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The corporate calendar and equity compensation impact on M&A decisions

Author: G.S., Georgia Stavropoulou
Student number: 618545
Thesis supervisor: Amy Yazhu Li
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PREFACE AND ACKNOWLEDGEMENTS

After months of research and hard work, the time has come for me to present my Master's thesis. The purpose of this paper is to investigate the impact of the corporate calendar on CEO incentives and myopic actions at the expense of the company's value. Through this process, I have, not only been educated on the related topics but also gained a deeper understanding of the technical aspects of conducting a research.

There are not enough words to express my appreciation and gratitude to my supervisor, Amy Yazhu Li, for her guidance and expertise throughout this study. Her own paper has been the inspiration for the research model in this thesis, making her input valuable to the process. All in all, this could not have been completed without her support.

I am also very grateful for all my friends who have motivated me during these past few months and helped me push forward. More than anyone, I would like to thank my parents who have always taken care of me and believed in me, and without whom I would not be where I am today.

Finally, I want to dedicate this paper to my grandfather, "Lara" as everyone called him, who sadly passed away during the making of this thesis.

ABSTRACT

This thesis paper examines the evidence in existing literature stating that CEOs are incentivized by equity compensation to make poor decisions for the company's long-term value. In this research, we incorporate variables to account for the corporate calendar, based on the paper of Dittmann et al. (2023). Their study finds that the timing of M&A announcements and equity-based compensation is often influenced by the corporate calendar. In this paper, we will replicate prior studies related to M&A announcements and incorporate the corporate calendar variables. While the correlation between equity compensation and M&As is not completely flat in our research, we do find that corporate variables influence prior results pointing toward CEOs consciously destroying the companies' value in the long-term. This research has proven that we need to reconsider how we measure CEO incentives, especially after proving the endogeneity of the existing research model.

Keywords: Mergers and acquisitions, Equity compensation, Corporate calendar, CEO incentives, CEO myopia
JEL classification: G14, G34, G40, M12, M52

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1. Introduction

According to a PwC report on global M&As (2023), the number of acquisitions around the world post-pandemic is at the highest level they have ever been. Even during uncertain periods with high market volatility, M&A announcements are expected to rise even more, especially in the industries of financial services and technology (PwC, 2023). Therefore, a study on the motives behind M&A decisions is more relevant than ever. This is also the focus of this paper, to examine what percentage of the executives' incentives lies with the benefit of the company, or if there is personal motivation involved in such decisions.

M&As act as a way to expand the company's business, and consequently future growth (Calipha et al., 2010). It can be argued that the costs associated with such an investment are enormous, however companies still go through with acquisitions in hopes of achieving potential synergies, the "2+2=5" effect as Hovers (1973) has described it (Cartwright and Cooper, 1990). On the contrary, multiple papers have found that the success rate is quite low. According to Brockhaus (1975), "One-third of all corporate mergers and acquisitions since World War II have failed and dissolved, while more than one-half have merely endured with mediocre results". Thus, it is a matter of interest to determine the reasoning behind M&A announcements. Is it executive incompetence that drives these decisions or simply the result of myopic actions, whether these are consciously or unconsciously made?

Prior research has concentrated on the agency theory, which explains the link between the executives' incentives and their objectiveness in the decision-making process in the company. More specifically, the equity compensation granted to executives (CEOs) can potentially incentivize them to take on investments and projects that will cause the market price to increase in the short term. However, it has been found that not all of these investments will create the forecasted excess value for the company in the long term (Cartwright and Schoenberg, 2006). Edmans et al. (2022) examine this hypothesis for two events, M&As and share repurchase programs, to determine whether CEOs consciously make value-destroying decisions for their personal financial incentives. This is not a recent topic of concern for researchers, as the literature can be traced back to the 1970s and 1980s, with behavioural papers whose topics are relevant even to this day. We will elaborate on the existing literature and briefly explain the key findings in the respective section of this paper.

On the other side of this argument, there has been evidence that the CEOs' equity compensation is not the only factor driving the decision on mergers and acquisitions. Dittmann et al. (2023) observe the lack of corporate calendar variables in prior research. Their paper adds to the Edmans et al. (2022) study, by examining the timing of share repurchase programs and how they are impacted by executives' incentives, while accounting for the corporate calendar. What they mainly conclude is that CEOs typically do not participate in equity sales around share buyback program periods. In the following sections, we describe how we plan to take the same course of action as Dittmann et al. (2023) to conduct a similar study on M&A decisions.

A big part of our research is based on that of Edmans et al. (2022) and Dittmann et al. (2023). Our hypothesis is that, combining the corporate calendar variables of the latter with the former's research results related to M&As the results will be affected. A big impact, such as the change in the relationship between equity compensation and acquisition announcements, will confirm our theory. However, even a smaller variation in findings, like insignificant results or smaller coefficients, will point towards the fact that prior papers have not captured the full aspect of the decision-making process of M&As. Even on acquisition-level data, it is a fact that each M&A case is unique compared to others. Therefore, any additional observations that can be included in older research models have the potential to expand our understanding of the M&A processes from the beginning, when the decision is made, to the very end, the combined company's performance, and adjustment period.

First, we think it is interesting to replicate the main M&A table of Edmans et al. (2022) adding three years of more recent data, and then examining the effect of the blackout ratio on the results. The rest of the variables shed light on CEO characteristics, adding to the evidence that M&As are typically more likely to occur if the CEO of the company is younger in age and less experienced. Second, we examine the likelihood of an acquisition announcement purely from the perspective of the corporate calendar to determine the time of the fiscal year or quarter when most companies opt for them to be published. From that point on, the paper focuses on the collective and separate impact of both equity compensation and the corporate calendar on the announcements and reported value of mergers and acquisitions. Finally, to break down this relationship on one more level, we observe the inside trading events of each company monthly per group, and then per activity (sale or purchase of equity). Overall, the results do not present a big shift in the effect of the CEO's compensation, and thus incentives, on the decision to acquire another company. However, we do find evidence that points toward the theory that important projects and investments are debated in board meetings, during which discussion topics include the equity compensation of CEOs and earnings announcements. It is our theory that the timing simply creates a link between the two decisions (Dittmann et al., 2023).

The rest of the paper contains Section 2 which provides an overview of the existing literature related to M&As and CEO behaviour, Section 3 on the methodology and variables used in this paper, Section 4 with comments and analysis of the findings, and Section 5 summarizing the conclusions of this thesis.

2. Literature Review

An extensive number of authors have expressed interest in the topic of mergers and acquisitions over the past years, which is not surprising considering the complexity of the operations and the significant adjustments both internally and externally. Topics such as the change in the company's performance and the strategic decisions after a merger have long been debated. A behavioural

finance approach has been included in the literature, in an attempt to explain the shareholder reaction and the motives behind dramatic decisions in the structure of a company. In this section, the goal is to summarize the results of existing literature, as well as explore gaps in it, if any.

2.1 Company Performance

As previously mentioned, the performance benefits deriving from the synergies are a significant factor in the decision to undertake M&As. However, this statement is often followed with a rational question; to what extent do M&As actually affect company performance and how can this be measured? From a theoretical point of view, the combination of operations should lead to one joint organization whose total value will be greater than that of the two stand-alone companies (Mirvis and Marks, 1992).

The problem with synergies is that the literature has not found a formula to measure the value of synergies with certainty (Garzella and Fiorentino, 2014). In theory, the market expects the added value in the combined company and, since M&A decisions are public knowledge, the efficient market hypothesis states that this event will reflect in the stock prices (Hackbarth and Morellec, 2008). According to Vazirani (2012), both financial measures and the achievement of strategic goals have been used to judge the success or failure of an acquisition. It is a common practice to examine the reaction of the market in terms of returns in order to obtain the results in various papers; only a handful of examples are Kaplan (2006), Hackbarth and Morellec (2008), Renneboog and Vansteenkiste (2019).

Barney et al. (1988) begin their study by praising the benefits of acquisitions, it is often the case though, that the figures are in contrast with theory. Dodd (1980) found evidence of negative returns in acquiring firms on the day of the announcement of merger proposals and for the next 10 days, whereas target firms present significantly positive abnormal returns purely because of this event. On the contrary, King et al. (2004) find evidence of positive returns in both acquiring and target firms on the M&A announcement day, before they turn insignificant or negative. These are merely two papers of the many with different findings and opinions on the matter, thus rendering the results inconclusive. Renneboog and Vansteenkiste (2019) mention the reasons for such deviation, that have been researched, relate to CEO overconfidence (Roll, 1986; Doukas and Petmezas, 2007; Malmendier and Tate, 2008), M&A frequency (Alexandridis et al., 2017; Golubov et al., 2015), and CEO incentives (Edmans et al., 2022), among others. It is our belief that only further research will be able to establish what the drivers of performance are in acquiring firms.

2.2 M&A Motivation

What attracts managers to M&As is the clear advantage of synergy gains, which is accomplished by combining two separate companies and benefiting from newly arisen opportunities and fluctuating returns (Bradley, 1988). However, as seen in the previous section, there is a vast collection of studies that disagree with the actual results of M&As. It is reasonable then to investigate managerial-based motives since it is proven that, performance-wise, M&As do not result in the expected added value (Searle and Ball, 2004).

Behavioural researchers pose that exact question; why do executives still opt for unsuccessful M&As? Traditional finance theories contain the assumption of rational individuals in the economy; however, this is against the actions of managers who decide to place a bid in the acquisition of another company (Subrahmanyam, 2007). A plausible explanation is that of Roll's hubris hypothesis (1986) in behavioural finance, which proposes the optimistic and overconfident nature of executives as key drivers for M&A decisions. Overconfident CEOs are shown to overestimate future returns on investments and underestimate costs (Filbeck et al., 2017), an approach that leads to a valuation significantly exceeding the threshold of the target's market price, and therefore irrational managerial behaviour (Roll, 1986). Consequently, the bidder firm is subject to the "winner's curse", which is simply the fact that acquiring companies tend to overpay for the target companies (Thaler, 1988).

Malmendier and Tate (2008) have even progressed Roll's theory by measuring overconfidence in CEO behaviour against mergers and acquisitions. Using executive options, the authors indeed find significant evidence of a positive link between overconfidence and undertaking M&As, especially if the acquiring company does not need to finance them with external resources. In general, overconfident CEOs are more likely to participate in riskier, or more innovative projects and industries, thus providing more growth opportunities (Hirshleifer, Low and Teoh, 2012), but not necessarily excess returns in the case of acquisitions (Malmendier and Tate, 2008).

In addition to the hubris hypothesis, behavioural studies have investigated the impact of the agency theory on takeovers. An agency relationship is considered "a contract under which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent" (Jensen and Meckling, 1976). The agency theory is developed around this relationship, and the disparity between the participants' incentives and goals. On the principal's side, there is a preference for risk-neutral and diversified investments, in order to impose stability in the company (Wright et al., 2001). However, from the agent's perspective, the pressure to maximize performance and, thus, their performance-based compensation leads to a risk-averse behaviour that will increase the CEO's power within the company (Jensen, 1986). As opposed to the hubris theory, the agents do not act in the best interest of the principals and often take "myopic actions", as characterized by Jensen (1988), for their personal benefit.

Taking the agency theory into consideration, there is a concern that CEOs could potentially make decisions that are not for the benefit of the company or the shareholders, but may be exploited for financial gains and job securitization (Amihud and Lev, 1981). Paradoxically, equity compensation was initially the solution to agency problems, as a way to link the incentives of the company and the agent (Benmelech et al., 2010). Bebchuk and Stole (1993) show that CEOs with short-term incentives tend to overinvest in the case of an observable by the market project. Short-term incentives are created through equity-based compensation, which is a practice endorsed by both CEOs and shareholders (Edmans et al., 2021). Concluding, it would be safe to assume that equity-based compensation motivates CEOs to boost market prices short-term by undertaking M&As, but reducing value in the long-term, as historically the expected returns don't materialize (Edmans et al., 2022; Ladika and Sautner, 2020).

3. Research & Methodology

Due to the fact that our research is heavily based on the research model of Dittmann et al. (2023), it will also be reflected in the variables and their construction. Company-level variables are obtained from the same databases on a quarterly basis and merged with executive-level data and M&A information of the same time period. An overview of the variables and the calculations can be found in Appendix A1.

3.1 Company-level Data

Company-related variables are obtained from the CRSP database, and present financials and information for US publicly traded companies between 2006 and 2019 on a quarterly basis. The first set of controls, consistent with Edmans et al. (2022), includes the natural logarithm of sales, research and development (R&D) expenses, and capital expenditures (Capex). The financial ratios in the regression are the market-to-book ratio, return on assets (ROA), market leverage, and adjusted returns. Finally, we compute the Herfindahl index, which is the square of the portion of the company's quarterly sales within the industry. In this model, we also include executive-related variables which will be explained in the next section. These control variables are lagged by one quarter (three months).

For the second set of controls, following Dittmann et al. (2023), we use the same database and research parameters. Including some of the variables mentioned above; these are the adjusted market returns and ROA. Additionally, we control for the book-to-market ratio, leverage, cash-to-assets ratio, and the natural logarithm of total assets. To incorporate market controls, other than the market returns, we obtain the quarterly trading volume. The stock returns variable is lagged by one quarter, whereas trading volume is not lagged.

The main variables of interest though are those for the corporate calendar. Mirroring the process of Dittmann et al. (2023), we calculate the blackout ratio of the company. The blackout period is approximately the number of days after the end of the fiscal quarter and before the earnings announcement, during which company employees are restricted from buying or selling equity (Bettis et al., 2000). However, as Dittmann et al. (2023) point out in their paper, it is not as simple as calculating the number of dates between the dates. Most companies are not transparent about their insider trading policies, therefore Guay et al. (2022) examine inside trading events to determine the average blackout period. Thus, Dittmann et al. (2023) follow the theory of Guay et al. (2022) and calculate the blackout period as the number of days starting from 20 days before the end of the quarter until 3 days after the earnings announcement. We also incorporate two more corporate calendar variables, one to indicate the month of the fiscal quarter and one for the month of the fiscal year. Our dataset consists of 34,726 different companies, which are publicly traded in the US between the years 2006 and 2019.

3.2 Mergers & Acquisitions Data

We generate a dataset of all the M&As that were announced by publicly traded US companies between 2006 and 2019 from the SDC Platinum database. The database provides information on both acquirer and target companies, making it possible to match the acquirers with the company-level data related to them and to create the dummy variable Target which indicates if the company has been a target during our research period. In addition to this, we gather information on the value of the M&A announced by each acquirer. Finally, using the date of the announcement, we calculate the industry M&A liquidity over the year, which shows the total value within the industry scaled by total assets. In our dataset, we observe 57,306 M&A announcements made by 14,620 different companies between 2006 and 2019. The average value of the M&As is USD 0.0246 (in millions).

3.3 Executive-level Data

To conclude this section on the research variables, we have also included in the research model variables related to the CEOs in order to observe their behaviour with respect to M&As. For the first set of controls based on Edmans et al. (2022), we add to the regression the salary, bonus, and tenure of CEOs, from the Compustat database, as well as a dummy variable which equals one if the CEO has been appointed during the year of the observation. Throughout the tables, the variables we pay attention to are those on equity-based compensation. From Equilar we acquire the amount of vesting, vested and unvested equity of CEOs during the research period, and create dummy variables for all three of them. Finally, we obtain the insider trading events from the TR Insiders database, computing

Table 1: Summary statistics

The table reports the summary statistics for the financials, CEO characteristics, inside trading habits, and M&A decisions of US firms between 2006 and 2019. The table shows the number of observations, mean, standard deviation, the 1st percentile and the 99th percentile of the dataset.

	N	Mean	SD	p1	p99
Merger and Acquisition statistics					
Industry M&A liquidity	1,905,865	7.1125	18.3233	0	80.435
M&A announcements	2,690,791	0.0213	0.144	0	1
Target company	2,694,232	0.0053	0.0727	0	0
Value of M&A	32,670	0.0246	0.1033	0	0.6275
Company-level statistics					
Adjusted market returns	1,111,164	0.0005	184.5268	-20.195	21.21
Blackout ratio	2,229,531	0.7408	0.1128	0.6129	1
Book-to-market	1,226,599	-0.4889	959.9295	-8.7779	5.5266
Buy-and-hold abnormal returns	1,085,721	-0.0062	186.6321	-18.3396	19.1081
Capex	1,900,212	0.0245	0.2423	0	0.2835
Cash-to-assets	1,407,878	0.2066	0.2583	0	0.9917
Debt-to-assets	1,400,985	0.3312	12.391	0	1.4918
Herfindahl index	2,156,290	161.3281	2466.773	0	9410.994
Leverage	1,226,566	0.4027	0.2987	0.0025	0.9799
Market-to-book	1,161,631	78.9218	6984.601	0.1011	217.8665
Market capitalization	1,231,005	3278.893	18482.85	0.4002	56215.58
Market leverage	1,004,536	0.2168	0.3916	0	0.9613
Month in fiscal quarter	4,278,683	1.4454	0.7376	1	3
Month in fiscal year	569,258	6.5094	3.4499	1	12
NROA	1,387,825	-0.0084	50.5073	-0.1875	0.1717
Price [t-1]	1,454,160	29.4543	664.758	0.006	166.65
R&D expenses	533,620	0.1878	21.4719	0	0.8431
ROA	1,304,448	-0.5444	54.9031	-3.6875	0.1494
Sales (ln)	1,259,680	3.8509	2.9012	-4.5099	9.7686
Total assets (ln)	1,412,223	5.5273	3.1614	-3.5066	12.1863
Trading volume	1,402,680	3.7201	1107.764	0.0004	5.2654
Executive-level statistics					
Age	609,110	63.1289	8.6745	43	84
Bonus	716,256	0.1211	0.6803	0	2.4
CEO tenure	609,946	8.0882	7.6107	0	35.8
New CEO	609,946	0.0135	0.1154	0	1
Salary	606,729	0.6009	0.3927	0	1.8
Unvested equity	209,877	0.2305	0.5301	0.0011	1.8659
Vested equity	277,709	2.2049	25.7717	0	26.0404
Vesting equity	98,058	1.4355	7.9377	0	18.1125
Inside trading statistics					
Inside trading	283,924	-73026.82	39500000	-87.3075	7.8805

CEO net trading	283,924	0.0007	0.3634	-0.0001	0.0001
CEO purchases	283,924	573.5122	299290.4	0	0.4485
CEO sales	283,924	4.6533	1163.295	0	11.8635
CxO net trading	283,924	0	0.0001	-0.0001	0
CxO purchases	283,924	0.0619	23.4343	0	0.0729
CxO sales	283,924	0.1795	1.8270	0	3.7551
Officials net trading	283,924	0	0.0021	-0.0004	0.0001
Officials purchases	283,924	52.9243	26796.38	0	0.1
Officials sales	283,924	0.8931	71.7109	0	10.4329
Directors net trading	283,924	0	0.0054	-0.0003	0.0002
Directors purchases	283,924	7.4571	2978.861	0	1.5354
Directors sales	283,924	7.4434	2922.854	0	19.0081
Owners net trading	283,924	0.0002	0.05	0	0.0001
Owners purchases	283,924	567.5136	127285	0	4.36
Owners sales	283,924	74058.81	39500000	0	27
Affiliates net trading	283,924	0	0	0	0
Affiliates purchases	283,924	0.0026	0.1426	0	0.0001
Affiliates sales	283,924	0.0633	1.7147	0	1.3696
Committees net trading	283,924	0	0	0	0
Committees purchases	283,924	0	0.0041	0	0
Committees sales	283,924	0.0009	0.2397	0	0
Others net trading	283,924	0	0	0	0
Others purchases	283,924	0	0	0	0
Others sales	283,924	0	0	0	0

the total amounts of selling and purchasing for each group of insiders within a month, along with the net amount of inside trading per group.

4. Research Results

This section presents the results of our research and the interpretation based on the tables and figures at the end of the paper. The summary statistics are shown in Table 1. Through our dataset, about 42% of the companies announce at least one acquisition, and the average value of the M&As reported is 0.0246 (in millions) in US dollars. The average CEO is about 63 years old and has a tenure of 8 years. With respect to equity compensation, CEOs have an average of 0.23 million of unvested equity, 2.2 million of vested equity, and 1.4 million of vesting equity.

First, section 5.1 will focus on the analysis of the figures. These figures include an overview of the timing of M&A announcements, considering both the calendar year and fiscal year of the company, as well as the analysis of the market price and equity-related variables around the time of M&As and

earnings announcements. In addition to this, we have prepared the research tables which show the impact of various variables on M&A announcements and the value of M&As.

4.1 The impact of the corporate calendar on M&As and CEOs' equity compensation

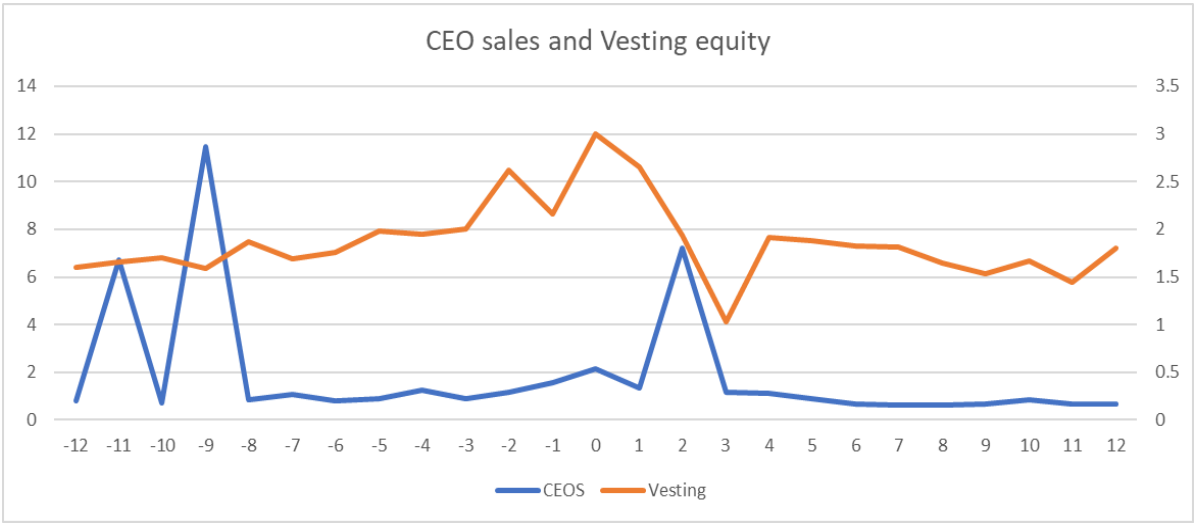
Figures 1 and 2 present the total of M&A announcements per calendar month and fiscal month, respectively, over the twelve months of the year. The reason for this split is that about 25% of the companies in our dataset do not start the fiscal year in January, therefore causing a variation between the fiscal and the calendar year. This is evident in the figures as they show minor differences in the M&A announcements. However, we reach the same conclusion with both figures, that companies tend to announce M&As during the first month of the quarter. The only exception to this statement is the second fiscal quarter, during which the M&A announcements are split equally between the months. There is no clear indication as to why this is the case at this stage of the analysis. Considering that the blackout period in our dataset varies between half a month and one month, this is the timing when M&As are announced. Overall, the numbers are consistent with the findings of Hu et al. (2022) and our hypothesis that M&A announcements typically occur after the earnings announcements.

Figure 1: M&A announcements over the calendar months.

In Figure 3, we observe the evolution of the share price and other variables between twelve months before an M&A announcement and twelve months afterward. There is one trend observed in the period we are examining, there is a big increase in the price up to the month of the M&A announcement, whereas in the months after the event the stock price is decreasing. This shift can be caused by several factors, mainly the sales and leverage of the company (Lintner, 1962). Thus, we include the average sales and leverage ratio in Figure 3 to analyse any potential impact they may have. Sales have a clear correlation with the stock price, as they follow the same trend over the analysis period, especially noting the increase in sales during the month of an acquisition announcement. Also accounting for the small decrease in the leverage ratio in the same month, we can confidently conclude that these events are the main factors for the increase in the stock price.

In the same figure, we also incorporate the CEO equity sales and vesting equity variables to observe evidence of the theory of CEOs acting based on their own incentives (Edmans et al., 2022). It appears that CEO equity sales vary throughout the months, along with the amount of vesting equity. There does not seem to be a link between the price of the shares and the timing of CEOs selling their equity, except for the second month after an acquisition announcement. Whether this is solely the effect of vesting equity during the month of the announcement and the one after, or a strategic timing from the CEOs' perspective is unclear. There is the possibility that CEOs are making M&A announcements public on the month of the vesting of their equity, anticipating the share price to increase and provide higher returns when they sell their equity. However, we cannot overlook the fact that, as stated in the introduction, vesting equity, and M&A announcements are linked with the earnings announcement, all of them taking place after they are discussed in the board meetings at the end of each fiscal quarter.

Lastly, Figure 4 illustrates the total number of M&A announcements that occur around the months of earnings announcements. As we also observed in Figure 2, there is evidence that M&As are typically published after earnings announcements. As earnings announcements typically occur during the first month of the quarter, then the third month before and the third month after one also represents the first month of a fiscal quarter. Similar to Figure 3, we include the average value of CEO equity sales, the amount of vesting equity, and the company's stock price. The average market price presents an upward trend leading up to the month of the earnings announcement. One month after the event the price decreases by 35% which later reverses. Once again, a drop in sales is attributed as the key driver in this fluctuation. All in all, the equity sales of CEOs are following the direction of their vesting equity, with one exception during the second month before the earnings announcement. We believe that the timing of M&A announcements and vesting equity due to the corporate calendar is what influences the timing between M&A announcements and CEO sales.



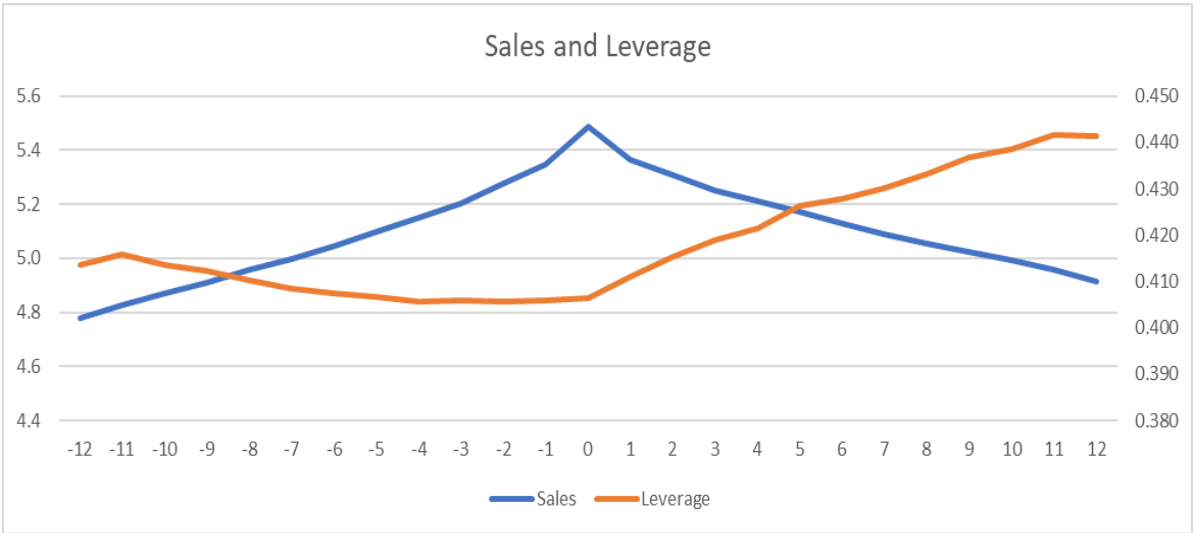
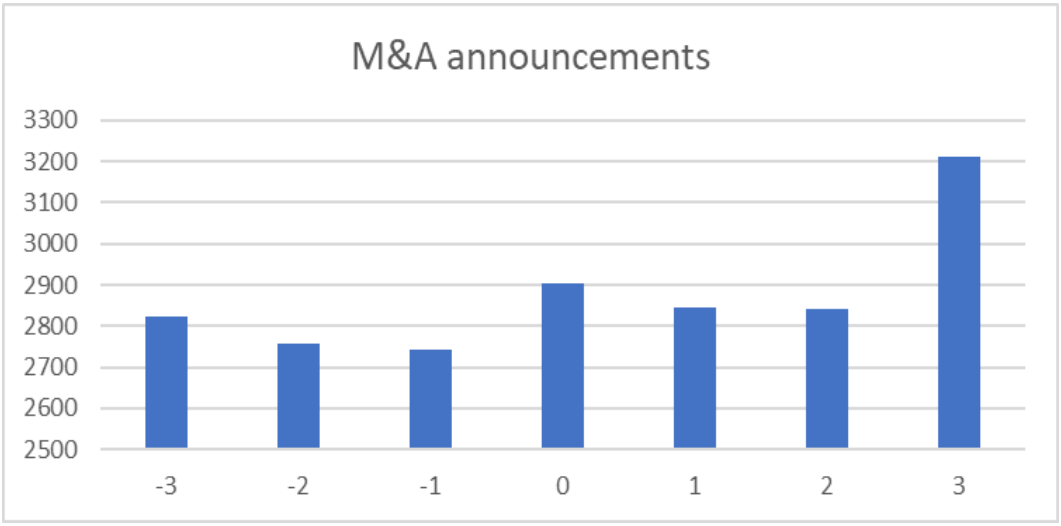
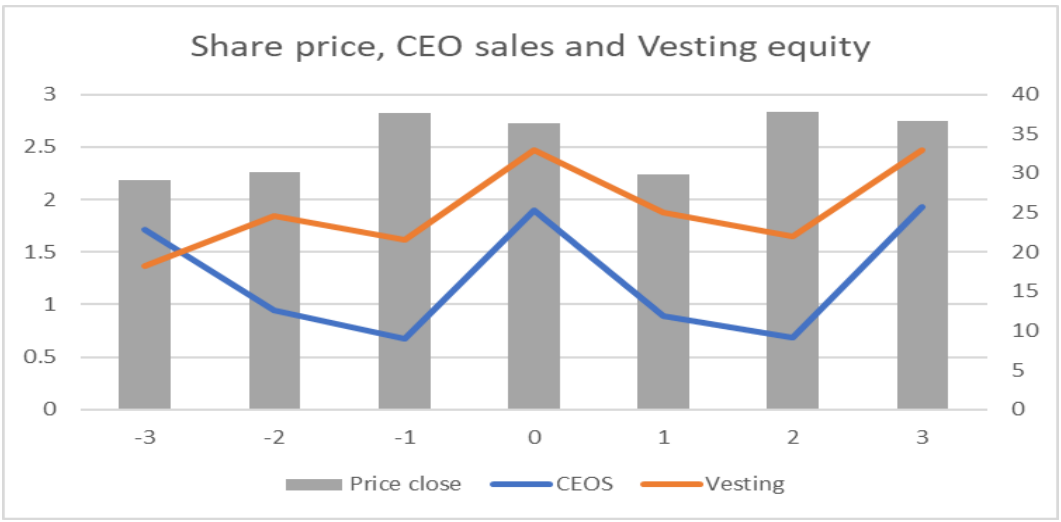


Figure 2: The evolution of the companies' stock price, CEO equity sales, vesting equity, sales, and leverage ratio between twelve months before and twelve months after an M&A announcement is made [m-12, m+12].





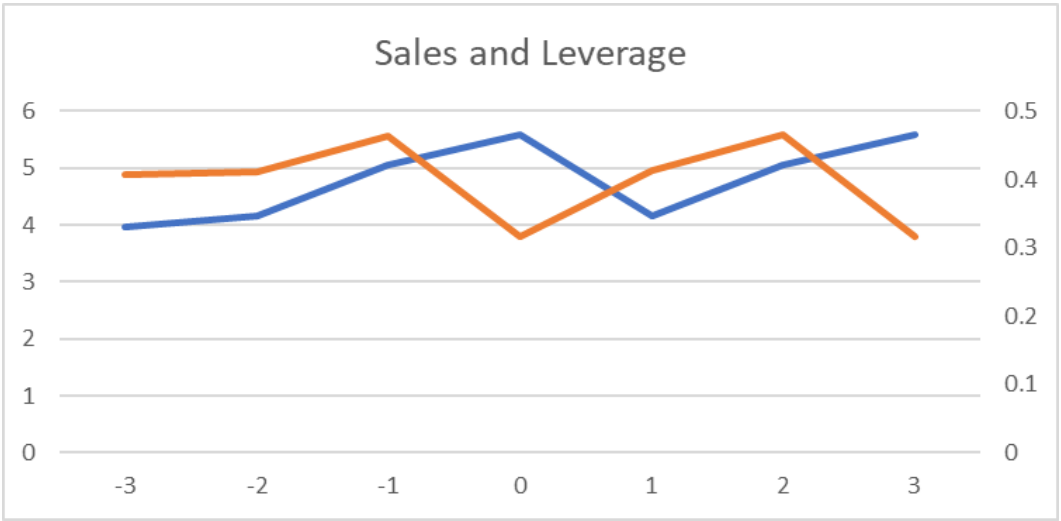


Figure 3: The evolution of M&A announcements, CEO equity sales, vesting equity and share price between three months before and three months after an earnings announcement [m-3, m+3].

4.2 Regressions of the impact of M&As on CEOs' equity compensation

To start the examination of the research regressions, Panel A of Table 2 is a replicated table from the paper of Edmans et al. (2022), which includes the first set of control variables described in section 3. Throughout the table, most of the coefficients reported are not statistically significant, however there are a few highlights worth noting. Vesting equity has a positive and statistically significant coefficient throughout the models, indicating that a positive change in the amount of the CEO's vesting equity will increase the chance of an M&A announcement, whereas vested equity is shown to have the opposite effect. With regard to the rest of the CEO characteristics, the age and tenure of the CEO have a negative impact on M&A decisions, while CEOs who are recently appointed are more likely to announce an acquisition during the first year of their tenure. This is consistent with prior research suggesting that younger CEOs are often more confident in their abilities and take more risks (Malmendier and Tate, 2008). Finally, we find that market leverage, R&D expenses, and Capex are not indicators of M&As, as companies are less inclined to undertake investment projects the higher these variables are. The opposite can be said about ROA and sales, which indicate excess inflows in the company that can be used to finance acquisitions.

Compared to the results that Edmans et al. (2022) report, we find small variations. In terms of the equity-based compensation, they find a positive and large impact on the likelihood of an acquisition announcement, which is not reflected in our research. The results on CEO tenure are contrasting our results as well. However, the age and new CEO controls, along with most company-related variables show the same impact, but less extreme, nevertheless. We believe that, first of all, the deviation in the equity compensation results is due to the difference in the units in which these variables are observed, while the Edmans et al. (2022) paper has decided to report the actual numbers, we present them in millions, in line with Dittmann et al. (2023). As for the rest of the differences, given that they are not too severe, we can attribute them to the addition of more recent data. Whereas Edmans et al. (2022) study the period between 2006 and 2016, we have included in our dataset three more years of observations (2016-2019).

What is different in Panel B of Table 2 is the incorporation of the blackout ratio and the fiscal month variable in the regressions. The added variable does not affect the rest of the variables' coefficients, other than slightly increasing the impact that the company-level variables have on the likelihood of an acquisition announcement. The corporate calendar variables, as mentioned in the methodology section, include the blackout ratio and a variable to indicate the month in the fiscal year. The blackout ratio results are showing a clear negative relationship, as the coefficient in the third column is statistically significant at the 5% level.

Table 2: The impact of equity-based compensation and CEO characteristics on M&A announcements

This table presents a similar regression table as shown in Edmans et al. (2021), on the relation between M&A announcements and CEOs' vesting equity. Column (1) reports the results of a probit model, while columns (2) and (3) report a standard OLS regression with robust standard errors. To examine the effect of the corporate calendar, panel A includes only the independent variable and controls used in Edmans et al. (2019), while the corporate calendar variable has been added in panel B. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: M&A announcements and vesting equity

	(1)	(2)	(3)
Dependent variable:	M&A Announcement		
Vesting equity	0.0136***	0.0034***	0.0027**
	(0.0036)	(0.0009)	(0.0011)
Unvested equity [t-3]	-0.0000	-0.0000	-0.0000
	(0.0000)	(0.0000)	(0.0000)
Vested equity [t-3]	-0.2287	-0.0253	-0.0173
	(0.2176)	(0.0299)	(0.032)
Salary [t-3]	-0.0812	-0.0013	0.0076
	(0.0564)	(0.0068)	(0.018)
Bonus [t-3]	0.0566	0.0118*	0.0182**
	(0.0357)	(0.0071)	(0.0081)
Age	-0.0043	-0.0002	0.0002
	(0.0027)	(0.0002)	(0.0006)
CEO tenure	0.001	-0.0001	-0.0009
	(0.0027)	(0.0002)	(0.0008)
New CEO	0.2022	0.0231	0.0008
	(0.1752)	(0.0261)	(0.0341)
Market leverage [t-3]	-0.5084***	-0.0509***	-0.0929***
	(0.117)	(0.011)	(0.0315)
Sales [t-3]	0.1297***	0.0127***	0.003
	(0.0146)	(0.0014)	(0.0034)
Market-to-book [t-3]	0.0004	-0.0003	-0.0001
	(0.0105)	(0.0007)	(0.001)
ROA [t-3]	1.1856***	-0.0212	0.0245
	(0.4395)	(0.028)	(0.0363)
RET [t-3]	0.001	0.0001	0.0002
	(0.002)	(0.0002)	(0.0002)
Industry M&A liquidity [t-3]	0.0638***	0.0015*	-0.0003
	(0.0217)	(0.0009)	(0.0008)
INDCONC [t-3]	-0.1671**	-0.0127***	-0.0095
	(0.0659)	(0.0044)	(0.0134)
R&D [t-3]	-2.8555***	-0.1122***	0.0212
	(0.8562)	(0.0415)	(0.0519)
CAPEX [t-3]	-2.3889***	-0.1969**	-0.116
	(0.9019)	(0.0779)	(0.1102)
Observations	14,250	14,383	14,383
(Pseudo) R2	0.0916	0.0406	0.0231
Year-month FE	Yes	Yes	Yes
Firm FE	No	No	Yes

Panel B: M&A announcements and vesting equity, with blackout ratio			
	(1)	(2)	(3)
Dependent variable:	M&A Announcement		
Blackout ratio	-0.2597	-0.0308	-0.0578**
	(0.1777)	(0.0206)	(0.0244)
Vesting equity	0.0139***	0.0034***	0.0028**
	(0.0036)	(0.0009)	(0.0011)
Unvested equity [t-3]	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)
Vested equity [t-3]	-0.2948	-0.0323	-0.0265
	(0.2162)	(0.0317)	(0.036)
Salary [t-3]	-0.0609	-0.0002	0.0089
	(0.0562)	(0.0068)	(0.0178)
Bonus [t-3]	000541	0.0111	0.0171**
	(0.0361)	(0.007)	(0.0084)
Age	-0.0049*	-0.0002	0.0004
	(0.0027)	(0.0002)	(0.0006)
CEO tenure	0.001	-0.0001	-0.0012
	(0.0027)	(0.0002)	(0.0008)
New CEO	0.1675	0.0182	-0.0051
	(0.1852)	(0.0264)	(0.0354)
Market leverage [t-3]	-0.4779***	-0.0488***	-0.0894***
	(0.1177)	(0.0111)	(0.0318)
Sales [t-3]	0.1187***	0.0118***	0.0018
	(0.0148)	(0.0111)	(0.0035)
Market-to-book [t-3]	-0.0003	-0.0004	-0.0002
	(0.0105)	(0.0007)	(0.001)
ROA [t-3]	1.1958***	-0.0175	0.0296
	(0.0105)	90.0282)	(0.0368)
RET [t-3]	0.0008	0.0001	0.0002
	(0.002)	(0.0002)	(0.0002)
Industry M&A liquidity [t-3]	0.0636***	0.0016*	-0.0002
	(0.0218)	(0.0003)	(0.0008)
INDCONC [t-3]	-0.1754**	-0.013***	-0.0097
	(0.0692)	(0.0045)	(0.0137)
R&D [t-3]	-2.9487***	-0.1163***	0.0244
	(0.8626)	(0.0417)	(0.0515)
CAPEX [t-3]	-2.447**	-0.1718**	-0.0742
	(0.9818)	(0.0826)	(0.1199)
Observations	14,147	14,278	14,278
(Pseudo) R2	0.0975	0.0443	0.0266
Year-month FE	Yes	Yes	Yes
Firm FE	No	No	Yes
Fiscal month FE	No	No	Yes

Table 3: The impact of the corporate calendar on M&As

This table reports the effect the corporate calendar variables have on M&A announcements. Robust standard errors are reported in parentheses. All regressions include month-year and firm fixed effects. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)
Dependent variable:	M&A Announcement				
Blackout ratio	-0.0122***		-0.021***		-0.0253***
	(0.0013)		(0.004)		(0.004)
Month in fiscal quarter = 3		-0.0103***	-0.0092***		
		(0.0016)	(0.0016)		
Month in fiscal year = 2				0.0043	0.0043
				(0.0027)	(0.0028)
Month in fiscal year = 3				-0.0086***	-0.0069***
				90.0025)	(0.0026)
Month in fiscal year = 4				-0.0012	-0.003
				(0.0022)	(0.0023)
Month in fiscal year = 5				-0.0055**	-0.0075***
				(0.0026)	(0.0027)
Month in fiscal year = 6				-0.0104***	-0.0107***
				(0.0025)	(0.0026)
Month in fiscal year = 7				0.0001	-0.0016
				(0.0022)	(0.0024)
Month in fiscal year = 8				-0.0038	-0.0056**
				(0.0026)	(0.0027)
Month in fiscal year = 9				-0.0094***	-0.0102***
				(0.0024)	(0.0026)
Month in fiscal year = 10				0.0017	-0.0007
				(0.0022)	(0.0024)
Month in fiscal year = 11				-0.0017	-0.004
				(0.0026)	(0.0027)
Month in fiscal year = 12				-0.0087***	-0.0091***
				(0.0026)	(0.0027)
Observations	1,340,171	386,216	359,510	569,964	536,372
R2	0.0015	0.0023	0.0028	0.0024	0.0029
Year-month FE	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes

For the rest of the tables, we have used a similar research model as in Dittmann et al. (2023). In Table 3, we mirror one of the regressions from their paper on the impact of the blackout ratio and the fiscal month on the announcements of M&As. It is important to note that the blackout ratio maintains a negative impact on M&A announcements. The likelihood of an M&A announcement during the third month of each quarter is clear, both from the month in fiscal quarter and month in fiscal year controls. The first months of each fiscal quarter are inconclusive in this table; however we have already analysed this link from Figure 2 and found these months to be the most common for M&A announcements.

Table 4: The impact of equity-based compensation and CEO trading on M&A announcements

This table shows a similar regression table as the one in Dittmann et al. (2023), however the dependent variable is M&A announcements. The independent variables are CEOs' vesting and vested equity and CEO selling and purchasing behavior Columns 1 and 2 use the variables with the actual amounts (in millions), and Columns 3 and 4 the dummy variables. The regression includes the company controls. Robust standard errors are reported in parentheses. All regressions include month-year and firm fixed effects, while fiscal months fixed effects are incorporated in columns 2 and 4. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Dependent variable:	M&A Announcement			
Vested equity	0.0003***	0.0003***		
	(0.0001)	(0.0001)		
Vesting equity	0.0007	0.0008		
	(0.0005)	(0.0006)		
CEO sales	0.0007	0.0007		
	(0.0004)	(0.0004)		
CEO purchases	-0.0008**	-0.0009***		
	(0.0003)	(0.0003)		
Vested equity dummy			0.0156	0.0137
			(0.0231)	(0.024)
Vesting equity dummy			0.005	0.0041
			(0.0042)	(0.0057)
CEO sales dummy			0.0011	0.0006
			(0.0042)	(0.0043)
CEO purchases dummy			0.0076	0.008
			(0.0072)	(0.0073)
Blackout ratio		-0.0256		0.0021
		(0.0306)		(0.0247)
Observations	19,850	19,739	31,292	31,064
R2	0.028	0.0303	0.0161	0.0179
Year-month FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Fiscal month FE	No	Yes	No	Yes

The rest of the study focuses on the impact of the corporate calendar and equity compensation variables on the M&A variables, namely the dummy variable which indicates an acquisition announcement and the value reported. As previously mentioned, the regression controls for the stock returns of the prior quarter, the trading volume, and various company characteristics. In Table 4, we present the results on the impact of equity compensation, CEO trading behaviour, and corporate calendar on M&A announcements. In Columns 1 and 2 the independent variables are the actual numbers (in millions) for equity compensation and CEO sales and purchases per month, whereas in Columns 3 and 4 we use the dummy variables. One interesting observation is the lack of statistical significance in the last two columns. On the other hand, vested equity positively impacts the decision to acquire a company, which points towards the theory of CEOs exploiting the power that derives from their position.

Table 5: The impact of equity-based compensation and CEO trading on M&A value

This table presents the impact of equity-based compensation and CEO sales behavior on the value of the M&As reported in the dataset, including the control variables. In panel A, the independent variable is vested equity (both dummy and actual variables), in panel B vesting equity, and in panel C CEO selling behavior. Robust standard errors are reported in parentheses. All regressions include month-year and firm fixed effects, while we incorporate fiscal month fixed effects in columns 2 and 4. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: M&As and vested equity

	(1)	(2)	(3)	(4)
Dependent variable:		M&A value		
Vested equity dummy	0.0048	0.0068		
	(0.0051)	(0.0055)		
Vested equity			-0.0001**	-0.0001**
			(0.0001)	(0.0001)
Blackout ratio		0.0205		0.011
		(0.0148)		(0.023)
Observations	14,096	12,016	6,651	6,609
R2	0.0150	0.0275	0.0204	0.0227
Year-month FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Fiscal month FE	No	Yes	No	Yes

Panel B: M&As and vesting equity

	(1)	(2)	(3)	(4)
Dependent variable:		M&A value		
Vesting equity dummy	-0.0077	-0.0074		
	(0.0104)	(0.0109)		
Vesting equity			-0.0033	-0.003
			(0.0024)	(0.0023)
Blackout ratio		0.1076**		0.1145**
		(0.0525)		(0.051)
Observations	2,399	2,383	2,399	2,383
R2	0.0288	0.0284	0.0295	0.0291
Year-month FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Fiscal month FE	No	Yes	No	Yes

Panel C: M&As and CEO sales

	(1)	(2)	(3)	(4)
Dependent variable:		M&A value		
CEO sales dummy	0.0016	0.0033		
	(0.0048)	(0.005)		
CEO sales			0.0000	0.0000
			(0.0000)	(0.0000)
Blackout ratio		-0.0071		-0.0066
		(0.0285)		(0.0286)
Observations	5,306	4,890	5,306	4,890
R2	0.0454	0.052	0.0455	0.0521
Year-month FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Fiscal month FE	No	Yes	No	Yes

We also investigate the effect of equity compensation and CEO equity sales on the value of M&As announced, also taking into account the corporate calendar variables in Table 5. Columns 1 and 2 of the table analyse the dummy variables for vested equity, vesting equity, and CEO sales, while columns 3 and 4 examine the actual amounts (in millions). For this table, we will mostly pay attention to the statistically significant results, as we notice a few inconsistencies among them. Panel A shows that the value of an acquisition decision is lower when CEOs have more vested equity. This observation points towards the theory that CEOs are less inclined to risk their company stake on a high-value acquisition, the opposite of the myopic behaviour that is observed in the Edmans et al. (2022) study. In Panel B, vesting CEO equity is shown to be associated with lower-value M&As, nonetheless the coefficient is not statistically significant so we cannot concretely state that this is the key determinant of M&A value. Lastly, in Panel C, neither the amount nor the dummy variable of CEO equity sales presents statistically significant results, in combination with the almost zero coefficients of CEO sales, no conclusion can be drawn from this panel. The blackout ratio has a negative effect on the M&A value throughout the table, except for the positive and statistically significant results in panel B, causing the belief that larger blackout periods are associated with higher-value M&As.

To conclude this research, Table 6 focuses on the relationship between inside trading and the value of M&As. In Panel A columns 1 and 2, we only input the net inside trading of the companies per month, which is likely to affect the M&A value negatively. Columns 3 and 4 present the results over the different insider groups' net trading amounts per month. Overall, net inside trading affects the value of an M&A negatively, but the effect is minor and therefore it is important to focus on inside trading per group. To summarize, only the net trading of chief officers and officials impacts the value of an acquisition positively, while the rest of the insiders categories do not present conclusive results. It is worth to notice that, although not significant, CEOs' and Directors' net trading activity is not correlated with high-value M&As, this is evidence that would be very important for our paper if statistical significance was observed. In Panel B, the research goes even further to examine the monthly selling and purchasing behaviour of each group. Officials and affiliates equity sales are not correlated with high-value M&As, and the same is proven for CEO and officials equity purchases. The most important variable for our research is the impact of CEO equity sales, which is slightly negative. Nonetheless, the impact is quite small to conclude this is the factor that drives high-value M&A decisions, meaning that it does not prove our theory, but it does not disprove it either. Finally, the corporate calendar variables are vaguely impacting the rest of the results in the table, providing the argument for the necessity for further research.

Table 6: The impact of inside trading on M&A value

The table reports the relationship between inside trading habits and the value of the M&As reported in the dataset. In panel A the independent variables are net inside trading, and executives' net trading, while in panel B they are executives' selling and buying behavior. Robust standard errors are reported in parentheses. All regressions include month-year and firm fixed effects, while we incorporate fiscal month fixed effects in columns 2 and 4. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Net inside trading and M&A value

	(1)	(2)	(3)	(4)
Dependent variable:			M&A value	
Inside trading	-0.0001**	-0.0001**		
	(0.0000)	(0.0001)		
Blackout ratio		-0.0063		-0.0051
		(0.0284)		(0.0284)
CEO trading			-8.686	-14.2423
			(14.6349)	(23.2255)
CxO trading			23.3569*	24.5317*
			(13.4342)	(14.3655)
Officials trading			20.5682***	22.7514***
			(7.4706)	(7.8393)
Directors trading			-10.4124	-11.451
			(6.9408)	(7.3141)
Owners trading			15.5506	13.9157
			(17.8393)	(18.463)
Affiliates trading			1.691	-1.2465
			(21.6926)	(22.2871)
Observations	5,306	4,890	5,306	4,890
R2	0.0463	0.0536	0.0406	0.0487
Year-month FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Fiscal month FE	No	Yes	No	Yes

Panel B: Inside trading per activity and M&A value

	(1)	(2)	(3)	(3)
Dependent variable:			M&A value	
CEO sales	0.0000	0.0001*		
	(0.0000)	(0.0000)		
CxO sales	-0.0014	-0.0021		
	(0.0016)	(0.0015)		
Officials sales	-0.0011**	-0.0011**		
	(0.0004)	(0.0004)		
Directors sales	0.0001	0.0001		
	(0.0001)	(0.0001)		
Owners sales	0.0001*	0.0001*		
	(0.0001)	(0.0001)		
Affiliates sales	-0.0032	-0.0034*		
	(0.0021)	(0.0018)		
CEO purchases			-0.013***	-0.0095***
			(0.0049)	(0.0031)
CxO purchases			0.038	0.043
			(0.0581)	(0.0595)

Officials purchases			-0.0254*	-0.0083
			(0.0149)	(0.0106)
Directors purchases			0.0002*	0.0002
			(0.0581)	(0.065)
Blackout ratio		-0.0117		-0.0049
		(0.0285)		(0.0289)
Observations	5,306	4,890	5,306	4,890
R2	0.0418	0.0493	0.0454	0.0524
Year-month FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Fiscal month FE	No	Yes	No	Yes

5. Conclusion

To conclude this paper, the incorporation of the corporate calendar variables mostly does not overturn the relation between equity compensation and M&As. However, we do present enough evidence to open a discussion on omitted variables in prior research. We have demonstrated a link between the corporate calendar, namely the earnings announcements and the blackout period, and M&A announcements. As stated in the introduction of this paper, M&A decisions and equity compensation are both discussed in board meetings, which take place before earnings announcements. Furthermore, equity vests on average four years after it is granted (Edmans et al., 2022), which would also coincide with a board meeting at the end of the fiscal quarter.

Based on our results, we add evidence to the existing literature that companies with CEOs who are younger and less experienced are more inclined to announce acquisitions. However, our results are also consistent with rational behaviour, as M&As are positively related to higher ROA and sales in the same quarter, but also fewer R&D expenses and Capex. These results indicate that the company has excess cash which is not being spent on R&D or other long-term investments and can be spent towards an acquisition. Furthermore, it is important to note that vesting and vested equity are both negatively impacting the value of M&As. CEOs are less likely to announce high-value M&As when their equity is vesting or has already been vested. Net inside trading is also showing the same effect, as CEOs and other officials even opt out of purchasing equity when high-value acquisitions are announced.

While this paper has provided insight into the link of the corporate calendar with M&A decisions in companies, further research is necessary to establish if CEO incentives are a component in these decisions. Mergers and acquisitions, as mentioned in previous sections, are not easily comparable to each other. We need to factor in, not only company and executive data, but also the culture, the operations, and the employees of each company. Various papers mentioned in section 2 have examined the market prices of companies before and after the announcement of an acquisition, but, to our knowledge, none of them have considered the hypothesis of Dittmann et al. (2023) on the

corporate calendar. Therefore, it is important to explore different controls for CEO incentives, which will have a higher level of independence to the independent variable, compared to vesting equity. It is our belief that future research can only explain the correlations between the above variables, as databases expand, and more M&A events are reported.

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A. APPENDIX

A.1 Overview of variables

Table A1. Overview of variables

Name	Source	Definition
Merger and Acquisition statistics		
Industry M&A liquidity (MALIQ)	SDC Platinum	Measured as the total value of M&A in the firm's industry over a year divided by the total assets.
M&A announcements	SDC Platinum	Dummy variable which equals 1 if the firm has announced an M&A in the month, otherwise 0.
Target company	SDC Platinum	Dummy variable which equals 1 if the firm is the target of an announced M&A, otherwise 0.
Value of M&A	SDC Platinum	The value of the M&A announced.
Company-level statistics		
Adjusted market returns	CRSP/Compustat	The monthly returns, calculated as the current month price minus the price of the previous month.
Blackout ratio	CRSP/Compustat	The fraction of blackout days within a month, measured as the days between the end of the fiscal quarter and the days of the earnings announcement.
Book-to-market	CRSP/Compustat	Book market of equity divided by market capitalization.
Buy-and-hold abnormal returns	CRSP/Compustat	Measured as the adjusted market returns reduced by the benchmark return on the CRSP value-weighted index.
Capex	CRSP/Compustat	Capital expenditures per quarter divided by total assets.
Cash-to-assets	CRSP/Compustat	Measured as cash and short-term investments divided by the total assets.
Debt-to-assets	CRSP/Compustat	Long-term debt divided by total assets.
Herfindahl index (INDCONC)	CRSP/Compustat	Calculated as the sum of the total M&A value within the same three-digit SIC group during the year divided by the total assets.
Leverage	CRSP/Compustat	Calculated as the difference between total assets and book value of equity, divided by the same plus market capitalization.
Market-to-book assets	CRSP/Compustat	Market value of assets divided by book value of assets.
Market capitalization	CRSP/Compustat	quarterly average of market capitalization.
Market leverage	CRSP/Compustat	Average market leverage per quarter, measured as the book value of debt divided by the market value of total debt.
NROA	CRSP/Compustat	Non operating income divided by the total assets.
Share price	CRSP/Compustat	The closing price of the company's stock per quarter.

R&D expenses	CRSP/Compustat	The quarterly expenses towards research and development.
ROA	CRSP/Compustat	Return on assets, calculated as operating income divided by total assets.
Sales (ln)	CRSP/Compustat	The natural logarithm of quarterly sales.
Total assets (ln)	CRSP/Compustat	The natural logarithm of the total assets per quarter.
Trading volume	CRSP/Compustat	The quarterly total trading volume.
Executive-level statistics		
Age	Compustat	The CEO's age.
Bonus	Compustat	The CEO's annual bonus (in millions).
CEO tenure	Compustat	The number of years the CEO has been in the position.
New CEO	Compustat	Dummy variable which equals 1 if the CEO has been appointed within the past year, otherwise 0.
Salary	Compustat	The CEO's annual salary (in millions).
Unvested equity	Equilar	The amount of CEO's unvested equity per month (in millions).
Vested equity	Equilar	The amount of CEO's vested equity per month (in millions).
Vesting equity	Equilar	The amount of CEO's vesting equity per month (in millions).
Inside trading statistics		
Inside trading	TR Insider	Net amount of total inside trading within the company per month.
CEO net trading	TR Insider	Net amount of inside trading by the CEO of the company per month.
CEO purchases	TR Insider	Purchasing activities by the CEO of the company per month.
CEO sales	TR Insider	Selling activities by the CEO of the company per month.
CxO net trading	TR Insider	Net amount of inside trading by the chief officers of the company per month.
CxO purchases	TR Insider	Purchasing activities by the chief officers of the company per month.
CxO sales	TR Insider	Selling activities by the chief officers of the company per month.
Officials net trading	TR Insider	Net amount of inside trading by the officials of the company per month.
Officials purchases	TR Insider	Purchasing activities by the officials of the company per month.
Officials sales	TR Insider	Selling activities by the officials of the company per month.
Directors net trading	TR Insider	Net amount of inside trading by the directors of the company per month.
Directors purchases	TR Insider	Purchasing activities by the directors of the company per month.
Directors sales	TR Insider	Selling activities by the directors of the company per month.
Owners net trading	TR Insider	Net amount of inside trading by the owners of the company per month.
Owners purchases	TR Insider	Purchasing activities by the owners of the company per month.

Owners sales	TR Insider	Selling activities by the owners of the company per month.
Affiliates net trading	TR Insider	Net amount of inside trading by the affiliates of the company per month.
Affiliates purchases	TR Insider	Purchasing activities by the affiliates of the company per month.
Affiliates sales	TR Insider	Selling activities by the affiliates of the company per month.
Committees net trading	TR Insider	Net amount of inside trading by the committee members of the company per month.
Committees purchases	TR Insider	Purchasing activities by the committee members of the company per month.
Committees sales	TR Insider	Selling activities by the committee members of the company per month.
Others net trading	TR Insider	Net amount of inside trading by other insiders of the company per month.
Others purchases	TR Insider	Purchasing activities by other insiders of the company per month.
Others sales	TR Insider	Selling activities by other insiders of the company per month.