  $\hat{\alpha}_3$  to calculate non-discretionary accruals for each firm-year in our sample:

$$NDA_{i,t} = \hat{\alpha}_0 + \hat{\alpha}_1 \frac{1}{Assets_{i,t-1}} + \hat{\alpha}_2 \frac{\Delta Sales_{i,t} - \Delta AR_{i,t}}{Assets_{i,t-1}} + \hat{\alpha}_3 \frac{Net\ PPE_{i,t}}{Assets_{i,t-1}} \quad (3)$$

where  $NDA_{i,t}$  are the non-discretionary accruals for firm  $i$  in year  $t$ , and all other variables are as described earlier. As such, non-discretionary accruals ( $NDA$ ) represent the portion of total accruals that are driven by firm fundamentals and therefore unlikely to be attributed to managerial control. We then obtain our measure of discretionary accruals ( $DA$ ) by deducting  $NDA$  from total accruals ( $TA$ ):  $DA_{i,t} = (TA_{i,t} \div Assets_{i,t-1}) - NDA_{i,t}$

In robustness tests we employ four alternate measures of discretionary accruals. The first three are also presented by Ecker, Francis, Olsson, and Schipper (2011) and the last is presented by Yu (2008). In the interest of brevity and because all measures yield similar conclusions, we

choose only to tabulate the additional measure as found in Yu (2008). Yu uses the following alternate equation in place of equation (2):

$$\frac{TA_{i,t}}{Assets_{i,t-1}} = \alpha_0 \frac{1}{Assets_{i,t-1}} + \alpha_1 \frac{\Delta Rev_{i,t}}{Assets_{i,t-1}} + \alpha_2 \frac{Net PPE_{i,t}}{Assets_{i,t-1}} + \varepsilon_{i,t} \quad (4)$$

The primary differences between equations (2) and (4) are that equation (4) does not contain an intercept term and uses  $\Delta Rev$  rather than  $(\Delta Sales - \Delta AR)$  in the numerator of the second term in the regression.

Consistent with our approach analyzing earnings surprises, we compare the discretionary accruals of our suspect firm years to those of a matched sample of non-suspect firm years in both a univariate and multivariate setting. Table 4 presents our univariate findings for discretionary accruals. We find that the level of signed discretionary accruals is -0.0007 for our suspect sample and -0.0020 for the matched sample. The difference between the two samples (0.0013) is insignificant. However, discretionary accruals are a transitory adjustment that must be reversed over time. Since we are not conditioning on time periods where executives have an incentive to manage earnings in a particular direction, a more appropriate estimate of earnings management is the variation in discretionary accruals, which we measure by using the absolute value of discretionary accruals (Yu (2008)).

Results presented in Table 4 show that the absolute value of discretionary accruals is larger for our suspect firm years both when using our primary model of discretionary accruals (i.e., equation (2)) and when investigating the Yu (2008) measure. For our primary measure, the absolute value of discretionary accruals is 0.081 for our suspect sample versus 0.071 for the matched sample. Differences are statistically significant at the 1% level and suggest that suspect executives use approximately 14% more discretionary accruals than other firms. Consistent with our earnings surprise findings, we also find that differences in discretionary accruals are

concentrated with the Suspect CFO sample, where the difference between suspect and matched firms is 0.016 ( $p\text{-value}=0.003$ ).

We next investigate our discretionary accrual results in a multivariate setting by pooling suspect and matched firm years and running the following regression:

$$\begin{aligned} |Disc. Accrual|_{i,t} = & \alpha_0 + \alpha_1 LnMVE_{i,t-1} + \alpha_2 MTB_{i,t-1} + \alpha_3 Leverage_{i,t-1} + \alpha_4 ROA_{i,t-1} + \\ & \alpha_5 Board Size_{i,t-1} + \alpha_6 Board Independence_{i,t-1} + \alpha_7 Institutional Own_{i,t-1} + \\ & \alpha_8 Officer Own_{i,t-1} + \alpha_9 Suspect_{i,t} + \alpha_{10} Suspect\_CFO_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (5)$$

Where  $i$  and  $t$  index the firm and year. The dependent variable,  $|Disc. Accrual|$ , is the absolute value of discretionary accruals obtained using our primary discretionary accrual measure (equation (3)). All independent variables are identical to those described in equation (1).

Results for our regression are presented Table 5. We find a positive and significant coefficient on *market to book* and negative and significant coefficient on ROA, board size, and institutional ownership. Consistent with Bergstresser and Philippon (2006) and Jiang et al. (2010), executive ownership has a positive and significant coefficient, suggesting that higher levels of stock ownership incent executives to use more discretionary accruals.

Coefficient estimates for *Suspect* and *Suspect CFO* are consistent with univariate results. When including only *Suspect*, we find the coefficient estimate is 0.009 in column 1 and 0.014 in column 3. Similar to results for positive earnings surprises, we find that adding *Suspect CFO* shows that results are concentrated with the CFO sample. The coefficient estimate on *Suspect CFO* is 0.013 in column 2 and 0.015 in column 4 and both are statistically and economically significant. In addition, after adding *Suspect CFO*, the coefficient estimate on *Suspect* becomes insignificantly different from zero.



#### *IV.c. Difference of Differences in Earnings Surprises*

Our findings thus far indicate that executives of questionable ethical character are associated with firms that exhibit a greater propensity to meet or beat earnings thresholds as well as use discretionary accruals. In addition, these abnormal activities appear most concentrated in the sample of firms with suspect CFOs. However, such correlations do not necessarily indicate a causal link between suspect executives and the actions of the firms that they manage. It is certainly possible that firms that engage in these types of questionable practices are more likely to attract executives with a questionable ethical character, or that the existing culture at a firm influences executive actions. To help disentangle the direction of causality between executive ethics and firm actions, we employ a difference-of-differences test.

To conduct our tests we begin by constructing a sample of suspect CEO and CFO transitions, where the transition year (i.e., suspect executive's start year) is the first year that the suspect CEO or CFO appears in that role with the firm. We collect firm characteristics from Compustat and CRSP for three years before and after the transition window.<sup>16</sup> We then require that each firm have available data for at least two years before and two years following the transition year in order to be included in the sample.

Our final sample contains 39 suspect CFO transitions and 44 suspect CEO transitions and we include all available information around each executive transition for three years before the suspect CEO/CFO arrives at the firm (years  $t-4$  to  $t-2$ ) and three years after the suspect CEO/CFO arrives at the firm (years  $t+1$  to  $t+3$ ). We exclude years in the transition window (years  $t-1$  and  $t$ ) because it often has anomalies associated with succession (Huang and Kisgen (2009); Chatterjee and Hambrick (2007)). We then match all firm year observations to a sample of firm years where executives have not engaged in option backdating activity. Our matching

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<sup>16</sup> We define the transition window to include the year of and before the suspect executive transition year.

procedure is based on year, industry (2-digit SIC code), and market value of equity (within 50% of the suspect firm year), as is previously described in Section III.a.

We proceed by running the following probit regression:

$$BEAT_{i,t} = \alpha_0 + \alpha_1 LnMVE_{i,t-1} + \alpha_2 ROA_{i,t-1} + \alpha_3 MTB_{i,t-1} + \alpha_4 Suspect\_firm_{i,t} + \alpha_5 Suspect\_firm * Post_{i,t} + \varepsilon_{i,t} \quad (6)$$

Where  $i$  and  $t$  index the firm and quarter of observation.  $BEAT$  (as in equation (1)) is an indicator variable that equals 1 if the firm just meets or beats analysts' mean quarterly earnings estimates by  $0\%$ ,  $1\%$ , or  $2\%$ . We control for firm characteristics such as size ( $LnMVE$ ), growth opportunities ( $MTB$ ), and profitability ( $ROA$ ). The variable  $Suspect\_firm$  is an indicator variable that is time invariant and is set to 1 if there is ever a suspect executive (CEO or CFO) at the firm.  $Suspect\_firm * Post$  is our variable of interest, where  $Post$  is an indicator variable that equals 1 if the firm year is after the suspect executive transition year. If executives of questionable ethical character influence the firms' propensity to meet or beat earnings expectations, we would expect a positive and significant coefficient on  $Suspect\_firm * Post$ .

Regression results are presented in Table 6 for the full sample of suspect executive transitions as well as for CFOs and CEOs separately. Our matching procedure controls for both year and industry effects that might be related to meeting or beating earnings expectations. We find that the coefficient on  $Suspect\_firm * Post$  is positive and statistically significant in all specifications. Coefficient estimates range from 0.257 for the suspect CFO sample to 0.357 for the suspect CEO sample. Overall, our results suggest that the actions of ethically challenged executives do influence firm outputs.

#### *IV.d. Acquisitions by Suspect Executives*

Thus far we have provided evidence that unethical executives are more likely to manipulate the earnings data that their firms provide to the marketplace. Such actions are likely

to provide tangible and immediate benefits to executives who derive a significant fraction of their income from stock-based compensation. However, while this practice might mislead investors in general, it does not necessarily go against the interests of the current shareholder, who will also benefit from any scheme to maximize the stock value in the short-run.

In this section we consider whether suspect executives are more likely to engage in real corporate activities from which they benefit, but that are damaging to shareholders. We conjecture that executives who compromise shareholder interests to increase the value of their compensation through backdating may also be willing to employ corporate resources in ways that are not value-maximizing for shareholders, but that can lead to larger personal payoffs. In particular, we analyze the acquisition activity of firms led by suspect executives, which is one of the largest and most readily observable forms of corporate investment. Specifically, we test for whether suspect executives are more likely to engage in value-destroying acquisitions.<sup>17</sup>

The acquisition data we analyze in this section comes from the Securities Data Company (SDC) Platinum Mergers and Acquisitions database. We analyze completed acquisitions of both public and private targets of any size that result in the acquirer owning 100 percent of the target. We match each firm run by suspect executives to a single control firm during the year that the suspect executive took office. Our match is based on industry (SIC2) and market value of equity. We then collect all acquisitions made by both groups of firms during the six year period beginning the year after the suspect executive took office.<sup>18</sup> Our tests in this section focus on the

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<sup>17</sup> Numerous authors have identified reasons that executives may engage in empire-building mergers that are not value-maximizing for shareholders (Jensen (1986); Lang, Stulz, and Walkling (1991); Morck, Shleifer, and Vishny (1990). More recent studies have found that monitoring by outside blockholders and stronger shareholder rights can mitigate the agency costs associated with acquisition decisions (Li, Harford and Chen (2007), Masulis, Wang and Xie (2007).

<sup>18</sup> We do not yet have clean data regarding the year our suspect executives leave their firms, and we therefore use a 6 year window to capture acquisitions that were likely to have been made during the suspects' tenures. In addition, we do not consider acquisitions in the year the suspect executives arrived at their firm since we cannot pinpoint the month of their arrival and acquisitions may have been executed or planned before they arrived.

probability and frequency of acquisition activity as well as on the 3-day cumulative abnormal returns (CARs)<sup>19</sup> surrounding the announcement dates of acquisitions, following Masulis, Wang and Xie (2007).

Univariate results for the difference in acquisition activity between our suspect and matched firms are presented in Table 7. The first interesting result that we document is that suspect executives are more likely to acquire other firms, and this increased likelihood of acquisition is concentrated in private company targets. In the six year period after and executive takes office, firms with suspect executives completed 35% more acquisitions than the matched firms (853 versus 629). Suspect firms are more likely to acquire both private and public companies, but private deals were both more common overall, and more likely to be executed by firms with suspect executives. Private deals constitute 86% of all acquisitions, and suspects were 28% more likely to acquire a public company (114 deals versus 89), but 37% more likely to acquire a private company (739 deals versus 540).

Executives may focus on private targets when initiating acquisitions for reasons that are at least partially inconsistent with shareholders' interests due to the opaque nature of private firms. For example, if an executive intends to use target assets for their private benefits, it may be in their interest not to target companies for which outside investors already have a good understanding of the nature and quality of assets in the firm. In addition, if an acquisition is at least partially motivated by earnings management flexibility, it would certainly be easier to

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<sup>19</sup>As in Masulis, Wang and Xie (2007), CARs are calculated relative to daily expected returns generated by a market model using the value-weighted market index estimated over the 200 trading day period ending 10days before the acquisition announcement date.

manipulate the earnings of a firm that has not yet made their financial statements publicly available.<sup>20</sup>

Table 7 also compares the 3-day CARs surrounding the announcement of acquisitions. Column (1) reports that acquisitions announcements by suspect firms are met with insignificant abnormal returns, whereas announcements by control firms are associated with average 3-day CARs of 0.88% ( $p\text{-value}<0.001$ ). The difference in 3-day CARs between our suspect and matched samples are -0.70% and are statistically significant at the 5% level. We also separate the acquisitions announcements by whether the target is public or private. Although the market responds similarly to announcement of public target acquisitions (approximately -2% for suspects and controls), the response is significantly different across the two groups when the target is private. Private acquisitions by suspect firms are on average met with a significant 0.52% stock price increase, and similar deals by control firms are met with a significant 1.33% price increase. The difference of 0.82% is significant at the 5% level.

It is not surprising that the market response to private acquisitions are generally positive given the findings of Fuller, Netter and Stegemoller (2002)<sup>21</sup>, but it appears that on average the benefits from these mergers are at least partially offset when the acquiring firm is under the control of unethical managers. To determine whether private acquisitions by suspect firms are more likely to destroy value, we compare the fraction of acquisitions that are met by large negative market responses across the two groups. Private firm acquisition announcements are

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<sup>20</sup> Another interesting possibility concerns the method of payment for the target. An acquirer that wants to avoid shareholder scrutiny because they are hiding fraudulent or illegal activities may be reluctant to pay for a public target with stock since there will likely be at least some shareholders opposed to the deal that may be motivated to disgrace the acquirer before a deal is consummated. On the other hand, a deviant acquirer may be more comfortable paying stock for a private target since the target shareholders would be in favor of the deal. As a result we would expect to see more negative returns on private acquisitions by suspect executives when they used stock, but similar or more positive returns to public acquisitions by suspects paying with stock.

<sup>21</sup> Fuller, Netter and Stegemoller (2002) show that returns to private acquisitions are positive on average and argue that the gains flow from better pricing due to the illiquidity of the acquired shares, the new possibility for outside monitoring of previously closely-held corporations and tax benefits to private company shareholders.

met with negative market responses of 1% or larger in 35% (31%) of instances when the acquirer is in the suspect (control) group, and the difference across these probabilities is significant at the 10% level. Using a negative 2% cutoff, the percentages change to 28% and 21%, respectively, and the difference is significant at the 0.1% level. It therefore appears clear that the market expects suspect executives to be more likely to destroy value through private acquisitions. A possible interpretation of these results is that suspect executives who make acquisitions for personal gain are more likely to target opaque private companies and that the market therefore responds less favorably to the announcement of these acquisitions.

In Table 8 we confirm these results in a multivariate framework. The control variables include the acquirer's market value of equity, leverage and free cash flow, as well as the abnormal stock price return for the acquirer in the 200 trading days preceding the acquisition announcement (calculated as the 200 day market-adjusted CAR relative to firms in the same CRSP universe size index<sup>22</sup>). To control for the influence of institutional investors and corporate governance at the acquiring firms we also include the percent of equity held by institutions and the size and independence of the acquirers' boards of directors.<sup>23</sup> We report regressions across the full sample of acquisitions, and also for public and private target acquisitions separately.

Consistent with previous multivariate specifications, our primary variable of interest is *Suspect*, which is an indicator variable that equals 1 for firms that have a suspect executive. Results presented in Table 8 show a negative and significant coefficient estimate for *Suspect* in the full sample. The magnitude of the coefficient estimate is -0.0095 ( $p$ -value=0.005), indicating

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<sup>22</sup> We do not use a market model to compute these CARs since it isn't clear what period should be used for estimating the market model parameters.

<sup>23</sup> Unfortunately, we cannot control for the level of shareholder protection as in the Masulis et al (2007) paper since that data is only easily accessible for the S&P 1500 firms covered by Riskmetrics. To generate this variable for firms in our regressions will require hand collection of the data from firms' bylaws, and this will be completed in the future.

that the 3-day CAR is -0.95% lower for suspect acquisition announcements when compared to the acquisition announcement returns of other firms. We continue to find that this effect is concentrated with private firm targets (-0.0098,  $p$ -value=0.005) and that the coefficient on *Suspect* in the public firm target sample is insignificantly different from zero. Overall, our analyses present a clear picture that unethical executives are more likely to engage in acquisitions than the sample of matched firms and that their acquisition announcements are met by lower stock market reactions.

## **V. Conclusion**

We propose a new and innovative way to identify corporate executives of questionable ethical character and investigate the impact of executive ethics on firm activities. We identify suspect executives as those that systematically backdate their option grants and/or exercises and investigate whether such executives influence their firms' propensity to meet or beat analysts' earnings expectations, use discretionary accruals, or engage in abnormal merger and acquisition activity.

Our study contributes to the literature that examines the relationship between executive characteristics and the economic outcomes of the firms that they manage (Hambrick and Mason, 1984; Bertrand and Schaefer, 2003; Chatterjee and Hambrick, 2007; Hambrick, 2007). Prior academic research has focused on executive characteristics such as overconfidence (Malmendier and Tate (2005)), political affiliation (Hutton, Jiang, and Kumar (2010)), gender (Huang and Kisgen (2009)), narcissism (Chatterjee and Hambrick (2007)), personal risk taking (Cain and McKeon (2011)), and personal tax aggressiveness (Chyz (2011)). We extend this body of literature by investigating the effect of executive ethics (ex-ante) on corporate outcomes.

Our procedure identifies 458 unique executives (CEO or CFO) with questionable ethical standards and finds that the firms that these executives manage are more likely to meet or narrowly beat analyst forecasts, and that they have larger discretionary accruals. Specifically, suspect executive firms are 15% more likely than their matched counterparts to meet or narrowly beat analysts' consensus earnings forecasts and use 14% more discretionary accruals. Results are continue to hold in a multivariate setting after controlling for firm characteristics such as growth opportunities, institutional ownership, and corporate governance characteristics. To help establish causality, we use a difference-in-differences methodology to confirm that the increased propensity to just meet or beat analysts' forecasts is evident after suspect executives join their firms.

Suspect executives are also more likely to use corporate resources for personal gain and to the detriment of shareholders. They make more acquisitions and their acquisition announcements are met by lower stock market reactions. The differential market response is concentrated in acquisitions of private targets, whose opaqueness may provide suspect executives with greater flexibility to divert corporate resources or hide accounting irregularities. Overall, this study provides evidence that a willingness to break the rules for personal gain under one set of circumstances implicates similar patterns of behavior across a broader array of corporate affairs.



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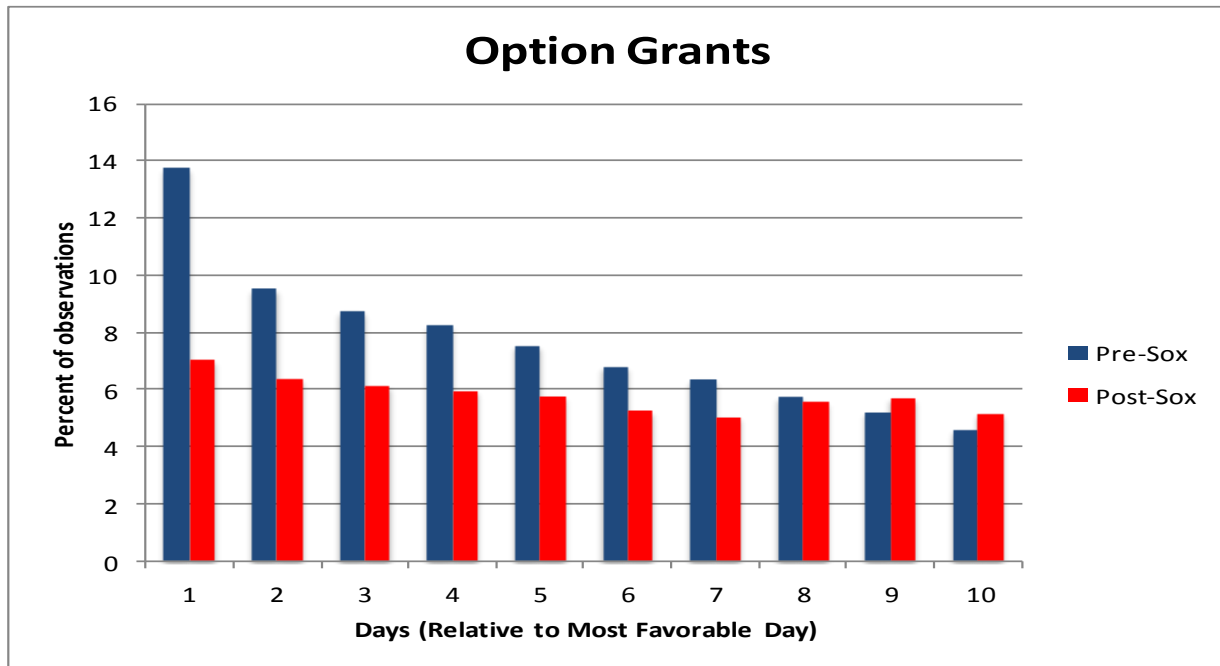
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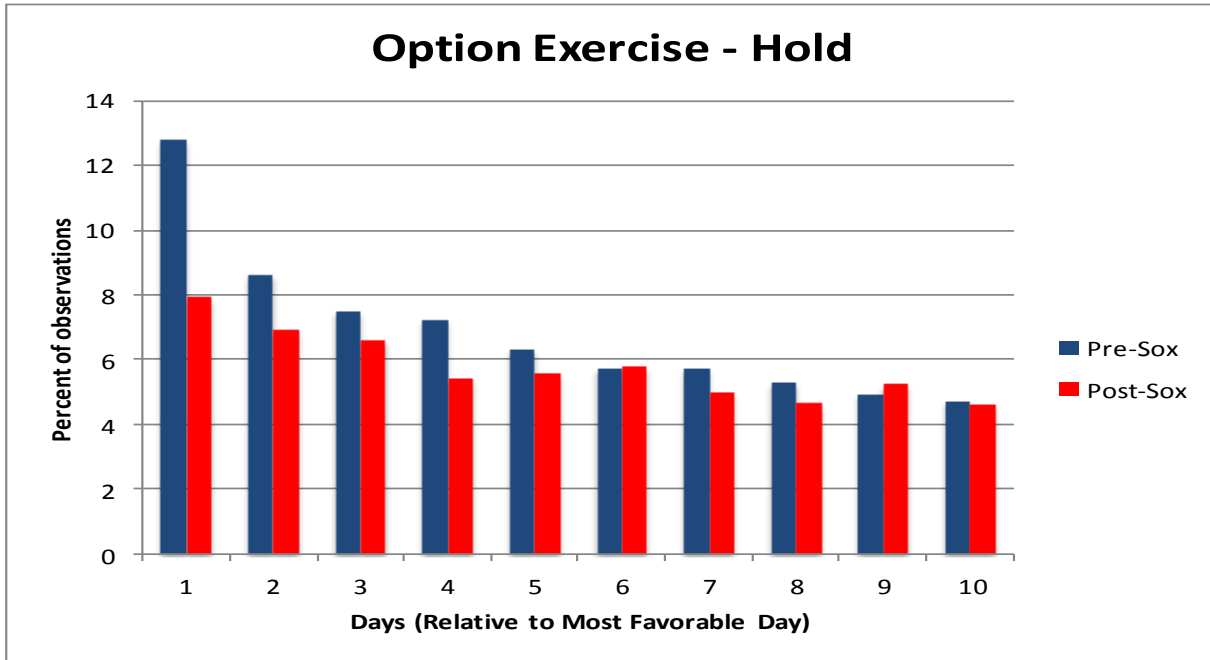
## Figure 1 – Option Grants and Exercises on Favorable Days

These figures show the frequency of option grants and exercises that occur on the ten most favorable days of the month. Data for both option grants and exercises are collected from the Thompson Financial Insiders trading database where an executive's highest *rolecode* is 'CEO' or 'CFO'. Panel A presents data for option grants during the time period from January 1, 1992 until December 31, 2009. After excluding all regularly scheduled grants as well as those that occur during an ex-dividend month, at the time of an annual meeting, or are not at the money, the sample includes 19,398 total option grants. The figure reports the frequency of option grants that occur on the ten most favorable days of the month both before and after the passage of the Sarbanes Oxley Act (SOX), where the most favorable day is the lowest closing stock price day of the month. Panels B and C present data for option exercises for the sample period from August 15, 1996 until December 31, 2009. We partition all option exercises into three mutually exclusive categories: i) exercise-and-hold, ii) exercise-and-sell company disposition, and iii) exercise-and-sell open market transaction, based on the executives disposition of the underlying option shares. Panel B reports the frequency of 4,593 option exercises classified as exercise-and-hold that occur on the ten most favorable days of the month both before and after the passage of the Sarbanes Oxley Act (SOX), where the most favorable day is the lowest closing stock price day of the month. Panel C reports the frequency of 1,866 option exercises classified as exercise-and-sell company disposition that occur on the ten most favorable days of the month both before and after the passage of the Sarbanes Oxley Act (SOX), where the most favorable day is the highest closing stock price day of the month.

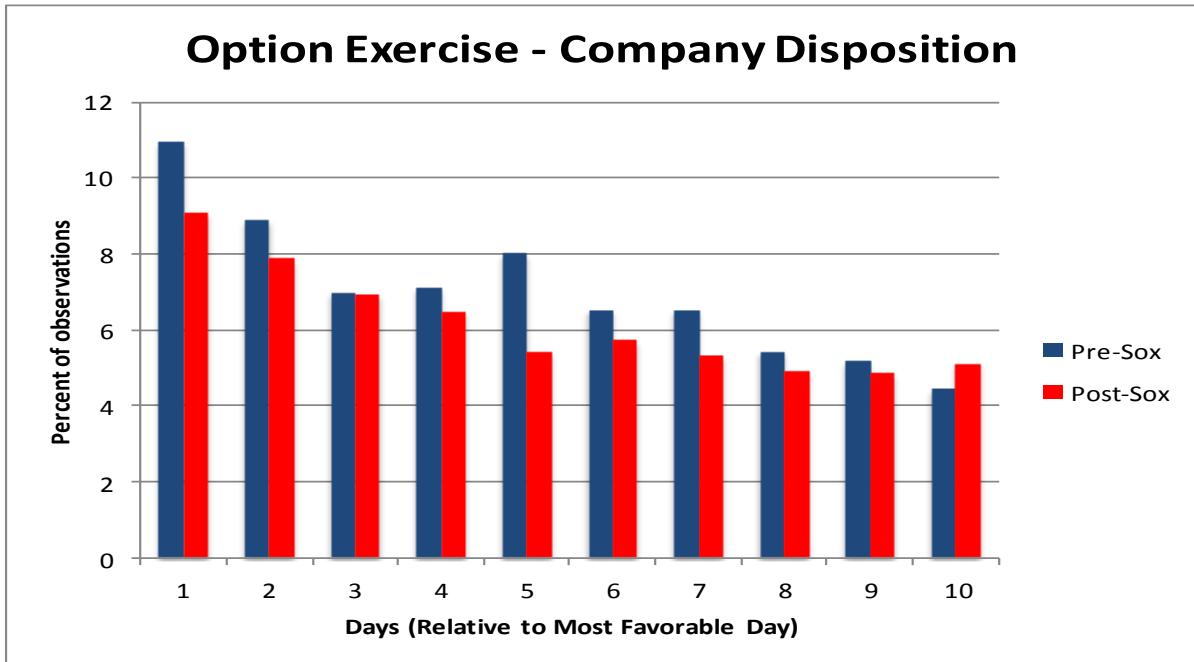
Panel A:



Panel B:



Panel C:



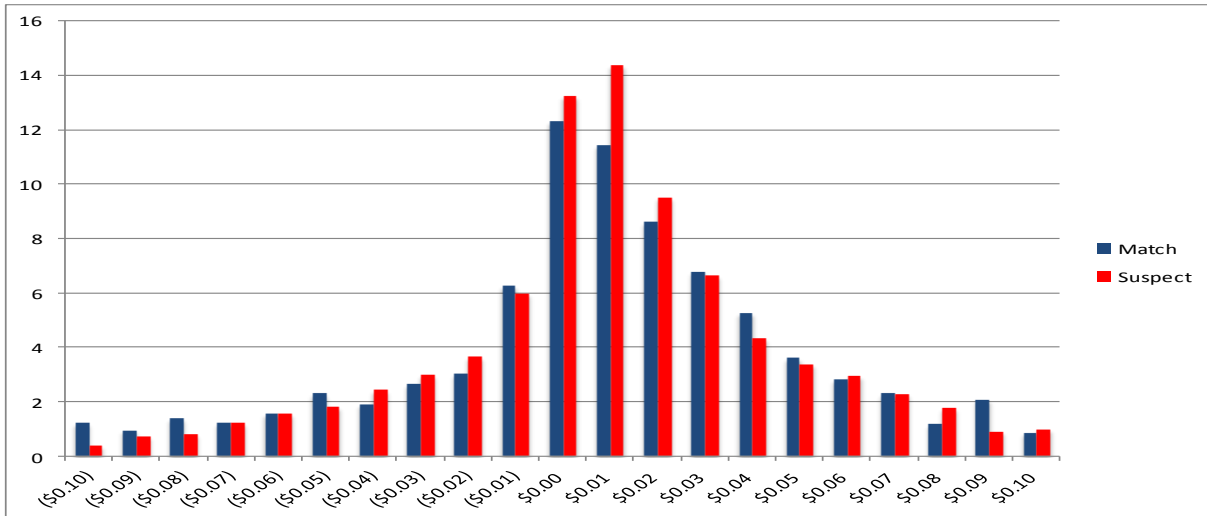
**Figure 2 – Frequency of Earnings Surprises**

These figures present the frequency of earnings surprises from -10¢ to +10¢ for annual earnings announcements during the 1992 to 2009 sample period. Earnings surprise is measured as actual earnings minus the most recent mean analyst forecast. Analysts forecasts are obtained from the Institutional Brokers Estimate System (IBES) unadjusted summary files. Panel A presents the frequency of earnings surprises for our entire sample of 38,989 firm years. Panel B presents the frequency of earnings surprises separately for our sample of firm years with ethically challenged (i.e. “suspect”) executives and the matched sample of firm-years. Suspect executives are defined as those with at least two ‘likely’ backdated option grants and/or exercises. Matched firm-years are those where the executives have no ‘likely’ backdated option activity and are matched to the suspect sample on year, 2-digit SIC code, and market value of equity.

Panel A:



Panel B:



**Table 1 – Summary Statistics**

This table reports the descriptive statistics for the full sample of firm-year observations, the sample of firm-years with ethically challenged (i.e. “suspect”) executives, and the sample of firm-years where the executives have no ‘likely’ backdated option activity. Data for both option grants and exercises is collected from the Thompson Financial Insiders trading database where an executive’s highest *rolecode* is ‘CEO’ or ‘CFO’. Market-to-book, asset, leverage, cash flow from operations, return on assets, and Tobins q are obtained from Compustat, and market value of equity is obtained from CRSP. Suspect executives are defined as those with at least two ‘likely’ backdated option grants and/or exercises.

	Mean	Median	Std. Dev.	10 <sup>th</sup> Perc.	90 <sup>th</sup> Perc.
<b><u>All Sample Firm Years</u></b>					
<i>Market Value of Equity</i>	3,636	500	16,554	59	5,997
<i>Market-to-Book</i>	3.213	2.075	45.497	0.845	6.063
<i>Assets</i>	5,586	547	35,911	56	8,037
<i>Leverage</i>	0.223	0.183	0.223	0.000	0.498
<i>Tobin's Q</i>	1.763	1.216	2.073	0.540	3.432
<i>Cash flow from Oper./Assets</i>	0.069	0.085	0.172	-0.072	0.222
<i>Return on Assets</i>	0.010	0.042	0.197	-0.148	0.151
Firm-Years = 38,989					
<b><u>Firms with Ethically Questionable (Suspect) Executives</u></b>					
<i>Market Value of Equity</i>	3,345	580	13,905	70	6,094
<i>Market-to-Book</i>	3.576	2.508	9.227	0.983	7.424
<i>Assets</i>	4,851	399	50,094	51	4,721
<i>Leverage</i>	0.173	0.089	0.216	0.000	0.464
<i>Tobin's Q</i>	2.479	1.592	3.608	0.645	4.775
<i>Cash flow from Oper./Assets</i>	0.064	0.086	0.196	-0.132	0.257
<i>Return on Assets</i>	0.001	0.046	0.222	-0.240	0.174
Firm-Years = 2,360					
<b><u>Firms without Ethically Questionable (Suspect) Executives</u></b>					
<i>Market Value of Equity</i>	3,654	494	16,710	58	5,981
<i>Market-to-Book</i>	3.189	2.052	46.882	0.838	5.972
<i>Assets</i>	5,633	558	34,800	56	8,271
<i>Leverage</i>	0.227	0.188	0.224	0.000	0.500
<i>Tobin's Q</i>	1.717	1.195	1.924	0.534	3.341
<i>Cash flow from Oper./Assets</i>	0.070	0.085	0.170	-0.067	0.220
<i>Return on Assets</i>	0.011	0.042	0.196	-0.140	0.150
Firm-Years = 36,629					



**Table 2 – Univariate Statistics for Earnings Surprises**

This table reports the univariate statistics for earnings surprises in our sample of firm-years with ethically challenged (i.e. “suspect”) executives and a matched sample of firm-years where the executives have no ‘likely’ backdated option activity. Data for both option grants and exercises is collected from the Thompson Financial Insiders trading database where an executive’s highest *rolecode* is ‘CEO’ or ‘CFO’. Likely backdated option grants/exercises are defined as those that occur on the most favorable day of the month and suspect executives are identified as those with at least two likely backdated option grants/exercises. Matching between suspect and non-suspect samples is based on year, industry (2-digit SIC code), and market value of equity. For both the suspect and matched samples we obtain earnings announcements and analysts forecasts from the IBES unadjusted summary files and define earnings surprise as the actual earnings announced minus the mean or median analyst forecast from IBES. We construct an indicator variable *BEAT* if the earnings surprise for a firm year is 0¢, 1¢ or 2¢, and define a similar indicator variable *MISS* for earnings surprises that equal -1¢ or -2¢. We present univariate differences between suspect firm years and the matched sample for annual earnings surprises in Panel A. Panel B presents univariate differences between suspect firm years and the matched sample for quarterly earnings surprises. The table also presents statistics for the subsample of firms with suspect CFOs only or CEOs only. P-values are presented in parentheses.

Panel A: Annual Earnings Surprises

	All Suspect Executives			Suspect CFOs Only			Suspect CEOs Only		
	Suspect	Match	Diff.	Suspect	Match	Diff.	Suspect	Match	Diff.
<b>Meet or Beat [0¢ to 2¢]</b>									
<i>vs. Analyst mean forecast</i>	0.373	0.325	0.048*** (0.001)	0.396	0.329	0.067*** (0.006)	0.346	0.304	0.038** (0.038)
<i>vs. Analyst Median forecast</i>	0.390	0.347	0.043*** (0.002)	0.413	0.342	0.071*** (0.004)	0.364	0.335	0.029 (0.161)
<b>Just Miss [-2¢ to -1¢]</b>									
<i>vs. Analyst mean forecast</i>	0.096	0.092	0.004 (0.614)	0.095	0.090	0.005 (0.727)	0.093	0.093	0.000 (1.000)
<i>vs. Analyst Median forecast</i>	0.091	0.092	-0.001 (0.878)	0.095	0.091	0.004 (0.794)	0.087	0.094	-0.007 (0.547)
# of Firm-Years	2,305	2,305		777	777		1,075	1,075	
# of Unique Firms	351			161			183		

Panel B: Quarterly Earnings Surprises

	All Suspect Executives			Suspect CFOs Only			Suspect CEOs Only		
	Bad Actors	Match	Diff.	Bad Actors	Match	Diff.	Bad Actors	Match	Diff.
<b>Meet or Beat [0¢ to 2¢]</b>									
<i>vs. Analyst mean forecast</i>	0.456	0.411	0.045*** (<.0001)	0.476	0.398	0.079*** (<.0001)	0.432	0.420	0.012 (0.261)
<i>vs. Analyst Median forecast</i>	0.465	0.419	0.046*** (<.0001)	0.487	0.397	0.090*** (<.0001)	0.439	0.430	0.009 (0.424)
<b>Just Miss [-2¢ to -1¢]</b>									
<i>vs. Analyst mean forecast</i>	0.099	0.107	-0.008* (0.071)	0.100	0.114	-0.014* (0.089)	0.096	0.106	-0.010 (0.137)
<i>vs. Analyst Median forecast</i>	0.096	0.103	-0.006 (0.155)	0.098	0.113	-0.015* (0.066)	0.094	0.102	-0.008 (0.214)
# of Firm-Years	8883	8816		2992	2959		4141	4095	
# of Unique Firms	351			161			183		

**Table 3 – Multivariate Analysis of Earnings Surprises**

This table reports the coefficient estimates of a probit regression of *BEAT* or *MISS* on independent variables that control for firm and executive characteristics. The sample of observations includes earnings announcements in firm years with ethically challenged (i.e. “suspect”) executives and a matched sample of firm-years where the executives have no ‘likely’ backdated option activity. Data for both option grants and exercises is collected from the Thompson Financial Insiders trading database where an executive’s highest *rolecode* is ‘CEO’ or ‘CFO’. Likely backdated option grants/exercises are defined as those that occur on the most favorable day of the month and suspect executives are identified as those with at least two likely backdated option grants/exercises. Matching between suspect and non-suspect samples is based on year, industry (2-digit SIC code), and market value of equity. For both the suspect and matched samples we obtain earnings announcements and analysts forecasts from the IBES unadjusted summary files and define earnings surprise as the actual earnings announced minus the mean or median analyst forecast from IBES. We construct an indicator variable *BEAT* if the earnings surprise for a firm year is 0¢, 1¢ or 2¢, and define a similar indicator variable *MISS* for earnings surprises that equal -1¢ or -2¢. Independent variables *lnMVE* are obtained from CRSP; *market-to-book*, *leverage*, and *return on assets* are obtained from Compustat; *board independence*, *board size*, and *officer ownership* are from Compact Disclosure; and *institutional ownership* is from the Thompson Financial 13F database. *Suspect* is an indicator variable that equals 1 if there is a suspect executive at the firm, and *suspect CFO* is an indicator variable that equals 1 if there is only a suspect CFO at the firm. Standard errors are presented in parentheses.

Panel A: Dependent Variable = *BEAT*

Independent Variables	Dependent Variable = 1 if just meet or beat [0¢ to 2¢]			
<i>Constant</i>	-0.531 <sup>***</sup> (0.041)	-0.543 <sup>***</sup> (0.041)	-0.653 <sup>***</sup> (0.070)	-0.658 <sup>***</sup> (0.070)
<i>Ln MVE</i>	0.054 <sup>***</sup> (0.006)	0.056 <sup>***</sup> (0.006)	0.088 <sup>***</sup> (0.009)	0.089 <sup>***</sup> (0.009)
<i>Market-to-Book</i>	-0.001 (0.001)	-0.001 (0.001)	0.002 (0.001)	0.002 (0.001)
<i>Leverage</i>	-0.289 <sup>***</sup> (0.046)	-0.279 <sup>***</sup> (0.046)	-0.182 <sup>***</sup> (0.061)	-0.175 <sup>***</sup> (0.061)
<i>Return on Assets</i>	0.613 <sup>***</sup> (0.049)	0.618 <sup>***</sup> (0.049)	0.556 <sup>***</sup> (0.061)	0.559 <sup>***</sup> (0.061)
<i>Board Size</i>			-0.023 <sup>***</sup> (0.006)	-0.024 <sup>***</sup> (0.006)
<i>Board Independence</i>			0.057 (0.074)	0.066 (0.074)
<i>Inst. Ownership</i>			0.153 <sup>***</sup> (0.044)	0.153 <sup>***</sup> (0.044)
<i>Officer Ownership</i>			0.262 <sup>***</sup> (0.066)	0.252 <sup>***</sup> (0.066)
<i>Suspect</i>	0.115 <sup>***</sup> (0.019)	0.044 <sup>*</sup> (0.024)	0.071 <sup>***</sup> (0.025)	0.033 (0.031)
<i>Suspect CFO</i>		0.134 <sup>***</sup> (0.027)		0.068 <sup>**</sup> (0.034)
# Observations	17,699	17,699	11,248	11,248
Pseudo-R <sup>2</sup>	0.016	0.017	0.023	0.023

Panel B: Dependent Variable = *MISS*

Independent Variables	Dependent Variable = 1 if just miss [-1¢ to -2¢]			
<i>Constant</i>	-0.846*** (0.055)	-0.846*** (0.055)	-0.966*** (0.095)	-0.968*** (0.095)
<i>Ln MVE</i>	-0.066*** (0.008)	-0.066*** (0.008)	-0.064*** (0.012)	-0.064*** (0.012)
<i>Market-to-Book</i>	0.001 (0.001)	0.001 (0.001)	-0.001 (0.002)	-0.001 (0.002)
<i>Leverage</i>	0.096 (0.059)	0.096 (0.059)	0.010 (0.081)	0.013 (0.081)
<i>Return on Assets</i>	-0.110* (0.060)	-0.110* (0.060)	-0.166** (0.076)	-0.165** (0.076)
<i>Board Size</i>			0.034*** (0.007)	0.034*** (0.007)
<i>Board Independence</i>			-0.141 (0.100)	-0.137 (0.100)
<i>Inst. Ownership</i>			-0.074 (0.060)	-0.074 (0.060)
<i>Officer Ownership</i>			-0.026 (0.090)	-0.030 (0.090)
<i>Suspect</i>	-0.046* (0.026)	-0.051 (0.032)	-0.041 (0.033)	-0.057 (0.043)
<i>Suspect CFO</i>		0.009 (0.037)		0.028 (0.047)
# Observations	17,699	17,699	11,248	11,248
Pseudo-R <sup>2</sup>	0.007	0.007	0.009	0.009

**Table 4 – Univariate Statistics for Discretionary Accruals**

This table reports the univariate statistics for discretionary accruals in our sample of firm-years with ethically challenged (i.e. “suspect”) executives and a matched sample of firm-years where the executives have no ‘likely’ backdated option activity. Data for both option grants and exercises is collected from the Thompson Financial Insiders trading database where an executive’s highest *rolecode* is ‘CEO’ or ‘CFO’. Likely backdated option grants/exercises are defined as those that occur on the most favorable day of the month and suspect executives are identified as those with at least two likely backdated option grants/exercises. Matching between suspect and non-suspect samples is based on year, industry (2-digit SIC code), and market value of equity. For both suspect and matched sample firm years, we calculate discretionary accruals using a modified version of the Jones (1991) model as described on pp. 18-19. We present univariate differences between suspect firm years and the matched sample for signed discretionary accruals and the absolute value of discretionary accruals. The table also presents statistics for the subsample of firms with suspect CFOs only or CEOs only. P-values are presented in parentheses.

	<b>All Suspect Executives</b>			<b>Suspect CFOs Only</b>			<b>Suspect CEOs Only</b>		
	Suspect	Match	Diff.	Suspect	Match	Diff.	Suspect	Match	Diff.
<i>Signed Discretionary Accruals</i>	-0.0007	-0.0020	0.0013 (0.709)	-0.0063	-0.0040	0.0013 (0.738)	0.0031	-0.0031	0.0013 (0.205)
<i>Abs. Value Discret. Accruals</i>	0.0813	0.0712	0.0101*** (<.001)	0.0895	0.0739	0.0156*** (0.003)	0.0725	0.0705	0.0020 (0.607)
<i>Abs. Value Discret. Accruals (Yu)</i>	0.0848	0.0755	0.0094*** (0.002)	0.0939	0.0770	0.0169*** (0.003)	0.0763	0.0762	0.0001 (0.982)
# of Firm-Years	2,305	2,305		777	777		1,075	1,075	
# of Unique Firms	351			161			183		

**Table 5 – Multivariate Analysis of Discretionary Accruals**

This table reports the coefficient estimates of a multivariate regression of the absolute value of discretionary accruals on independent variables that control for firm and executive characteristics. The sample of observations includes firm years with ethically challenged (i.e. “suspect”) executives and a matched sample of firm-years where the executives have no ‘likely’ backdated option activity. Data for both option grants and exercises is collected from the Thompson Financial Insiders trading database where an executive’s highest *rolecode* is ‘CEO’ or ‘CFO’. Likely backdated option grants/exercises are defined as those that occur on the most favorable day of the month and suspect executives are identified as those with at least two likely backdated option grants/exercises. Matching between suspect and non-suspect samples is based on year, industry (2-digit SIC code), and market value of equity. For both suspect and matched sample firm years, we calculate discretionary accruals using a modified version of the Jones (1991) model as described on pp. 18-19. Independent variables *lnMVE* are obtained from CRSP; *market-to-book*, *leverage*, and *return on assets* are obtained from Compustat; *board independence*, *board size*, and *officer ownership* are from Compact Disclosure; and *institutional ownership* is from the Thompson Financial 13F database. *Suspect* is an indicator variable that equals 1 if there is a suspect executive at the firm, and *suspect CFO* is an indicator variable that equals 1 if there is only a suspect CFO at the firm. Standard errors are presented in parentheses.

Independent Variables	Dependent Variable = Abs. Value of Discretionary Accruals			
<i>Constant</i>	0.092*** (0.006)	0.091*** (0.006)	0.091*** (0.009)	0.090*** (0.009)
<i>Ln MVE</i>	-0.002*** (0.001)	-0.002*** (0.001)	0.003*** (0.001)	0.004*** (0.001)
<i>Market-to-Book</i>	0.0001* (0.0001)	0.0001* (0.0001)	0.0006*** (0.0001)	0.0006*** (0.0001)
<i>Leverage</i>	-0.034*** (0.006)	-0.033*** (0.006)	-0.022*** (0.008)	-0.021** (0.008)
<i>Return on Assets</i>	-0.161*** (0.006)	-0.161*** (0.006)	-0.136*** (0.008)	-0.136*** (0.008)
<i>Board Size</i>			-0.004*** (0.001)	-0.004*** (0.001)
<i>Board Independence</i>			0.0001 (0.010)	0.002 (0.010)
<i>Inst. Ownership</i>			-0.032*** (0.006)	-0.032*** (0.006)
<i>Officer Ownership</i>			0.045*** (0.009)	0.043*** (0.009)
<i>Suspect</i>	0.009*** (0.003)	0.002 (0.003)	0.014*** (0.003)	0.006 (0.004)
<i>Suspect CFO</i>		0.013*** (0.004)		0.015*** (0.005)
# Observations	4,610	4,610	2,929	2,929
Pseudo-R <sup>2</sup>	0.149	0.151	0.157	0.160

**Table 6 – Multivariate Analysis of Earnings Surprises: Difference of Differences**

This table reports the coefficient estimates of a probit regression of *BEAT* on independent variables that control for firm and executive characteristics. The sample of observations includes earnings announcements in firm quarters with ethically challenged (i.e. “suspect”) executives and a matched sample of firm-years where the executives have no ‘likely’ backdated option activity. Firm-quarters are included in the sample if they fall into a three year period before a suspect executive arrived at the firm or during a three year period following their arrival (we exclude quarters from the year before the executive arrived and the year of their arrival). Data must be available for firms in at least two of the three years in both periods to be included in the sample. Data for both option grants and exercises is collected from the Thompson Financial Insiders trading database where an executive’s highest *rolecode* is ‘CEO’ or ‘CFO’. Likely backdated option grants/exercises are defined as those that occur on the most favorable day of the month and suspect executives are identified as those with at least two likely backdated option grants/exercises. Matching between suspect and non-suspect samples is based on year, industry (2-digit SIC code), and market value of equity. For both the suspect and matched samples we obtain earnings announcements and analysts forecasts from the IBES unadjusted summary files and define earnings surprise as the actual earnings announced minus the mean analyst forecast from IBES. We construct an indicator variable *BEAT* if the earnings surprise for a firm year is 0¢, 1¢ or 2¢. Independent variables *lnMVE* are obtained from CRSP; *market-to-book* and *return on assets* are obtained from Compustat. *Suspect\_firm* is a time invariant indicator variable that equals 1 if there is ever a suspect executive at the firm, and *Post* is an indicator variable that equals 1 if the firm has a suspect executive and the firm-quarter follows their arrival. Standard errors are presented in parentheses.

	<b>All Suspect Executives</b>	<b>Suspect CFOs Only</b>	<b>Suspect CEOs Only</b>
<b>Independent Variables</b>			
<i>Constant</i>	-0.718*** (0.116)	-0.881*** (0.174)	-0.773*** (0.165)
<i>Ln MVE</i>	0.062*** (0.018)	0.100*** (0.029)	0.071*** (0.024)
<i>Return on Assets</i>	0.904*** (0.174)	1.006*** (0.285)	0.714*** (0.226)
<i>Market-to-Book</i>	0.009*** (0.003)	-0.011 (0.011)	0.010*** (0.003)
<i>Suspect_firm</i>	-0.126** (0.063)	0.093 (0.093)	-0.329*** (0.090)
<i>Suspect_firm*Post</i>	0.309*** (0.071)	0.257** (0.106)	0.357*** (0.100)
# Observations	2,678	1,269	1,409
Psuedo-R <sup>2</sup>	0.0223	0.0310	0.0279

**Table 7 – Acquisitions by Suspect Executives**

This table presents an analysis of the acquisition activity of firms led by executives of suspect character, defined as executives that appear to have engage in stock option backdating. We present summary statistics of the probability of being acquired and the acquisition frequency of suspect firms relative to a matched set of control firms during the years 1 through 7 after a suspect CEO or CFO joined the firm. Control firms are matched based on SIC2 for industry and market value of equity (within 50%) as of the year when the suspect executive joined her firm. The acquisitions data is taken from the SDC Platinum Mergers and Acquisitions database. Acquisitions are included in the sample if they were completed, resulted in the bidder controlling 100% of the target's stock and were acquisitions of public or private targets. The table also presents univariate comparisons of the 3 day(-1,1) CARs around acquisitions announcements across suspect and control firms. CARs are calculated with a market model estimated over the 200 trading day period ending 10 days before the announcement, consistent with Masulis, Wang and Xie (2007). P-values are reported in parentheses and significance is indicated at the 10, 5 and 1% levels by \*, \*\* and \*\*\*, respectively.

	Suspect	Control	Difference
<b>Bidder Firms</b>			
Firm Completes an Acquisition	0.570	0.506	0.064* (0.086)
Avg. # of Firms Acquired	2.697	1.756	0.942*** (0.002)
<b>Bidder Firms (with at least one acquisition)</b>			
Avg. # of Firms Acquired	4.737	3.473	1.264*** (0.009)
<b>Cumulative Abnormal Returns (For Bidder Firms)</b>			
All Acquisitions	0.18% (0.47)	0.88%*** (0.00)	-0.70%** (0.05)
<i># of Acquisitions</i>	853	629	
Public Targets	-2.04%*** (0.01)	-1.87%** (0.02)	-0.17% (0.88)
<i># of Acquisitions</i>	114	89	
Private Targets	0.52%** (0.04)	1.33%*** (0.00)	-0.82%** (0.03)
<i># of Acquisitions</i>	739	540	



**Table 8 – Multivariate Analysis of Acquisitions by Suspect Executives**

This table presents a multivariate OLS regression analysis of (-1,1) day stock return CARs around acquisition announcements by firms led by executives of suspect character, defined as executives that appear to have engage in stock option backdating. Acquisitions are included in the sample if they were announced in the years 1 to 7 after a suspect executive joined her firm, were completed, resulted in the bidder controlling 100% of the target's stock and were acquisitions of public or private targets. Control firms are matched based on SIC2 for industry and market value of equity (within 50%) as of the year when the suspect executive joined her firm. The acquisitions data is taken from the SDC Platinum Mergers and Acquisitions database. CARs are calculated with a market model estimated over the 200 trading day period ending 10 days before the announcement, consistent with Masulis, Wang and Xie (2007). Independent variables *lnMVE* are obtained from CRSP; *leverage*, and *free cash flow* are calculated with Compustat annual data; *board independence* and *board size* are from Compact Disclosure; and *institutional ownership* is from the Thompson Financial 13F database. *Stock price run-up* is the 200 day stock return CAR ending 10 days before the acquisition announcement and is calculated with a market adjustment model relative to the appropriate CRSP universe firm size decile. *Suspect* is an indicator variable that equals 1 if there is a suspect executive at the firm. Standard errors are presented in parentheses, and significance is indicated at the 10, 5 and 1% levels by \*, \*\* and \*\*\*, respectively.

	All Target Firms		Private Target Firms		Public Target Firms	
<i>Constant</i>	0.0575*** (0.0136)	0.0602*** (0.0230)	0.0544*** (0.0143)	0.0520** (0.0233)	0.0171 (0.0293)	0.0753 (0.0511)
<i>Ln MVE</i>	-0.0046*** (0.0013)	-0.0054*** (0.0018)	-0.0033** (0.0015)	-0.0041** (0.0018)	-0.0078** (0.0035)	-0.0133* (0.0069)
<i>Leverage</i>	0.0050 (0.0092)	-0.0023 (0.0109)	0.0028 (0.0093)	-0.0031 (0.0110)	0.0356 (0.0401)	0.0213 (0.0515)
<i>Free Cash Flow</i>	-0.0089 (0.0094)	-0.0089 (0.0074)	-0.0153* (0.0079)	-0.0101 (0.0071)	0.0623 (0.0741)	0.0192 (0.0509)
<i>Stock Price Run-up</i>	-0.0005 (0.0084)	-0.0028 (0.0101)	0.0006 (0.0085)	-0.0044 (0.0108)	-0.0287 (0.0307)	-0.0103 (0.0343)
<i>Institutional Ownership</i>	0.0024 (0.0071)	0.0029 (0.0091)	-0.0007 (0.0073)	0.0002 (0.0090)	0.0028 (0.0233)	0.0050 (0.0361)
<i>Board Size</i>		0.0014 (0.0009)		0.0012 (0.0011)		0.0035 (0.0028)
<i>Board Independence</i>		-0.0086 (0.0124)		-0.0038 (0.0128)		-0.0249 (0.0388)
<i>Suspect</i>	-0.0064* (0.0039)	-0.0095** (0.0045)	-0.0088** (0.0040)	-0.0098** (0.0048)	0.0052 (0.0125)	-0.0057 (0.0157)
Observations	1,407	1,018	1,205	892	202	126
R-squared	0.021	0.028	0.022	0.028	0.107	0.125