Executive Deferral Plans and Insider Trading

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Abstract

We study executive equity contributions to non-qualified deferred compensation plans, which consist in the election to defer part or all of the annual base salary and other cash pay into the company's stock. These transactions provide executives with an alternative channel to purchase shares in the firm while benefiting from an affirmative defence against illegal insider trading allegations. Using a large sample of executive deferrals over 2000-2014, we find evidence that executives use these transactions as a means to acquire the company's stock during blackout windows. Consistent with the conjecture that deferrals can benefit from lower litigation costs that inhibit insider trades before the release of corporate news, we also find that the deferred amounts are significantly higher (lower) before the disclosure of good (bad) earnings news. Together, these results suggest that executives can use equity deferrals to circumvent Rule 10b5 trading restrictions and generate returns by strategically selecting timing and content of corporate disclosures around these transactions.

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1. Introduction

Under U.S. federal securities laws (i.e., SEC Rule 10b5), insiders of public companies are prohibited from trading in the company's securities while in possession of material non-public information.[1] In addition to security law restrictions, trades by officers and directors can be further limited by the company's insider trading policies, which generally impose trading blackouts or permit trading only during open windows.[2] To deal with such restrictions, corporate officers and directors may consider performing transactions usually exempt from the company's insider trading memos and/or set in accordance with Rule 10b5. Examples of such transactions are insiders' equity contributions to non-qualified deferred compensation plans, which represent the timely election to convert part or all of the annual base salary and other cash pay (e.g., annual bonuses or long-term incentive plan cash payouts) into the company's deferred stock. These transactions are particularly interesting because of two reasons. First, they provide insiders with an alternative channel to acquire company shares. Second, since these transactions are executed based on a pre-planned schedule, they benefit from an affirmative defence against illegal insider trading allegations. In this paper, we investigate whether executives use equity deferral transactions to acquire the firm's stock in windows when open market purchases would violate Rule 10b5 trading restrictions and whether executives strategically select timing and content of corporate disclosures around their scheduled deferral dates to profit from these transactions.

Non-qualified deferred compensation plans for corporate executives are commonly used amongst U.S. public companies (e.g., Fidelity Investments Report, 2013). These plans are private

[1] Rule 10b-5 is the anti-fraud provision promulgated in the Security and Exchange Act of 1934. The rule defines illegal insider trading as the act of buying or selling a security, in breach of a fiduciary duty or other relationship of trust, while in possession of material non-public information about the security.

[2] Although not mandatory, companies' insider trading policies are commonly viewed as a key compliance and corporate governance best practice. These documents serve the double purpose of: a) educating insiders and other related parties about what may constitute illegal insider trading and their legal obligations relating to the use or disclosure of material non-public information; b) helping the company to establish a defense against a "controlling person liability" for actions of insiders and other related parties that may constitute illegal insider trading. In addition to regularly scheduled quarterly blackout periods, these policies might institute special blackout windows when other material pending events or news about the company have not been yet publicly disclosed.

contractual arrangements between a company and its executives that allow insiders to defer the annual cash compensation and related income taxes to a later date. These plans are "non-qualified" because they do not meet Section 401(a) rules of the Internal Revenue Code, which govern tax-qualified plans. While qualified plans impose limits on the amounts plan participants can defer during a tax year, non-qualified plans (also called 409(a) plans because they are subject to Section 409(a) tax rules) have fewer limits (if any) on deferral amounts.[3]

A key feature of these plans is the timing of executive deferral choices, with participating executives having to make their deferral elections by the end of the calendar year *prior to* which the cash compensation will be earned. When making such elections, the executive and the firm must agree on: a) the amount or proportion of cash compensation to be deferred; b) the notional investment choice; c) the deferral transaction dates (i.e., when the deferral transactions shall be recorded); and d) the form and time of distribution of the deferred amounts plus investment returns (unless the plan has mandatory provisions). Executives electing to defer their annual cash pay can usually choose among a variety of investment alternatives. The most common options include a stock index, treasury note rates, long-term debt rates, other investments available in the company's 401(k) saving plans**,** or the company's stock (see examples of proxy statement descriptions of executive deferral plans in the Appendix).[4] Details on executives' plan participation and notional investment choices for the deferred amounts are not available from any public source.[5] The only exception is when the executives elect to defer their cash pay into the company's stock. On the pre-selected deferral dates, the executive's deferred compensation account is credited with a

[3] The statutory limitation on annual contributions to qualified plans is the major reason why companies offer non-qualified plans to their executives. Another important advantage compared to qualified plans is that non-qualified plans usually allow participants to elect relatively short payout periods and to receive distributions years before they end their employment at the company (Fidelity Investments Report, 2013).

[4] To remain untaxed, however, the deferred amounts plus investment returns must be unfunded. While Section 401(k) plans are formally funded, non-qualified deferred compensation balances and investment returns are typically unfunded, thus at risk of insolvency if the firm becomes financially distressed. Even when the employer establishes a rabbi trust, participants to the plans remain unsecured general creditors of the company.

[5] The SEC proxy rule reform of 2006 (see http://www.sec.gov/rules/final/2006/33-8732afr.pdf) does only require public firms to disclose in a separate column of the DEF14 Summary Compensation Table the annual change in the actuarial value of the executive's accumulated nonqualified deferred compensation.

number of stock units equivalent in value to the deferred cash on the day of the transaction and, since Section 16b-3(f) of the Securities Exchange Act defines deferrals into the company's stock as change in beneficial ownership transactions thus subject to Section 16b-3's filing rules, the deferrals are recorded in a Form-4 filing not later than the second business day following the deferral date. Another key feature of the plans is that, when equity deferral elections are made, they are deemed irrevocable. Although executives may still exercise discretion on whether or not to execute their deferral transactions before the scheduled dates, these selective acts can call into question Rule 10b5 affirmative defence against insider trading allegations.[6]

Despite their filing requirements, these transactions are mostly unmonitored, since they are usually planned within the safe harbour of Rule 10b5-1 of the Security and Exchange Act. Any insider executing pre-planned transactions pursuant to a Rule 10b5-1 plan has an affirmative insider trading defence, even if the trades executed pursuant to the plan occur at a time when the individual was likely in possession of material non-public information (that would otherwise subject that person to liability under Section 10(b) of the Act). Rule 10b5-1 insider trading has become increasingly popular among U.S. public firms. According to a study conducted by The Washington Service, about 52% of S&P500 firms had insiders trading under 10b5-1 plans in 2012, compared to 27% in 2004 (The Washington Service, 2012). These trends have recently raised concerns that executives may be using Rule 10b5-1 to trade profitably in the firm's securities while circumventing insider trading restrictions.[7] Despite these concerns, the SEC does not currently require companies to disclose details of Rule 10b5-1 plans for their insiders.[8] The SEC

[6] Although deferral plans usually prohibit the executive's subsequent influence over amount and timing of their pre-planned deferrals, executives may still exercise discretion on whether to terminate their transactions before the scheduled dates. However, the SEC's interpretative guidance on Rule 10b5-1 transactions suggests that these selective acts can call into question whether the plan was "entered into in good faith" and compromise the availability of Rule 10b5-1 legal protection (U.S. Securities and Exchange Commission 2000, paragraph 15(b)).

[7] A series of articles appearing on the Wall Street Journal between November 2012 and April 2013 support these concerns, providing numerous examples of corporate executives realizing significant gains or avoiding significant losses through Rule 10b5-1 trades preceding significant corporate news (Susan Pulliam and Rob Barry, Nov. 28, 2012; Susan Pulliam, Jean Eaglesham and Rob Barry, Dec. 11, 2012).

[8] A company making such disclosures would generally do so through Forms 8-K, but without providing the details of the plan (e.g., plan participants, plan duration, trading periods, amendments to or termination of the plans).

currently advises (does not require) insiders to note on Form 4 filings that the trades were made pursuant to a Rule 10b5-1 plan to ensure that investors monitoring insiders' transactions know that the trades were not initiated based on information available at the time of the transaction.

Using a large sample of executive equity deferrals between 2000 and 2014, we find evidence that executives use these transactions as substitutes for open-market purchases of the company's stock. We also find that a significant fraction of the deferrals occurs during blackout windows and that executives defer higher amounts during blackout days as compared to other trading days. Results from trading return tests indicate that executives earn substantial abnormal returns from their deferrals and that the returns are significantly higher for transactions occurring during blackout periods. We next investigate whether the plans provide executives incentives to manipulate timing and content of earnings disclosures around their pre-planned deferral dates. Consistent with the conjecture that deferral transactions can benefit from substantially lower litigation costs that inhibit insider trades preceding the release of corporate news, we find that executive deferred amounts are significantly associated with the sign of the news released around the deferral transaction dates, with deferred amounts being significantly higher before the disclosure of good earnings news and lower before the release of bad earnings news. Together, these results suggest that deferring executives can strategically select timing and content of corporate disclosures around their scheduled deferral dates to profit from these transactions.

Our study makes the following contributions to the literature. First, our results provide a justification for the abnormal returns observed for the sample of outside directors in Franco et al. (2017). Franco et al. (2017) focus on the determinants of outside directors' equity deferrals, i.e., the choice to convert director cash fees into deferred stock thus to increase the proportion of the annual pay that is tied to future firm performance. Using a large sample of director equity deferrals between 1999 and 2009, the authors test and find significant associations between outside directors' deferral choices and three sets of variables: a) contractual features of the director

compensation plan; b) directors' personal characteristics and wealth diversification status; and c) the firm's future stock performance. They find that each of these dimensions are associated with directors' deferrals with the deferred amounts varying significantly with proxies for the directors' existing ownership in the firm, outside wealth diversification, and expectations about the firm's future prospects (i.e., market-adjusted future returns). Related to our study, they also find that the deferred amounts are associated with a variable capturing the existence of similar transactions by the firm's CEO and CFO and that the deferrals result in significant abnormal returns. Based on trading performance comparisons to the non-deferring directors in their sample, the authors conclude that the returns result from deferring directors "conditioning their transactions based on some form of insider information", leaving out the analysis of the information mechanism driving their results. Our results of strategic disclosure behaviors around executive deferral transactions provides a justification for the abnormal returns observed in Franco et al. (2017). Most importantly, it allows us to contribute to the existing literature on strategic disclosures around executive scheduled trades and stock option grants (Yermack, 1997; Aboody and Kasznik, 2000). Yermack (1997) investigates whether CEOs influence their compensation committees to receive stock options grants before good news earnings announcements. By doing so, he investigates option awards as a function of corporate disclosures. One advantage from studying opportunistic disclosures in the context of executive equity deferrals is that these transactions, by being planned by the end of the prior year, moderate concerns about the timing of executive trading and disclosure choices. Our research question and predictions are close in spirit to Aboody and Kasznik (2000) who investigate whether CEOs manage the timing of their disclosures around scheduled stock option grants. Using a sample of 2,039 awards between 1992 and 1996, they find asymmetric price movements, analyst forecast errors and management earnings forecasts that are consistent with CEOs opportunistically delaying good news and anticipating bad news around stock option award dates. Executive deferrals are different from scheduled option awards in the

following respects. First, while option awards are at the discretion of the firm's compensation committee, amounts and timing of the deferrals are at the executive's discretion every year. This feature makes these transactions a more flexible and personal instrument executives can use to acquire additional stakes in the firm. Second, the possibility of a Rule 10b5-1 plan defense makes executive deferrals an alternative, still unexplored, setting to detect opportunistic disclosure behaviors around insider scheduled transactions. This setting is particularly interesting when considering that the use of equity deferral options in executive compensation plans have significantly increased while option grants have registered a sharp decline amongst U.S. public companies over the last two decades (e.g., Carter et al., 2007; Hayes et al., 2012; Fidelity Investments Report, 2013; Equilar & Cook, F.W., 2013-2017).

Second, our results contribute to the limited empirical evidence on Rule 10b5-1 insider trades (e.g., Jagolinzer, 2009; Shon and Veliotis, 2013). While these studies focus on insider sales, our sample of deferral transactions allows us to test whether executives also use Rule 10b5 complaint acquisitions strategically. Jagolinzer (2009) investigates the return patterns around a sample of Rule10b5-1 plan transactions as voluntarily disclosed in firms' SEC Form 4 and 8k filings between 2000 and 2005. The study finds evidence that Rule10b5-1 plan insider sales, on average, precede stock performance declines and generate higher abnormal returns compared to non-plan insider sales. However, since the Rule10b5-1 disclosures used in his sample only allow to identify plan participants, *not* to distinguish between scheduled and non-scheduled transactions, Jagolinzer (2009) cannot investigate whether executives do alter corporate information releases around their precommitted trades, leaving the question of how plan-selling insiders generate their abnormal returns. Shon and Veliotis (2013) extend Jagolinzer (2009) and find significant associations between a sample of Rule 10b5-1 scheduled sales and the firm's likelihood of meeting or beating analyst earnings forecasts between 2003 and 2010. The authors interpret these results with the possibility of executives engaging in some strategic disclosure behaviour to alter

market expectations and thus maximize their stock sale proceeds. Their scheduled versus non-scheduled sale partitioning variable suffers however from being conditioned to insiders voluntarily disclosing in their SEC Form 4 sale filings that the trades were made pursuant to a Rule 10b5-1 plan. Since executive deferrals do not need to be formally covered by a Rule 10b5-1 plan to benefit from an affirmative defence against insider trading allegations, we can avoid conditioning our tests on Rule 10b5-1 voluntary disclosures. Moreover, since for all deferrals in our sample there is no uncertainty about the precommitted nature of the transactions, we are able to directly investigate executive strategic disclosure behaviours around scheduled trades, a feature that distinguish our setting from Jagolinzer (2009) and Shon and Veliotis (2013).

Third, our results that executive equity deferrals are more significantly associated to the sign of the news following (compared to preceding) the transaction dates are new to the insider trading literature (e.g., Noe, 1990; Cheng and Lo, 2006; Cheng et al., 2010; Brochet and Srinivasan, 2014; Cheng et al., 2016) and consistent with executives exploiting disclosure opportunities around their deferral transactions selectively, when the litigation risks associated with open-market purchases preceding information releases are higher. Together, our results support the concerns that executives might be engaging in strategic information releases around Rule 10b5 transactions and the recent calls by the Council of Institutional Investors (CII), an association of pension funds and other institutional investors, inviting the SEC to amend or provide interpretative guidance regarding Rule 10b5-1's plans, including the requirement of separate disclosures about plan adoption and participation as well as the prohibition for insiders to perform transactions during blackout periods or earlier than a minimum number of months after

plan adoption.[9] Although CII's request generated publicity about the issue, it is not clear that any such amendment or guidance is currently contemplated by the SEC.[10]

The remainder of the paper consists of five sections. Section 2 describes our sample of executive equity deferrals and provides evidence on the use of these transactions as substitutes for open-market purchases of the company's stock. Section 3 investigates incidence and values of executive deferral transactions during blackout windows. Section 4 reports results from trading return tests. Section 5 presents results from tests for strategic news releases around sample executives' deferral transactions. Section 6 concludes.

2. Sample

We build our sample of executive deferral transactions from the Thomson Insider security and derivative filings. The dataset provides detailed information on insider trading transactions as reported on Forms 3, 4, and 5 to the SEC, including the name of the insider, three "role-code" fields for the various positions held at the firm (e.g., officer, director, beneficial owner, and other position), number of shares bought or sold, transaction price, and transaction dates.[11] We identify corporate executives through the "RoleCodes1-3" fields in Thomson Insider and retain insiders with officer-type affiliation codes (i.e., "RoleCodes1-3" fields equal to 'AV', 'CEO', 'CFO', 'CI', 'CO', 'CT', 'EVP', 'H', 'O', 'OB', 'OD', 'OE', 'OP', 'OS', 'OT', 'OX', 'P', 'S', 'SVP', 'VP').[12]

[9] In November 2012, with a follow-up in May 2013, the Council of Institutional Investors submitted a letter requesting that the SEC consider pursuing interpretive guidance or amendments to Rule 10b5-1 that would: 1) require companies to disclose adoptions, amendments, and terminations of transactions set under the plans; and 2) prohibit corporate insiders from: a) adopting multiple, overlapping Rule 10b5-1 plans; b) making frequent modifications or cancellations of plans; c) executing transactions earlier than a minimum delay of at least three months after the adoption of a plan; and d) performing transactions during blackout trading windows.

[10] Although in 2002 the SEC proposed that the adoption, modification, or termination of Rule 10b5-1 plans be disclosed on Forms 8-K, SEC's proposal was not included in the significant revisions to Forms 8-K adopted by the SEC in 2004 and appears to have been abandoned.

[11] Thomson Insider records three separate date fields for each insider transaction: 1) the day on which the transaction occurred (i.e., "trandate" field); 2) the day on which the original Form 4 filing was received by the SEC (i.e., "secdate" field); and the day on which the Form 4 filing was entered in the SEC's database (i.e., "createdate" field). The date field we use in our analyses is the "trandate" field in which the deferral transaction occurred and the corresponding stock units were credited to the executive's deferred compensation account.

[12] Thomson Insider Data Manual's descriptions of the retained role-codes are: 'Assistant Vice-President' (AV); 'Chief Executive Officer' (CEO); 'Chief Financial Officer' (CFO); 'Chief Investment Officer' (CI); 'Chief Operating Officer' (CO); 'Chief Technology Oficer' (CT); 'Executive Vice-President' (EVP); 'Officer, Director or Beneficial

We identify deferral transactions by requiring the "sectype" and "derivative" type fields in Thomson Insider's Tables 1-2 to be equal to "DEFR" (i.e., Deferred Compensation) or "PHTNM" (i.e., Phantom Stock). The PHNTM field is used only for those cases in which a footnote to the transaction's Form 4 filing explicitly states that the phantom stocks acquired by the executive originated from equity deferrals made in accordance with the firm's executive deferred compensation plan. Our initial sample consists of 119,456 executive deferral transactions filed by 8,701 distinct executives in 1,194 unique firms between 2000 and 2014. We then require the identified transactions to have available information on the number of underlying shares, transaction price, and resulting share ownership in the firm. This data requirement reduces the sample to 93,836 deferrals filed by 7,737 distinct executives in 1,030 unique firms between 2000 and 2014 (equivalent to 77,298 executive-firm-days in 4,644 firm-year observations).

Table 1 – Column I provides statistics on the frequency and transaction values of the executive deferrals in our sample. About 13.0% of the deferrals are transactions filed by corporate CEOs, 9.5% are deferrals filed by CFOs, and the remaining 77.5% are deferrals filed by executives covering other titles at the firms. Individual executives perform, on average, about 4 deferral transactions per year, with individual CEOs performing relatively more frequent transactions compared to other executives. As typical of insider trades data, deferral values present high variation across individuals and are highly skewed. Average (median) deferral values are $ 217,700 ($ 5,912) for CEOs, $ 72,861 ($ 2,788) for CFOs, and $ 65,597 ($ 1,692) for other executives, respectively.[13] Figure 1 plots the average number of executive deferrals by day of the year. The figure shows that sample executives file their deferrals throughout the year but cluster

Owner' (H; OB); 'Officer' (O); 'Officer and Director'; (OD); 'Other Executive' (OE); 'Officer of Parent Company' (OP); 'Officer of Subsidiary Company' (OS); 'Officer and Treasurer' (OT); 'Divisional Officer' (OX); 'President' (P); 'Secretary' (S); 'Senior Vice-President' (SVP); 'Vice President' (VP). The most populated role-codes for the sub-sample of non-CEO/CFO officer types are 'Officer', 'Divisional Officer', 'Senior Vice-President', 'Executive Vice-President' and 'Vice-President' (about 76% of the non-CEO/CFO sample).

[13] For a sub-sample of deferring executives for which we could retrieve annual compensation data from Execucomp (i.e., 36,420 deferrals made by 2,674 distinct executives in 519 unique S&P1500 firms, with available transaction and firm characteristics), in untabulated analyses, we find that the total value deferred in a year averaged about 90% of the executive's cash compensation (i.e., sum of salary, annual bonuses and LTIPs' cash payouts) for that year.

their transactions at the end of the calendar quarters and the end of the year. In untabulated analyses, we find that the average (median) number of days between the earliest and latest deferral date within each firm-year is 266 (308) days and within each firm-quarter is 45 (59) days. The months with the highest number of transactions are December (14.4% of the transactions), September (10.4% of the transactions), June (10.3% of the transactions), and March (9.91% of the transactions). About 29% of the deferrals fall in the first quarter, 21% and 22% in the second and third quarter, respectively, and the remaining 28% in the fourth quarter. Together, these statistics suggest that deferring executives are allowed to schedule their deferral dates in any month of the year but concentrate their transactions around month- and quarter-ends. These patterns are consistent with deferred compensation plan descriptions allowing executives to defer based on pre-scheduled quarterly instalments and the existence of "cooling-off" periods between the plan initiation date and the first deferral transaction date.[14] Most interesting for the purposes of our study, in untabulated analyses we also find a significant clustering of the non-CEO/CFO deferrals around the firm's CEO's and/or CFO's deferrals. Conditionally upon the firm's CEO and/or CFO filing equity deferral transactions in the year, about 98% of the CFO's deferrals fall on the same day as CEO's deferrals and about 97% of the firm's non-CEO/CFO executives' deferrals fall on the same day as the CEO's and/or the CFO's deferral transaction dates. These statistics provide strong evidence of non-CEO/CFO executives coordinating their deferrals around the firm's CEO's and/or CFO's pre-planned deferrals dates.

To investigate whether executives use deferral transactions as substitutes for open-market purchases of the firm's stock, Columns II and III of Table 1 report statistics on executive open-market purchases. Column II reports frequencies and transaction values of the open-market purchases recorded in firms with at least one deferring executive in the year (i.e., 9,010

[14] Cooling-off periods prohibit the executives from electing deferral transaction dates that fall within a certain number of days after plan initiation. Cooling-off periods are usually set as multiples of 30 days after plan initiation. Periods that last a minimum of 30, 60 or 90 days after plan initiation can insulate an insider from allegations that the executive possessed material non-public information around plan initiation.

transactions by 2,299 distinct executives). Column III reports statistics on the open-market purchases performed by *all* other executives appearing on Thomson Insider over our sample period (i.e., 177,703 transactions by 32,913 unique executives in 9,861 other distinct firms). Comparisons between the two sub-samples indicate that sample executives use the deferrals as substitutes for open-market purchases of the company's stock. In firms with at least one executive deferral in the year, executives record, on average, less than one open-market purchase per year, with deferrals representing about 91% of total (deferral plus open-market purchase) transactions. In firms that do not report executive deferral transactions, open-market purchases are far more frequent among executives, with an average (median) number of purchases equal to 3 (1) per year, across all executives. Comparisons between executive deferrals and open-market purchases indicate that deferrals report significantly higher average transaction values, but lower median values and higher variation across individuals.

Table 2 provides details on the number and proportion of executive deferrals and ope-market purchases by S&P index (i.e., S&P500, Mid/Small Cap and No Index) and Fama and French (1997) 12-industry classifications. The sample in Column I (Column II) includes 77,134 executive deferrals (101,615 open-market purchases) with available data on transaction and firm characteristics. Executive deferrals are far more common among S&P1500, with about 88% of the deferral transactions being registered by executives working for S&P500 (about 53%) and Mid/Small Cap (about 35%) firms, compared to only 22% of open-market purchases.[15] Deferring executive work in a variety of different industries, with some concentration in the utilities (about 18% of the sample), financial services (about 15%), manufacturing and business equipment (about 14% and 13%, respectively) industries. Table 3 reports descriptive statistics on transaction and firm characteristics. Table 3 - Panel A reports summary statistics and mean comparison tests on

[15] The higher incidence of executive equity deferrals among S&P500 firms is consistent with the evidence in Franco et al. (2017) who find a significantly higher frequency of firms offering equity deferral options to outside directors among S&P 500 firms (about 58%) over their sample period 1999-2009.

transaction frequency, transaction values and resulting ownership in the firm, by executive title at the firm.[16] Compared to open-market transactions, executive deferrals are relatively less frequent among CEOs and CFOs and more frequent among executives covering non-CEO/CFO titles. Despite their lower frequencies, deferrals by CEOs and CFOs report significantly higher mean values compared to open-market purchases. For CEOs (CFOs), average transaction values for deferrals are $ 199,262 ($ 61,130), compared to only $ 68,960 ($ 25,533) for open-market purchases. Consistent with the conjecture that executives can use the deferrals as an alternative mechanism to acquire the firm's stock in windows when insider purchases would violate Rule 10b-5's restrictions, we find higher incidences of deferrals falling during blackout windows. We follow Bettis et al. (2000) and define the -47 to +2 trading days relative to quarterly earnings announcement dates as blackout days and the +3 to +12 trading days as non-blackout days. Across all executives, nearly 54% of the deferral transactions fall during blackout windows, compared to only 31% of the open-market purchases.[17] We also find that deferral transactions are more frequent among executives with lower stock holdings in their firms. This result is consistent with proxy statement descriptions promoting equity deferrals as a means to increase executives' ownership levels in the firm, and the views from governance commentators and practitioners that deferred stock units can help executives to meet existing ownership guidelines in a cost-effective manner (e.g., Equilar & Cook, F.W., 2013). Table 3 - Panel B reports summary statistics and mean

[16] One challenge we face in addressing executive deferral choices in conjunction with other aspects of the executive compensation contracts is that, out of the original sample of 77,134 (101,615) deferrals (open-market purchases), we were able to collect ExecuComp data for only 36,420 (19,968) deferrals (open-market purchases) made by 2,674 (4,431) distinct executives, corresponding to about 47% (20%) of the original deferrals (open-market purchases) sample. This is because most of the companies/insiders with open-market purchases on Thompson filings are not S&P1500 firms/top-paid executives over our sample period 2000-2014 (see Table 2). For the sub-samples of executives with available compensation data, untabulated univariate comparisons indicate that deferring executives, being employed by bigger firms, do receive significantly higher total compensation packages and higher proportions of equity incentives (i.e., sum of the value of the restricted shares and stock option grants for the year). Despite the severe sample attrition due to missing compensation data, all our results hold in models that control for the executive's proportion of equity incentives in the year.

[17] In untabulated analyses, we also find that the average transaction values of deferrals falling during blackout days are substantially higher compared to those of open-market purchases. For CEOs (CFOs), average deferral values are $ 202,478 ($ 57,999) in blackout days, compared to only $ 73,665 ($ 25,865) for open-market purchases. Across all executives, average deferral values are $ 72,311 in blackout days, compared to only $ 59,582 for open-market purchases.

comparison tests on a set of firm characteristics shown by prior studies to be associated with insider trading activities (e.g., Ofek and Yermack, 2000; Lakonishok and Lee, 2001; Cheng and Lo, 2006; Ravina and Sapienza, 2009). These variables include proxies for firm size, growth, past profitability and volatility in returns. $Size_{t-1}$ is the natural logarithm of the firm's market value (in millions) at the end of quarter t-1 relative to the transaction date. $Growth_{t-1}$ is the firm's market to book ratio at the end of quarter t-1. Roe_{t-1} is the most recent quarterly earnings available before the end of quarter t-1, scaled by beginning of quarter book value. Ret_{t-1} is the buy and hold raw stock returns over quarter t-1. $SdRet_{t-1}$ is the standard deviation of firm's daily raw stock returns over quarter t-1. Comparisons between deferrals and open-market purchases indicate that deferring executives work for larger firms with higher growth opportunities, better performance and lower volatility in past returns.

3. Executive deferrals during blackout windows

We start to investigate the use of the deferrals as a substitute to open-market purchases to trade during blackout windows by estimating the dollar values sample executives defer during blackout days as compared to other days of the year. We report the results of these analyses in Table 4. The table reports results from OLS models for the natural logarithm of one plus the total dollar values sample executives deferred on a firm-day. Since executives can place more than one transaction in a day, the sample for this table includes 76,702 executive-firm-days with non-missing data on transaction, executive and firm characteristics. To test whether executives defer higher amounts during blackout days relative to other days of the year, we include an indicator variable (*Blackout*) that is equal to one if the deferral transaction date falls within the -47 to +2 days around quarterly earnings announcement dates, and zero otherwise. The executive-level variables measure the executive's title (i.e., CEO, CFO, and other executive) and stock holdings in the firm (*Holdings*), measured as the natural logarithm of one plus the total number of shares

held by the executive on the firm-day. The firm-level characteristics include the measures for firm size, growth, past stock returns and returns volatility presented in Table 3 - Panel B.

Table 4 - Column I regresses the total dollar value deferred on a firm-day on the blackout dummy, executive- and firm-level variables. Table 4 - Columns II and III add an indicator variable for whether the footnotes to the original Form 4 filings mention that the transactions were executed pursuant to an existing Rule 10b5-1 plan (*Rule10b5-1*) and its interaction with the blackout dummy. We collect this variable based on a keyword search on LivEdgar requiring the words "defer" (or "deferred") and "10b5" (or "10b5-1") to appear in the full text of deferring executives' Form 4 filings. In untabulated statistics, we find that only 6% of the deferral transactions in our sample mentioned on the corresponding Form 4s that the transaction was originated in accordance to a Rule 10b5-1 plan. All models include firm and year fixed-effects and cluster standard errors at the executive level. Results in Table 4 indicate that executive deferred amount are significantly higher during blackout windows compared to other deferral transaction days. Interestingly, we also find that the deferred amounts are higher if the footnotes to the original Form 4 mention that the transaction was executed pursuant to a Rule 10b5-1 plan. However, amounts deferred during blackout windows do not vary significantly with the Form 4's explicit reference to a Rule 10b5-1 plan. This result suggests that Rule 10b5-1 plan disclosures have limited mitigating effects on insider trading litigation costs for executive equity deferrals.

To further assess the use of the deferrals as an alternative mechanism to acquire the firm's stock in windows when insider purchases would violate Rule 10b-5's trading restrictions, in alternative model specifications we benchmark executive deferred amounts to all other firm-days in the year. For this purpose, we first identify those firm-years with at least one executive deferral or open market purchase transaction on Thompson Insiders filings over our sample period 2000-2014. This sample includes 37,403 firm-years for 11,139 unique firms. For each of these firm-years we created a file with all firm-days in the year (i.e., 7,042,502 firm-days, corresponding to

20,927 firm-years for 5,755 unique firms with non-missing data on firm characteristics) and estimated a model for the dollar value of either a deferral or acquisition transaction (net of sales on the day) regressed on the deferral dummy, the blackout dummy, and their interaction. For all firm-days with no deferral, open-market purchase or sale, we set the total dollar value of executive transactions as zero. We report the results of these analyses in Table 5. Table 5 – Column I regresses the total transaction value on the deferral dummy. Table 5 – Columns II and III add the indicator for whether the transaction occurred during a blackout window and its interaction with the deferral dummy. All models include firm and year fixed-effects and cluster standard errors at the firm level. Across all columns, results indicate that executives deferrals report, on average, significantly higher transaction values compared to open-market purchases, and that the deferred amounts are significantly higher during blackout days compared to other days of the year. Together, these additional analyses further support the conjecture that executives can use the deferrals as an alternative mechanism to acquire the firm's stock during blackout windows.

4. Abnormal returns from deferral transactions

In this section, we investigate the abnormal returns sample executives realize from their deferral transactions. We measure abnormal returns as the difference between the firm's stock returns and the returns predicted by the size, book-to-market and momentum model as in Daniel et al. (1997).[18] We report results from these analyses in Table 6. The sample for this table includes 76,912 deferral transactions with non-missing data on future abnormal returns, deferral transaction values, executive and firm characteristics. Table 6 - Panel A reports summary statistics. *Adj RET(t+30)*, *Adj RET(t+60)*, *Adj RET(t+90)* are the cumulative abnormal returns over the +30, +60, +90 days following the deferral transaction dates. Across all measurement windows, deferring executives earn significant abnormal returns from their transactions. Average abnormal returns are equal to 1.5%, 2.8% and 3.0% over the +30, +60, and +90 days following

[18] We find similar results if we replace the risk-adjusted returns with the firm's market-adjusted returns with the S&P 500 Composite Index used as a proxy for the market portfolio.

the deferral transaction dates, respectively. Table 6 - Panel B reports mean comparison tests between the returns deferring executives realize from transactions recorded during blackout and non-blackout days (i.e., 41,878 and 35,034 transactions, respectively). Comparisons between the two sub-samples indicate that deferring executives realize significantly higher returns from transactions falling during blackout windows. Table 6 - Panel C reports results from multivariate analyses that regress the +30, +60, and +90 day abnormal returns on the blackout indicator, executive and firm characteristics. The executive characteristics include the executive's title, holdings in the firm, and size of the transaction, measured as the natural logarithm of one plus the total deferred amounts on the date. We estimate all models including firm and year fixed-effects and clustering standard errors at the executive level. Across all measurement windows, we continue to find that executives realize significantly higher returns from deferral transactions falling during blackout windows. We reach similar conclusions when we replicate the return tests after benchmarking firm returns following a deferral date to those following all other firm-days in the year. We report results from these analyses in Table 7. As for Table 5, sample for this table includes 7,042,502 firm-days for 20,927 firm-years with at least one executive deferral or open market purchase transaction on Thompson Insiders filings over our sample period. All models include firm and year fixed-effects and cluster standard errors at the firm level. Results indicate that executive deferral days report, on average, significantly higher ex-post returns, and that the returns are higher for transactions occurring during blackout days. Together, these results suggest that executives might be using the deferrals to conduct informed trading and generate significant returns in windows that violate Rule 10b5's restrictions.

There are two strategies executives can implement to realize significant returns from their deferrals. One strategy would be that of planning the deferral transactions in anticipation of pending favorable firm news events. Under this strategy, executives would time their transactions in windows shortly before the release of positive news about the firm. However, if insiders plan

their deferrals based on short-term information, we should observe higher returns for deferrals executed in blackout windows that are closer to the deferral election date (i.e., December of the previous year). To test this conjecture, in alternative specifications, we replicate the models in Table 6 – Panel C after adding three indicator variables for whether the deferrals occurred in the first, second, and third calendar quarter of the year, and their interactions with the blackout dummy. Untabulated results from these analyses indicate that the returns from deferral transactions occurring in blackout windows do not vary significantly across quarters, nor they are higher in the first quarter. We find similar results when we replace the quarter dummies with an indicator variable for the six-month period between January and June and its interaction with the blackout dummy. Together, these results suggest that executives do not seem to schedule their deferrals to exploit pending favourable company news. In the next section, we investigate the alternative explanation that the returns from the deferrals come from executives strategically selecting timing and content of their earnings disclosures around the pre-planned deferral dates.

5. Earnings disclosures around executive deferrals

We start to investigate the strategic release of corporate news around executive deferral transactions by plotting the mean cumulative abnormal returns over the – 90 to +90 days around sample deferral transaction dates. Figure 2 shows significant differences in returns between the pre- and post-deferral windows. Consistent with the conjecture that executives may strategically exploit disclosure opportunities around their pre-planned transactions, prices rise steeply in the window following the deferral dates. While abnormal returns average 0.5% over the 90-days period prior to the deferral dates, they increase to 2% over the 30-days period following the transaction dates and continue to increase until they level out to about 3.5% in the third month after the deferral dates. In unreported analyses, we find that the price increase is steeper for deferrals occurring in blackout periods. These return patterns are similar to those observed in

studies that infer strategic disclosure behaviors around stock option grants (e.g., Yermack, 1997; Aboody and Kasznik, 2000) and 10b5-1 plans' transactions (Jagolinzer, 2009).

5.1. Earnings announcement news

We start our analyses of executive deferrals with respect to earnings announcement news by comparing the frequency of executive deferrals and open-market purchases around quarterly earnings announcement dates. We report results of these analyses in Table 8 – Panel A. Comparisons between the two subsamples indicate that deferral transactions fall significantly more (less) frequently than open-market purchases in windows before (after) earnings announcement dates, with about 26% (32%) of deferral transactions falling within the 30 days before (after) a quarterly earnings announcement, compared to only 12% (55%) of open-market purchases. We next follow an approach similar to Noe (1999) and Cheng and Lo (2006) and estimate executive deferral amounts with respect to the content of quarterly earnings announcement news. For this purpose, we construct four indicator variables for whether the deferral transactions occur before or after the release of good and bad earnings news. *Pre_EA_Good* (*Pre_EA_Bad*) indicates whether the deferral transaction date falls within the 30-day window before a good (bad) news earnings announcement. *Post_EA_Good* (*Post_EA_Bad*) indicates whether the deferral transaction date falls within the 30-day window after a good (bad) news earnings announcement. The coefficients on these four indicator variables should capture the "abnormal" deferral activity with respect to the content of earnings announcement news, relative to other transaction days in the year. Prior insider trading research (e.g., Givoly and Palmon, 1985; Noe 1999; Cheng and Lo, 2006; Jagolinzer and Roulstone, 2008) shows that insiders are more likely to take advantage of the stock price movements associated with disclosures happening sometime before (rather than after) the trades take place. These studies attribute insiders' reluctance to trade before information releases due to firm-imposed trading restrictions and the higher litigation concerns compared to trades performed after information

releases. We follow this literature and first expect the deferrals to be more likely preceded by the release of bad (price-decreasing) than good (price-increasing) earnings news. However, since the pre-planned nature of the deferrals can provide executives with a defense against illegal trading allegations, we expect the deferrals also to be significantly related to the sign of the news following (rather than preceding) the transaction dates. As a consequence, we also expect the deferrals to be more likely followed by the release of good (price-increasing) news than bad (price-decreasing) news. Moreover, if the availability of a Rule 10b5-1 protection provides executives incentives to exploit earnings disclosures selectively (i.e., when the litigation costs of open-market transactions are higher), we expect the deferrals to be more significantly associated with the sign of the news released sometimes after (rather than before) the pre-planned transaction dates.

We report results of these analyses in Table 9. As for the models in Table 4, the dependent variable in Table 9 is the natural logarithm of one plus the total value of the deferral transactions net of sales the executive registered on a firm-day. Table 9 – Panel A reports regression results. Table 9 – Panel B reports differences in coefficients between good and bad news, as well as the corresponding tests for strategic news releases around the deferral transaction dates. Column I classifies earnings announcements as "good" ("bad") news if the size-adjusted daily returns in the three-day (-1, +1) window around the earnings announcement date are positive (negative). If the abnormal returns are positive (negative), we classify earnings announcements as good news (bad news). Column II classifies earnings announcements as "good" ("bad") news if the released earnings meet or beat (are lower than) analysts' consensus earnings forecast. Consensus forecasts are calculated as the average of all the most recent forecast estimates relative to the firm's earnings announcement date. We classify earnings announcements as "good" ("bad") news if the released earnings meet or beat (are lower than) analysts' consensus earnings forecast. Across both columns, we find results in support of our predictions. Conditional on a deferral transaction occurring in the 30-day window around a good news earnings announcement, executive deferred

amounts are significantly higher before rather than after the release of good news. Similarly, for deferral transactions occurring in the 30-day window around a bad news earnings announcement, executive deferred amounts are significantly lower before rather than after the release of bad news. For deferral transactions occurring in the 30-day window before earnings announcements, deferred amounts are significantly higher before the release of good news and lower before the release of bad news. For deferral transactions occurring in the 30-day window after earnings announcements, deferred amounts are only weakly related with the sign of the news, with executives deferring marginally higher amounts after the release of good news.

Significance tests for strategic news releases in Table 9 – Panel B indicate that the differences in coefficients between the pre- and post- good and bad news indicators are both statistically and economically significant. Based on the model estimates in Column I (Column II), executive deferred amounts before good news are about 1.45 (1.10) times higher than those after good news. Conversely, deferred amounts before bad news are about 64% (73%) lower than those after bad news. For deferral transactions occurring in the 30-day window before earnings announcements, deferral amounts before the release of good news are 2.44 (1.53) times higher than those before the release of bad news. For deferral transactions occurring in the 30-day window following earnings announcements, the deferred amounts are only weakly related with the news, with executives deferring larger, but economically insignificant, amounts after the release of good news. Taken together, these results support the conjecture that deferring executives might strategically select earnings disclosures around their pre-planned deferral dates. Moreover, the result that the deferred amounts are more significantly related to pending compared to prior earnings news suggest that executives might exploit their disclosure opportunities selectively, when the litigation risk associated with open-market purchases is higher.

5.2. Management forecast news

In this section we investigate executive deferrals with respect to management forecast news. The discretionary nature of these disclosures makes them a particularly interesting setting for the purposes of our analyses, since we hypothesize that gains from short-term stock price movements may motivate managers to strategically select timing and content of their disclosures around their pre-planned transaction dates. Noe (1999) and Cheng and Lo (2006) find evidence that insiders time their trades strategically around management forecast dates. Both studies find that managers buy more after bad news than good news management forecasts (and conversely sell more shares after good news than after bad news forecasts). However, both studies do not find significant differences in insider trading activity before forecasts are released, a result the authors attribute to the higher litigation costs associated with trading before corporate announcements. Testing these associations in the context of executive deferrals presents two advantages. First, the pre-planned nature of these transactions allows us to more directly test whether insider trading affects strategic disclosures, rather than executives trading as a response to previous management forecast decisions. Second, the possibility of a Rule 10b5-1 defense, allows us to detect strategic management forecasts decisions following, rather than preceding, executive insider trades.

We obtain management forecast data from IBES Guidance database. Since we aim at capturing the association between timing and content of disclosures that have the potential of impacting the firm's stock prices around the deferral transaction dates, we include all management forecasts, whether they are for earnings or other measures, such as cash flow or revenues, and whether they are for quarterly or annual periods. As for earnings announcement dates, we start our analyses by recording the frequency of executive deferrals and open-market purchases around management forecast dates. We report results of these analyses in Table 8 – Panel B. We find that a significantly higher proportion of executive deferrals fall within the -30 to +30 days around management forecast dates, compared to open-market purchases. Across all executives, nearly 47% of deferral transactions fall within the -30 to +30 days around a management forecast date,

compared to only 21% of open-market purchases. About 26% of the deferrals occur within 30 days after a forecast date, compared to 18% of open-market purchases. We record higher differences in transaction frequencies over the 30-days window preceding management forecast dates, with about 21% of deferrals falling within 30 days before a management forecast, compared to only 3% of open-market purchases.

Table 10 investigates the association between executive deferred amounts and management forecast news in a multivariate setting. As for the models in Table 9, the dependent variable in Table 10 is the natural logarithm of one plus the total value of the deferral transactions net of sales the executive registered on a firm-day. Table 10 – Panel A reports regression results. Table 10 – Panel B reports tests for strategic news releases around the deferral transaction dates. *Pre_MF_Good* (*Pre_MF_Bad*) indicates whether the deferral transaction occurs within the 30-day window before a good (bad) news management forecast. *Post_MF_Good* (*Post_MF_Bad*) indicates whether the deferral transaction occurs within the 30-day window after a good (bad) news management forecast. Column I classifies management forecasts as "good" ("bad") news if the size-adjusted daily returns in the three-day (-1, +1) window around the management forecast date are positive (negative). Column II classifies management forecasts as "good" ("bad") news if the forecasted earnings meet or beat (are lower than) analysts' consensus earnings forecast. Across both columns, we find results in support of our predictions. Conditional on the deferral transaction occurring in the 30-day window around a good news (bad news) management forecast, executive deferral amounts are significantly higher (lower) before rather than after the release of good news (bad news). For deferral transactions occurring in the 30-day window before a management forecast, deferred amounts are significantly higher before the release of good news and lower before the release of bad news. For deferral transactions occurring in the 30-day window after a management forecast, deferred amounts are only weakly related with the sign of the news, with executives deferring marginally higher amounts after the release of good news.

Significance tests for strategic news releases in Table 10 – Panel B indicate that the differences in coefficients between the pre- and post- good and bad news indicators are both statistically and economically significant. Based on the model estimates in Column I (Column II), executive deferred amounts before good news are about 1.44 (1.50) times higher than those after good news. Conversely, deferred amounts before bad news are about 60% (79%) lower than those after bad news. For deferral transactions occurring in the 30-day window before earnings announcements, deferral amounts before the release of good news are 2.73 (1.72) times higher than those before the release of bad news. As for earnings announcement news, for deferral transactions occurring in the 30-day window following management forecasts, sample executives defer marginally higher amounts after the release of good news compared to bad news forecasts. We find similar results when we restrict our analyses to management forecasts that do not occur on the same date as the firm's quarterly earnings announcements. We report the results for these analyses in Table 11. Overall, results from our management forecasts tests further support the conjecture that executives might exploit disclosure opportunities around their pre-planned deferrals, especially in windows when the litigation costs associated to trades before corporate disclosures are higher.

6. Conclusions

We study executive equity deferral transactions, which represent the executives' election to defer part or all of the annual base salary and other cash pay into the company's stock. These transactions are particularly interesting for two reasons. First, they provide executives with an alternative channel to acquire the company's shares. Second, since these transactions are executed based on a pre-planned schedule, they can benefit of an affirmative defence against illegal insider trading allegations. Using a large sample of executive equity deferrals between 2000 and 2014, we investigate whether executives use these transactions to acquire the firm's stock in windows when open purchases would violate Rule 10b5 trading restrictions and whether executives exploit disclosure opportunities around their pre-planned deferrals to maximize their trading profits.

Our results indicate that executives use deferral transactions as an alternative means to acquire the company's stock. We also find that a significant proportion of the deferrals occur during blackout windows and that deferring executives earn substantial abnormal returns from their transactions. Consistent with the conjecture that executive may strategically select the timing and content of corporate disclosures around their pre-planned deferral dates, we find significant associations between executive deferral amounts and the sign of the earnings news released around the deferral transaction dates. For deferral transactions occurring in the 30-day window around a good (bad) news, deferred amounts are significantly higher (lower) before rather than after the release of the news. For deferral transactions occurring in the 30-day window before earnings news, deferral amounts are significantly higher (lower) before the release of a good (bad) news. Together, our results are consistent with executives exploiting disclosure opportunities around their deferrals selectively, when the litigation costs associated with open market purchases preceding information releases are higher and support the recent concerns that executives might be using Rule 10b5 complaint transactions to conduct informed trading.

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Washington Service, 2012b. Companies with 10b5-1 Plans in the S&P 500 Index.

Appendix
Proxy statement descriptions of executive deferred compensation plans

From First Community Bancorp's 2007 Definitive Proxy Statement:

The Company has adopted a Directors' Deferred Compensation Plan, or the Deferred Plan, that allows all directors of the Company and certain executive officers of the Company to elect by written notice to defer payment of all or a portion of their directors' fees, in the case of outside directors, or base salary, bonus or other compensation in the case of employee directors, for the next succeeding calendar year into the Deferred Plan. The Deferred Plan permits participants to elect to have deferred amounts invested in a money market account or common stock of the Company. The Deferred Plan has been designed to comply with Rule 10b5-1 of the Securities Exchange Act of 1934, as amended. Participation in the Deferred Plan is voluntary and participants may not change their investment elections once made. [..] All deferred amounts are deemed invested in a money market fund or deemed invested in shares of common stock of the Company depending on the election made by the participant.

From Eastman Kodak's 2007 Definitive Proxy Statement:

The Company maintains a non-qualified deferred compensation plan for its executives, known as the Eastman Kodak Company 1982 Executive Deferred Compensation Plan (EDCP). The plan permits the Company's executives to defer a portion of their base salary and annual bonus awards. Each fall, the Company's executives may elect to defer base salary for the following year and up to a portion of any bonus earned under EXCEL the following year. The plan is intended to promote retention by providing our executives with a long-term savings opportunity on a tax-deferred basis. The plan has only two investment options: an interest-bearing account that pays interest at the prime rate and a Kodak phantom stock account. [..] Dividend equivalents on amounts invested in an executive's phantom stock account are credited to an executive's account in the form of additional stock units. The plan's benefits are neither funded nor secured.

From Starbucks' 2010 Definitive Proxy Statement

The named executive officers are eligible to participate in the Management Deferred Compensation Plan, a nominally funded, non-qualified plan, the benefits of which are paid by Starbucks out of our general assets. The plan is subject to the requirements of Section 409A of the Internal Revenue Code. [..] Participants may defer up to 70% of base salary to the Executive Management Bonus Plan and up to 95% of bonuses paid under the Executive Management Bonus Plan [..] As a nominally funded, non-qualified plan, the Management Deferred Compensation Plan uses measurement benchmarks to credit earnings on compensation deferred under the plan. Those measurement benchmarks are based on the same funds available under our 401(k) plan. [..] At the time of making the deferral election for a particular year, a participant elects when the associated deferred compensation will be distributed. In general, the participant can receive scheduled "in-service" withdrawals or hardship withdrawals while still employed or have distributions paid on separation from service.

From Boeing's 2015 Definitive Proxy Statement:

Our Deferred Compensation Plan for Employees is a nonqualified, unfunded defined contribution plan under which eligible executives may defer up to 50% of base salary, 100% of annual incentive awards and 100% of performance awards. Deferred compensation investment elections available under the Deferred Compensation Plan include an interest-bearing account, a Boeing Stock Fund account and 21 other notional investment funds that track those available to employees under the Voluntary Investment Plan (a 401(k) plan). [..] Executives may change how deferrals are invested in the funds at any time, subject to insider trading rules and other Deferred Compensation Plan restrictions that limit the transfer of funds into or out of the Boeing stock fund. Executives choose how and when to receive payments under the Deferred Compensation Plan. Executives may elect either a lump-sum payment or annual payments over two to 15 years.

Table 1: Frequency and value of executive deferrals and open-market purchases

The table provides summary statistics and comparison tests between executive deferrals and open-market purchases' frequencies and values. Column I provides descriptive statistics on our initial sample of 93,836 executive deferral transactions filed by 7,737 distinct executives in 1,030 unique firms between 2000 and 2014 as reported on Thomson Insider filings. Column II reports statistics on the open-market purchases performed by the executives in firms with at least one deferral transaction in the year (i.e., 9,010 transactions by 2,299 distinct executives in 1,030 unique firms). Column III reports descriptive statistics on the open-market purchases performed by all other executives appearing on Thomson Insider over our sample period (i.e., 177,703 transactions by 32,913 unique executives in 9,861 other distinct firms). *** indicate significance levels at $p < 0.01$ from two-tailed tests for differences in means with the deferral values reported in Column I.

	I Deferral Transactions		II Open-Market Purchases (Firm-Years with executive deferrals)		III Open-Market Purchases (Firm-Years without executive deferrals)	
Panel A:	N Transactions (%)	Average (Median) Transactions/Year	N Transactions (%)	Average (Median) Transactions/Year	N Transactions (%)	Average (Median) Transactions/Year
Transactions by:						
CEOs	12,224 (13.03%)	4.67 (2.00)	2,886 (32.03%)	0.97 (0.00)	72,662 (40.89%)	4.48 (2.00)
CFOs	8,859 (9.44%)	4.27 (2.00)	1,010 (11.21%)	0.42 (0.00)	20,206 (11.37%)	2.29 (1.00)
Other Executives	72,753 (77.53%)	4.28 (2.00)	5,114 (56.76%)	0.26 (0.00)	84,835 (47.74%)	2.57 (1.00)
All Executives	93,836 (100.00%)	4.32 (2.00)	9,010 (100.00%)	0.36 (0.00)	177,703 (100.00%)	3.06 (1.00)
Panel B:						
Transaction Values ($):	Mean (Median)	Std Dev	Mean (Median)	Std Dev	Mean (Median)	Std Dev
CEOs	$ 217,700 ($ 5,912)	$ 909,715	$ 142,403 ($ 21,532) ***	$ 647,115	$ 72,047 ($ 8,046) ***	$ 590,623
CFOs	$ 72,861 ($ 2,788)	$ 317,996	73,013 ($ 13,625)	$ 316,176	$ 29,180 ($ 6,328) ***	$ 130,297
Other Executives	$ 65,597 ($ 1,692)	$ 427,034	59,571 ($ 9,071)	$ 260,195	$ 58,130 ($ 7,024) ***	$ 471,499
All Executives	$ 86,097 ($ 2,206)	$ 511,206	$ 87,610 ($ 12,868)	$ 430,294	$ 60,529 ($ 7,350) ***	$ 500,865
N	93,836		9,010		177,703	

Table 2: Executive deferrals and open-market purchases by S&P index and industry

The table presents number and proportion of executive deferral and open-market purchases by S&P index (i.e., S&P500, Mid/Small Cap and No Index) and Fama and French (1997) 12-industry classifications. The sample in Column I (Column II) includes 77,134 executive deferrals (101,615 open-market purchases) filed between 2000 and 2014 with available data on transaction and firm characteristics (see Table 3).

	I Deferral Transactions (N=77,134)								II All Open-Market Purchases (N = 101,615)							
	All transactions		S&P500		Mid/Small Cap		No Index		All transactions		S&P500		Mid/Small Cap		No Index	
Industry	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	1,211	1.57	826	2.02	238	0.91	147	1.65	3,115	3.06	481	8.00	426	2.64	2,208	2.78
2	4,625	6.00	888	2.18	3,268	11.96	469	5.25	1,672	1.65	137	2.28	543	3.36	992	1.25
3	11,123	14.42	5,589	13.67	4,797	17.56	737	8.26	8,307	8.17	789	13.11	1,935	11.99	5,583	7.03
4	2,403	3.12	1,750	4.28	431	1.58	222	2.49	4,787	4.72	848	14.09	751	4.65	3,188	4.01
5	6,873	8.91	2,660	6.50	3,464	12.68	749	8.39	3,032	2.98	127	2.11	498	3.08	2,407	3.03
6	10,174	13.19	7,628	18.65	2,117	7.75	429	4.81	16,524	16.26	705	11.71	2,504	15.51	13,315	16.76
7	2,722	3.53	2,292	5.60	182	0.69	248	2.78	1,509	1.49	98	1.63	78	0.50	1,333	1.68
8	13,687	17.74	6,969	17.04	6,662	24.39	56	0.62	3,595	3.54	624	10.37	1,189	7.36	1,782	2.24
9	2,948	3.82	1,414	3.46	627	2.29	907	10.16	8,525	8.39	416	6.91	2,520	15.61	5,589	7.03
10	4,403	5.71	3,826	9.36	168	0.56	409	4.58	14,530	14.30	321	5.32	1,114	6.90	13,095	16.48
11	11,363	14.73	5,356	13.10	2,822	10.33	3,185	35.69	26,680	26.25	1,023	17.00	3,094	19.17	22,563	28.40
12	5,602	7.26	1,695	4.14	2,540	9.30	1,367	15.32	9,339	9.19	450	7.47	1,490	9.23	7,400	9.31
N	77,134	100	40,893	100	27,316	100	8,925	100	101,615	100	6,019	100	16,142	100	79,455	100
%	100.00%		53.01%		35.41%		11.58%		100.00%		5.93%		15.88%		78.19%	

Table 3: Summary statistics on transaction characteristics

The table provides summary statistics and mean comparison tests between executive deferrals and open-market purchases. The sample in Column I (Column II) includes 77,134 executive deferrals (101,615 open-market purchases) filed between 2000 and 2014 with available data on transaction and firm characteristics. All variables are defined in the text. *** indicate significance levels at $p < 0.01$ levels from two-tailed tests for differences in percentages and means between deferrals and open-market purchases.

	I Deferral Transactions (N=77,134)			II All Open-Market Purchases (N = 101,615)			Diff
Transaction Characteristics							
	N	%		N	%		
Transactions by:							
CEOs	9,704	(12.58%)		42,782	(42.10%)		***
CFOs	6,980	(9.05%)		11,800	(11.61%)		***
Other Executives	60,450	(78.37%)		47,033	(46.29%)		***
All Executives	77,134	(100.00%)		101,615	(100.00%)		
Blackout Transactions by:							
CEOs	5,339	(55.02%)		13,162	(30.77%)		***
CFOs	3,842	(55.04%)		3,106	(26.32%)		***
Other Executives	32,888	(54.41%)		14,944	(31.77%)		***
All Executives	42,069	(54.54%)		31,212	(30.72%)		***
	Mean	Median	SD	Mean	Median	SD	
Transaction Values ($):							
CEOs	$ 199,262	$ 4,371	$ 850,761	$ 68,960	$ 8,550	$ 523,328	***
CFOs	$ 61,130	$ 2,289	$ 259,622	$ 25,533	$ 6,533	$ 75,393	***
Other Executives	$ 59,109	$ 1,431	$ 417,344	$ 58,329	$ 6,720	$ 371,338	
All Executives	$ 76,924	$ 1,811	$ 485,597	$ 58,997	$ 7,500	$ 424,217	***
	Mean	Median	SD	Mean	Median	SD	
Holdings (ln(# shares)):							
CEOs	9.107	9.790	2.576	12.986	12.691	2.834	***
CFOs	7.606	8.032	2.369	9.693	9.730	1.680	***
Other Executives	7.622	7.947	2.216	10.262	9.930	2.647	***
All Executives	7.807	8.112	2.331	11.343	10.938	2.991	***
Firm Characteristics							
	Mean	Median	SD	Mean	Median	SD	
$Size_{t-1}$	8.721	8.514	1.759	5.456	5.292	1.884	***
$Growth_{t-1}$	2.794	2.204	2.538	2.641	1.608	4.570	***
Roe_{t-1}	0.035	0.035	0.071	-0.025	0.010	0.164	***
Ret_{t-1}	0.034	0.038	0.159	-0.021	-0.029	0.277	***
$SdRet_{t-1}$	0.019	0.015	0.011	0.037	0.031	0.021	***

Table 4: Executive deferrals during blackout windows

The table presents results from OLS models for the dollar value deferred by the executive on a firm-day. The dependent variable is the natural logarithm of one plus the total dollar value of the deferral transactions the executive registered on a firm-day. The dollar value of the deferral transactions equals the value of the deferred stock units on the day the transactions are filed, as reported in the "trandate" field in Thomson Insider Filings Data. Blackout is equal to one if the deferral transaction date falls within the -47 to +2 days trading days relative to earnings announcement day, zero otherwise. Rule10b5-1 is equal to one if the footnotes to the Form 4 indicate that the deferral transactions are made pursuant to a Rule10b5-1 plan, zero otherwise. All models include firm and year fixed effects and cluster standard errors at the executive level (i.e., the "personid" field in Thomson Insider). $^{***, **, *}$ indicate significance levels at $p < 0.01$, $p<0.05$, $p<0.10$, respectively. All variables are defined in the text.

Dependent Variable →	**Ln(Tot Deferred on Firm-Day)**								
Sample →	**Deferral days in the year**								
	I			**II**			**III**		
Timing:									
Blackout	0.089	(2.92)	***	0.084	(2.78)	***	0.078	(2.52)	**
Rule10b5-1	--			1.581	(10.84)	***	1.535	(8.90)	***
Blackout* Rule10b5-1	--			--			0.083	(0.65)	
Exe Characteristics:									
CEO	0.806	(10.69)	***	0.805	(10.86)	***	0.804	(10.84)	***
CFO	0.139	(1.99)	**	0.138	(1.95)	*	0.138	(1.95)	*
Holdings	-0.000	(-1.66)	*	-0.000	(-1.65)	*	-0.000	(-1.65)	*
Firm Characteristics:									
$Size_{t-1}$	-0.634	(-6.95)	***	-0.694	(-7.58)	***	-0.694	(-7.58)	***
$Growth_{t-1}$	-0.030	(-2.42)	**	-0.038	(-3.09)	***	-0.038	(-3.09)	***
Roe_{t-1}	1.519	(4.51)	***	1.436	(4.18)	***	1.436	(4.18)	***
Ret_{t-1}	0.374	(3.08)	***	0.423	(3.49)	***	0.423	(3.48)	***
$SdRet_{t-1}$	-14.485	(-5.40)	***	-15.139	(-5.67)	***	-15.144	(-5.67)	***
Constant	12.936	(14.98)	***	12.286	(15.32)	***	13.287	(15.32)	***
Firm FE	YES			YES			YES		
Year FE	YES			YES			YES		
N	76,702			76,702			76,702		
Adj. R^2	0.243			0.249			0.249		

Table 5: Executive deferrals during blackout windows: benchmarking deferrals days against all other firm-days

Sample for this table includes all firm-days for those firms with at least one executive deferral and/or open market purchase transaction on Thompson Insiders filings over our sample period 2000-2014 (i.e., 7,042,502 firm-days, corresponding to 20,927 firm-years for 5,755 unique firms with non-missing data on transaction and firm characteristics). The table presents results from OLS model for the natural logarithm of one plus the total dollar value of the deferral and/or open-market purchases registered by firm executives on a day. For all firm-days with no deferral or open-market purchases, the total dollar value of executive transactions is set to zero. Blackout is equal to one if the deferral transaction falls within the -47 to +2 days trading days relative to earnings announcement day, zero otherwise. All models include firm and year fixed effects and cluster standard errors at the firm level. $^{***, **, *}$ indicate significance levels at $p < 0.01$, $p<0.05$, $p<0.10$, respectively.

Dependent Variable →	**Ln(Tot Deferred or Acquired on a Firm-Day)**								
Sample →	**All firm-days in the year**								
	I			**II**			**III**		
Timing:									
Deferral	7.484	(57.54)	***	7.486	(57.59)	***	7.046	(49.00)	***
Blackout	--			0.076	(14.38)	***	0.073	(14.26)	***
Deferral*Blackout	--			--			0.846	(7.51)	***
Firm Characteristics:									
Size $_{t-1}$	-0.082	(-11.73)	***	-0.082	(-11.75)	***	-0.082	(-11.75)	***
Growth $_{t-1}$	-0.000	(-1.02)		-0.000	(-0.98)		-0.000	(-0.99)	
Roe $_{t-1}$	-0.000	(-1.26)		-0.000	(-1.25)		-0.000	(-1.25)	
Ret $_{t-1}$	-0.066	(-4.04)	***	-0.066	(-4.05)	***	-0.066	(-4.05)	***
SdRet $_{t-1}$	0.116	(1.22)		0.102	(1.07)		0.102	(1.08)	
Constant	0.431	(9.73)	***	0.390	(8.86)	***	0.392	(8.89)	***
Firm FE	YES			YES			YES		
Year FE	YES			YES			YES		
N	7,042,502			7,042,502			7,042,502		
Adj. R^2	0.079			0.079			0.080		

Table 6: Abnormal returns following the deferral transaction dates

The table reports summary statistics and significance tests on the abnormal returns following executive deferral transactions. Sample for this table includes 76,912 executive deferral transactions with non-missing data on future returns, transaction values and firm characteristics. Adj RET(t+30), Adj RET(t+60), Adj RET(t+90) are the cumulative abnormal returns over the +30, +60, +90 days following the deferral transactions dates (i.e., the "trandate" field in Thomson Insider Filings Data). We measure abnormal returns as the difference between the firm's stock returns and the returns predicted by the size, book-to-market and momentum model as in Daniel et al. (1997). Panel A provides summary statistics. Panel B compares the abnormal returns for deferral transactions recorded during blackout and non-blackout days. Blackout (non-blackout) days are defined as the -47 to +2 (+3 to +12) days relative to earnings announcement day. *** indicate significance levels at $p < 0.01$ from two-tailed tests for differences in means between the sub-samples of deferral transactions recorded during blackout and non-blackout days. Panel C presents results from OLS models for the returns at the +30, +60, +90 days following the deferral transaction dates. Blackout is equal to one if the deferral transaction date falls within the -47 to +2 trading days relative to earnings announcement day, zero otherwise. Transaction size is the natural logarithm of one plus the dollar value of the transaction. All other variables are defined in the text. ***, **, * indicate significance levels at $p < 0.01$, $p<0.05$, $p<0.10$, respectively. All models include firm and year fixed effects and cluster standard errors at the executive level (i.e., the "personid" field in Thomson Insider).

Panel A:	N	Mean	SD	Q1	Median	Q3
Adj RET (t+30)	76,912	0.015	(0.090)	-0.031	0.008	0.052
Adj RET (t+60)	76,912	0.029	(0.120)	-0.034	0.014	0.077
Adj RET (t+90)	76,912	0.030	(0.152)	-0.049	0.015	0.093

Panel B:	Blackout Days (N = 41,878)			Non Blackout Days (N = 35,034)			Diff
	Mean	SD	p-value	Mean	SD	p-value	
Adj RET (t+30)	0.019	(0.094)	0.000	0.011	(0.085)	0.000	***
Adj RET (t+60)	0.031	(0.121)	0.000	0.026	(0.118)	0.000	***
Adj RET (t+90)	0.032	(0.157)	0.000	0.026	(0.146)	0.000	***

Panel C:

Dependent Variable →	**Abnormal Returns following the Deferral-Day**								
Sample →	**Deferral days in the year**								
	Adj RET (t+30)			Adj RET (t+60)			Adj RET (t+90)		
Blackout	0.007	(7.76)	***	0.004	(4.17)	***	0.005	(3.11)	***
CEO	0.000	(0.11)		-0.001	(-0.34)		-0.003	(-1.23)	
CFO	0.001	(0.97)		0.001	(0.63)		0.003	(1.03)	
Transaction Size	-0.000	(-0.81)		0.000	(0.35)		0.001	(1.18)	
Holdings	0.000	(2.34)	**	-0.000	(-1.22)		-0.000	(1.14)	
Size $_{t-1}$	-0.024	(-9.02)	***	-0.046	(-11.22)	***	-0.077	(-14.00)	***
Growth $_{t-1}$	-0.001	(-3.25)	***	0.000	(0.36)		-0.000	(-0.37)	
Roe $_{t-1}$	0.022	(1.76)	*	-0.059	(-2.97)	***	-0.045	(-1.89)	*
Ret $_{t-1}$	-0.014	(-1.78)	*	-0.021	(-2.27)	**	-0.003	(-0.04)	
SdRet $_{t-1}$	0.565	(5.11)	***	0.779	(5.29)	***	0.628	(3.48)	***
Constant	0.221	(9.06)	***	0.426	(11.05)	***	0.712	(13.58)	***
Firm FE		YES			YES			YES	
Year FE		YES			YES			YES	
N		76,912			76,912			76,912	
Adj. R^2		0.175			0.241			0.235	

Table 7: Abnormal returns following the deferral transaction dates: benchmarking deferrals days against all other firm-days

Sample for this table includes all firm-days for those firms with at least one executive deferral and/or open market purchase transaction on Thompson Insiders filings over our sample period 2000-2014 (i.e., 7,042,502 firm-days, corresponding to 20,927 firm-years for 5,755 unique firms with non-missing data on transaction and firm characteristics). This table presents results from OLS models for the returns at the +30, +60, +90 days following all firm-days in the year. Blackout is equal to one if the deferral transaction falls within the -47 to +2 days trading days relative to earnings announcement day, zero otherwise. All models include firm and year fixed effects and cluster standard errors at the firm level. $^{***, **, *}$ indicate significance levels at $p < 0.01$, $p<0.05$, $p<0.10$, respectively.

Dependent Variable →	**Abnormal Returns following the Firm-Day**								
Sample →	**All firm-days in the year**								
	Adj RET (t+30)			Adj RET (t+60)			Adj RET (t+90)		
Timing:									
Deferral	0.010	(7.54)	***	0.024	(9.98)	***	0.023	(8.21)	***
Blackout	0.002	(2.80)	***	0.002	(3.18)	***	0.003	(3.63)	***
Deferral*Blackout	0.006	(3.48)	***	0.004	(1.88)	*	0.003	(1.12)	
Firm Characteristics:									
Size $_{t-1}$	-0.046	(-29.57)	***	-0.083	(-29.73)	***	-0.117	(-29.08)	***
Growth $_{t-1}$	-0.000	(-0.99)		0.000	(0.44)		0.000	(1.37)	
Roe $_{t-1}$	0.000	(0.48)		0.000	(1.48)		0.000	(1.35)	
Ret $_{t-1}$	-0.003	(-1.98)	*	-0.008	(-2.60)	***	-0.006	(-0.94)	
SdRet $_{t-1}$	-0.111	(-1.72)	*	-0.209	(-1.89)	*	-0.227	(-1.50)	
Constant	0.279	(26.34)	***	0.509	(27.00)	***	0.711	(26.44)	***
Firm FE	YES			YES			YES		
Year FE	YES			YES			YES		
N	7,042,502			7,042,502			7,042,502		
Adj. R^2	0.062			0.119			0.163		

Table 8: Transactions around earnings anouncement and management forecast dates

The table provides summary statistics and mean comparison tests between executive deferrals and open-market purchases frequency around earnings announcement dates (Panel A) and management forecasts (Panel B). The sample in Column I (Column II) includes 77,134 executive deferrals (101,615 open-market purchases) with available data on transaction and firm characteristics. *** indicate significance levels at $p < 0.01$ levels from two-tailed tests for differences in means between deferral and open-market purchases.

	I Deferral Transactions (N=77,134)		II All Open-Market Purchases (N = 101,615)		Diff
Panel A: Around EAs					
	N	%	N	%	
Within 30 days after a EA					
CEOs	2,973	(30.64%)	23,783	(55.59%)	***
CFOs	2,198	(31.49%)	7,370	(62.46%)	***
Other Executives	19,257	(31.86%)	24,867	(52.87%)	***
All Executives	24,428	(31.67%)	56,020	(55.13%)	***
Within 30 days before a EA					
CEOs	2,599	(26.78%)	5,308	(12.41%)	***
CFOs	1,827	(26.17%)	1,012	(8.58%)	***
Other Executives	16,129	(26.68%)	6,067	(12.90%)	***
All Executives	20,555	(26.65%)	12,387	(12.19%)	***
Other dates	32,131	(41.68%)	33,208	(32.68%)	
Panel B: Around MFs					
	N	%	N	%	
Within 30 days after a MF					
CEOs	2,431	(25.05%)	7,790	(18.21%)	***
CFOs	1,800	(25.79%)	2,540	(21.53%)	***
Other Executives	15,820	(26.17%)	7,980	(16.97%)	***
All Executives	20,051	(26.00%)	18,310	(18.02%)	***
Within 30 days before a MF					
CEOs	1,979	(19.78%)	1,262	(2.95%)	***
CFOs	1,430	(20.49%)	390	(3.31%)	***
Other Executives	12,752	(21.10%)	1,839	(3.91%)	***
All Executives	16,101	(20.87%)	3,491	(3.44%)	***
Other dates	40,982	(37.45%)	79,814	(78.54%)	

Table 9: Earnings announcement news around deferral transactions

The table presents results from OLS models for the dollar value deferred by the executive on a firm-day. The dependent variable is the natural logarithm of one plus the total dollar value of the deferral transactions the executive registered on a firm-day. The dollar value of the deferral transactions equals the value of the deferred stock units on the day the transactions are filed, as reported in the "trandate" field in Thomson Insider Filings Data. Pre_EA_Good (Pre_EA_Bad) indicates whether the deferral transaction occurs within the 30-day window before a good (bad) news earnings announcement. Post_EA_Good (Post_EA_Bad) indicates whether the deferral transaction occurs within the 30-day window after a good (bad) news earnings announcement. Column I classifies earnings announcements as "good" ("bad") news if the size-adjusted daily returns in the three-day window around the management forecast date are positive (negative). Column II classifies earnings announcements as "good" ("bad") news if the released earnings meet or beat (are lower than) analysts' consensus earnings forecast. All models include firm and year fixed effects and cluster standard errors at the executive level (i.e., the "personid" field in Thomson Insider). $^{***, **, *}$ indicate significance levels at $p < 0.01$, $p<0.05$, $p<0.10$, respectively. All variables are defined in the text.

Panel A: Regression results

Dependent Variable →	**Ln(Tot Deferred on Firm-Day)**					
Sample →	**Deferral days in the year**					
	I			**II**		
Timing:						
Pre_EA_Good	0.456	(13.18)	***	0.144	(4.45)	***
Pre_EA_Bad	-0.435	(-10.69)	***	-0.282	(-5.42)	***
Post_EA_Good	0.084	(2.11)	**	0.055	(1.59)	
Post_EA_Bad	-0.011	(-0.28)		0.037	(0.69)	
Exe Characteristics:						
CEO	0.806	(18.46)	***	0.807	(18.44)	***
CFO	0.142	(3.21)	***	0.141	(3.18)	***
Holdings	-0.000	(-2.33)	**	-0.000	(-2.30)	**
Firm Characteristics:						
$Size_{t-1}$	-0.624	(-12.27)	***	-0.636	(-12.48)	***
$Growth_{t-1}$	-0.026	(-2.70)	***	-0.029	(-3.01)	***
Roe_{t-1}	1.413	(5.35)	***	1.455	(5.46)	***
Ret_{t-1}	0.379	(3.87)	***	0.369	(3.76)	***
$SdRet_{t-1}$	-14.825	(-8.04)	***	-14.079	(-7.61)	***
Constant	12.877	(26.87)	***	12.964	(26.98)	***
Firm FE	YES			YES		
Year FE	YES			YES		
N	76,702			76,702		
Adj. R^2	0.246			0.243		

Panel B: Tests for strategic news releases

	Before News	Pred. Sign	After News	Diff	F-stat
Column I:					
Good News	0.456 (13.18)	>	0.084 (2.11)	0.372	73.25 ***
	>		<		
Bad News	-0.435 (-10.69)	<	-0.011 (0.28)	-0.446	76.25 ***
Diff	0.891		0.095		
F-stat	420.22 ***		4.11 **		
	Before News	Pred. Sign	After News	Diff	F-stat
Column II:					
Good News	0.144 (4.45)	>	0.055 (1.59)	0.089	5.69 **
	>		<		
Bad News	-0.282 (-5.42)	<	0.037 (0.69)	-0.319	21.98 ***
Diff	0.426		0.018		
F-stat	63.61 ***		0.10		

Table 10: Management forecast news around deferral transactions

The table presents results from OLS models for the dollar value deferred by the executive on a firm-day. The dependent variable is the natural logarithm of one plus the total dollar value of the deferral transactions the executive registered on a firm-day. The dollar value of the deferral transactions equals the value of the deferred stock units on the day the transactions are filed, as reported in the "trandate" field in Thomson Insider Filings Data. Pre_MF_Good (Pre_MF_Bad) indicates whether the deferral transaction occurs within the 30-day window before a good (bad) news management forecast. Post_MF_Good (Post_MF_Bad) indicates whether the deferral transaction occurs within the 30-day window after a good (bad) news management forecast. Column I classifies management forecasts as "good" ("bad") news if the size-adjusted daily returns in the three-day window around the management forecast date are positive (negative). Column II classifies management forecasts as "good" ("bad") news if the released earnings meet or beat (are lower than) analysts' consensus earnings forecast. All models include firm and year fixed effects and cluster standard errors at the executive level (i.e., the "personid" field in Thomson Insider). $^{***, **, *}$ indicate significance levels at $p < 0.01$, $p<0.05$, $p<0.10$, respectively. All variables are defined in the text.

Panel A: Regression results

Dependent Variable →	**Ln(Tot Deferred on Firm-Day)**					
Sample →	**Deferral days in the year**					
	I			**II**		
Pre_MF_Good	0.561	(14.48)	***	0.386	(7.41)	***
Pre_MF_Bad	-0.445	(-10.06)	***	-0.158	(-4.04)	***
Post_MF_Good	0.197	(4.40)	***	-0.019	(-0.32)	
Post_MF_Bad	0.069	(1.59)		0.074	(1.86)	*
Exe Characteristics:						
CEO	0.806	(18.46)	***	0.805	(18.39)	***
CFO	0.142	(3.22)	***	0.139	(3.13)	***
Holdings	-0.000	(-2.30)	**	-0.000	(-2.29)	**
Firm Characteristics:						
$Size_{t-1}$	-0.625	(-12.30)	***	-0.626	(-12.27)	***
$Growth_{t-1}$	-0.027	(-2.84)	***	-0.030	(-3.18)	***
Roe_{t-1}	1.488	(5.62)	***	1.469	(5.50)	***
Ret_{t-1}	0.395	(4.04)	***	0.372	(3.80)	***
$SdRet_{t-1}$	-14.758	(-8.01)	***	-14.647	(-7.94)	***
Constant	12.859	(26.83)	***	12.904	(26.87)	***
Firm FE	YES			YES		
Year FE	YES			YES		
N	76,702			76,702		
Adj. R^2	0.247			0.243		

Panel B: Tests for strategic news releases

	Before News	Pred. Sign	After News	Diff	F-stat
Column I:					
Good News	0.561 (14.48)	>	0.197 (4.40)	0.364	56.97 ***
	>		<		
Bad News	-0.445 (-10.06)	<	0.069 (1.59)	-0.514	95.28 ***
Diff	1.006		0.128		
F-stat	432.20 ***		6.17 **		
	Before News	Pred. Sign	After News	Diff	F-stat
Column II:					
Good News	0.386 (7.41)	>	-0.019 (-0.32)	0.405	30.76 ***
	>		<		
Bad News	-0.158 (-4.04)	<	0.074 (1.86)	-0.232	28.80 ***
Diff	0.544		-0.093		
F-stat	92.97 ***		2.03		

Table 11: Management forecast news: Sub-sample of unbundled management forecasts

The table replicates the models in Table 10 on the subsample of management forecasts that do not occur on the same date as the firm's quarterly earnings announcements. The dependent variable is the natural logarithm of one plus the total dollar value of the deferral transactions the executive registered on a firm-day. Pre_MF_Good (Pre_MF_Bad) indicates whether the deferral transaction occurs within the 30-day window before a good (bad) news management forecast. Post_MF_Good (Post_MF_Bad) indicates whether the deferral transaction occurs within the 30-day window after a good (bad) news management forecast. Column I classifies management forecasts as "good" ("bad") news if the size-adjusted daily returns in the three-day window around the management forecast date are positive (negative). Column II classifies management forecasts as "good" ("bad") news if the forecasted earnings meet or beat (are lower than) analysts' consensus earnings forecast. All models include firm and year fixed effects and cluster standard errors at the executive level (i.e., the "personid" field in Thomson Insider). $^{***, **, *}$ indicate significance levels at $p < 0.01$, $p<0.05$, $p<0.10$, respectively. All variables are defined in the text.

Panel A: Regression results

Dependent Variable →	**Ln(Tot Deferred on Firm-Day)**					
Sample →	**Deferral days in the year**					
	I			**II**		
Timing:						
Pre_MF_Good	0.632	(9.25)	***	0.391	(4.10)	***
Pre_MF_Bad	-0.702	(-8.64)	***	-0.167	(-2.40)	**
Post_MF_Good	0.447	(6.23)	***	0.607	(6.17)	
Post_MF_Bad	0.415	(5.95)	***	0.291	(4.43)	***
Exe Characteristics:						
CEO	0.793	(15.02)	***	0.792	(14.96)	***
CFO	0.151	(2.80)	***	0.146	(2.68)	***
Holdings	-0.000	(-2.08)	**	-0.000	(-2.09)	**
Firm Characteristics:						
Size $_{t-1}$	-0.543	(-8.64)	***	-0.536	(-8.50)	***
Growth $_{t-1}$	-0.005	(-0.34)		-0.006	(-0.44)	***
Roe $_{t-1}$	1.382	(4.35)	***	1.177	(3.69)	***
Ret $_{t-1}$	0.345	(3.08)	***	0.355	(3.16)	***
SdRet $_{t-1}$	-7.043	(-3.28)	***	-6.779	(-3.15)	***
Constant	11.906	(20.61)	***	11.863	(20.49)	***
Firm FE	YES			YES		
Year FE	YES			YES		
N	49,846			49,846		
Adj. R^2	0.267			0.264		

Panel B: Tests for strategic news releases

	Before News	Pred. Sign	After News	Diff	F-stat
Model I:					
Good News	0.632 (9.25)	>	0.447 (6.23)	0.185	4.40 **
Bad News	-0.702 (-8.64)	<	0.415 (5.95)	-1.117	127.56 ***
Diff	1.334		0.032		
F-stat	183.21 ***		0.12		
	Before News	Pred. Sign	After News	Diff	F-stat
Model II:					
Good News	0.391 (4.10)	>	0.607 (6.17)	-0.216	2.65
Bad News	-0.167 (-2.40)	<	0.291 (4.43)	-0.458	30.53 ***
Diff	0.558		0.316		
F-stat	25.01 ***		7.94 ***		

Figure 1: Number of executive deferrals by time of the year

The figure plots the number of executive deferral transactions by day of the year, averaged across sample years. The sample for this figure consists of 93,836 executive deferral transactions filed by 7,737 distinct executives in 1,030 unique firms between 2000 and 2014 as reported on Thomson Insider filings.

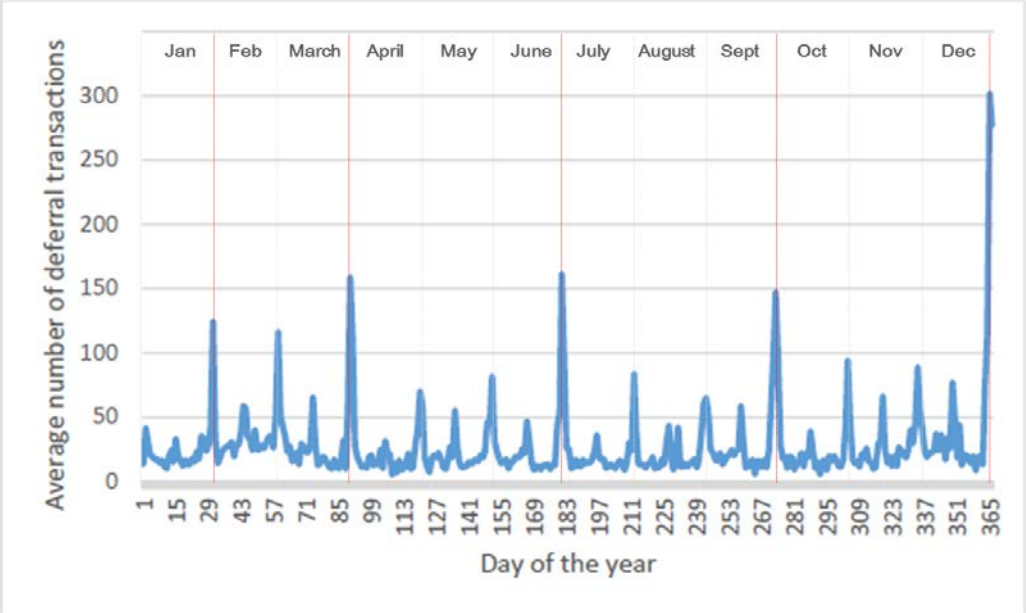

Figure 2: Cumulative abnormal returns around deferral transaction date

The figure plots the – 90 through +90 days cumulative abnormal returns around sample deferral transaction dates (day 0). We measure abnormal returns as the difference between the firm's stock returns and the returns predicted by the size, book-to-market and momentum model as in Daniel et al. (1997). The sample for this figure consists of 76,912 executive deferral transactions between 2000 and 2014 with non-missing data on future returns, transaction and firm characteristics.