# Does the Market Have a Better Memory Than CEOs? Evidence From M&As

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## Abstract

We study whether financial markets are more efficient in terms of memory than corporations. We focus on the market for corporate control and argue that CEOs overlook information about new industries they enter when such news coincides with releases from their primary competitors. In contrast, financial markets are less distracted on average, as they aggregate information from many participants, each with a different attention focus, resulting in less bias overall. Empirically, we document that the likelihood of deals increases with the extent to which the CEOs ignore bad news due to distraction, and such deals tend to be value-destroying, as evidenced by lower future profitability (ROA or ROI). On the other hand, markets immediately price in CEOs' faulty memory, leading to both short-term and long-term negative stock returns. This market reaction is particularly pronounced in firms with more transparent information environments.

**Keywords: Information, Limited Memory, M&As, Attention.**

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# Introduction

The role of memory in financial markets has been extensively studied in the finance literature, demonstrating its significant impact on individual behavior and market dynamics. Market participants often reply on past trends, historical prices, and anchor points to shape their decision making. Corporate CEOs, for instance, rely on historical information to guide future actions: the past performance of industries and companies influence how CEOs select target companies for mergers and acquisitions (M&As) or joint ventures (JVs) and how they execute these strategies. More broadly, memories of past successes and failures play a pivotal role in sharing future corporate strategies and decisions.

However, this reliance on historical information is often flawed due to the biased and faulty memories of the economic actors, as widely documented in the literature (e.g., DellaVigna and Pollet 2009; Hirshleifer, Lim, and Teoh 2009; Ben-Rephael, Da, and Israelsen 2017; Kempf, Manconi, and Spalt 2017; Bordalo, Gennaioli, and Shleifer 2017; Bordalo, Gennaioli, Ma, and Shleifer 2020; Bordalo, Gennaioli, Porta, and Shleifer 2024). People tend to forget information encountered during moments of distraction and selectively recall what was salient or specifically emphasized. This raises an important question: do financial markets possess a "better memory" than corporations? This question parallels the ongoing debate in finance on whether CEOs possess more information than the market—creating information asymmetry—or whether they learn from the market ("feedback effect").

In this paper, we investigate this issue by exploring whether financial markets have a superior memory compared to CEOs. We argue that CEOs, constrained by limited attention, do not base all their decisions on the full set of available information but instead rely on a subset of it. More specifically, CEOs often disregard certain available information, not because of lack of exposure, but because their attention is diverted by news from other, more relevant firms.

For example, consider a food company (e.g., Unilever) evaluating entry into the payment industry. The CEO's assessment of the payment industry is influenced by existing information on the industry, as well as on how and when the information had been released and whether the CEO "had paid attention" to such information. If news from directly competing firms in the food industry is released

simultaneously with information from the payment industry, Unilever's CEO may become "distracted," prioritizing the more related news from the food industry. As a result, the CEO may overlook or pay less attention to the payment industry information, impairing his ability to process it. When Unilever eventually decides to expand into the payment industry, this prior distraction creates a "learning gap" regarding the true prospects of the payment industry. Consequently, faulty memory may lead to suboptimal decisions, resulting in value-destroying actions during the post-integration process.

Let's consider a concrete case. On 2000 October 27, Meteor Industries Inc., a key player in the petroleum marketing and distribution sector, announced the decision to acquire Active IQ Technologies, a company specializing in software and IT solutions. This acquisition was aimed at integrating Active IQ's expertise in data management and business process automation into Meteor Industries' operational efficiency. However, the integration turned out to be more complex than anticipated. The combined entity, Meteor Active IQ Technologies, Inc., encountered financial difficulties and was ultimately delisted, marking the acquisition as an unsuccessful venture.

Had Meteor paid attention to the industry of Active IQ prior the M&A announcement? In fact, significant negative news from Active IQ's industry coincided with announcements from Meteor's peer firms. For example, on 2000 April 27, two firms in the industry of Active IQ Technologies, PowerCerv Corp and Ross Systems Inc announced their earnings significantly below the analysts' forecasts. However, on the same day, Enterprise Products Partners, a peer firm of Meteor in the downstream petroleum sector, also released its earnings, potentially diverting Meteor's attention from the negative developments in Active IQ's sector. We argue that this confluence of events and the resulting oversight of negative industry news contributed to Meteor's overly optimistic view of the deal.

This phenomenon is not limited to cross-industry expansion. Companies are particularly attentive to the actions of their direct competitors. When news about directly competing firms is released, it can divert the CEO's attention away from other companies, reducing his ability to understand these companies when he eventually becomes interested in acquiring them. This suggests that both cross-industry and same-industry M&A dynamics are impacted by the "distracted attention" of CEOs.

As a result, value destruction in M&As may not necessarily stem from empire-building ambitions or hubris but rather from a lack of understanding of the target firms due to the CEO's "distraction." We term this phenomenon the "distraction effect." We posit that CEOs are subject to this effect, which influences their decision-making. In contrast, we argue that financial markets, on average, tend to be less prone to such distractions. This is because markets aggregate information from a wide array of participants, each with different attention focuses, leading to a less biased perspective overall.

We test this hypothesis by examining whether "forgetfulness" of the CEO impacts the decision to engage in corporate events, particularly in the market for corporate control and how the market reacts to such forgetfulness during these corporate events. We argue that CEOs are distracted by economic news from directly competing companies, which prevents them from effectively processing information about potential acquisition targets. This distraction leads to a lack of attention to relevant news.

More specifically, we propose that such inattention makes CEOs more optimistic about a target firm when bad news is overlooked and less optimistic when good news is ignored. In other words, when CEOs overlook good news, their decisions are predominantly influenced by bad news, leading to a downward bias in their expectations. Conversely, omitting bad news will increase optimism. Therefore, we expect that greater distraction and inattention to good news will lead to less optimistic behavior and lower willingness to pursue a new deal, whereas more distraction and less attention to bad news will result in more optimistic behavior and higher willingness to engage in a new deal. Moreover, since ignoring bad news may make CEOs more likely to engage in low-quality deals, we expect distracted CEOs to engage in value-destroying M&As. These considerations lead to our main testable hypotheses.

Our first hypothesis posits that the likelihood of a deal happening is positively related to the extent to which CEOs, when distracted, ignore bad news. These deals are likely to be value-destroying, especially when there is inadequate oversight by owners, such as in situations of low institutional ownership. In other words, we expect a negative relationship between value creation in M&As and the degree of managerial distraction and neglect of bad information.

What happens in the case of good news? It is important to note that we can only observe the deals that occurred and not the potential deals that might have happened had the CEO not been distracted and

ignored good news, as we lack information about potential targets. Therefore, we do not expect a relationship between value creation in M&As and the degree of managerial distraction regarding good information, as these are precisely the deals that we cannot observe.

The next hypothesis concerns the market's reaction. If the market is less distracted than the CEO, it will likely account for the CEO's degree of distraction and price it accordingly. We therefore expect the market to react negatively to CEOs initiating deals while disregarding bad news. This negative stock market reaction should reflect the long-term value-destroying impact of such deals, persisting both in the short and long run, even after the deal is completed. This is our second hypothesis.

We also expect the market reaction to be more pronounced when there is greater transparency and lower information asymmetry regarding the firm. Additionally, general market sentiment will affect the market reaction. However, the direction of the effect is ambiguous. On the one hand, during periods of overvaluation and high sentiment, investor optimism might lead to a muted response to negative events, causing weaker market reactions when CEOs overlook negative news in M&A decisions. On the other hand, the market might expect CEOs to be more biased by limited memory during high sentiment and overvaluation periods, resulting in stronger reactions.

We test these hypotheses using a sample of all M&A deals involving US firms from 1997 to 2018. Drawing on the attention literature, we construct a measure of CEO distraction during corporate actions. Specifically, we develop a proxy for the degree of CEO distraction to news in the sector where the M&A deal will take place. Then, we examine how the decision to engage in these deals is linked to such distraction.

Building on the literature of attention (e.g., DellaVigna and Pollet 2009; Hirshleifer, Lim, and Teoh 2009; Bordalo, Gennaioli, and Shleifer 2020), we argue that the CEOs do not process industry news uniformly as their attention depends on whether such news coincides with other information. We construct two proxies: the "forgotten ratio of positive news" and "forgotten ratio of negative news," which capture the extent to which CEOs, due to distraction, overlook industry news—either good

(positive) or bad (negative)—pertinent to the target company.[3] The "forgotten ratio difference," defined as the difference between the two (positive minus negative), captures the extent to which the CEO neglects more positive news relative to negative news. These proxies enable us to investigate the value creation process in M&As.

We begin by assessing whether CEOs' faulty memory leads to value-destroying deals, focusing on the real implications of inattention for firm performance. Our findings indicate that the forgotten ratio of negative news is negatively related to future profitability, whether measured by ROA or ROI. This effect is both statistically significant and economically substantial. A one standard deviation increase in the forgotten ratio of negative news is associated with a 0.49 percentage point (0.36 percentage points and 0.31 percentage points) decrease in industry-excess ROA within 1 year (2 years and 3 years) after deal completion. Similarly, it is associated with a 1.01 percentage point (0.64 percentage points and 0.58 percentage points) decrease in industry-excess ROI within 1 year (2 years and 3 years) post-completion. Forgotten ratio of positive news is positively correlated with future profitability, while the relationship is not statistically significant.

These results suggest that the forgotten ratio of negative news effectively captures the extent to which CEOs engage in value-reducing deals. As hypothesized, the reduction in value is more pronounced in cases where institutional ownership is low. While the effect is present for both low and high institutional ownership, it is significantly stronger when institutional ownership is below the industry average. Specifically, a one standard deviation increase in the forgotten ratio of negative news correlates with a 0.64 percentage point decrease in ROA within one year for acquirer firms with institutional ownership below the industry average. For firms with above-average institutional ownership, the same increase in the forgotten ratio of negative news results in a 0.33 percentage point decrease in ROA.

We then examine whether the decision to initiate a deal is influenced by the CEO's memory faults and whether, conditional on this decision, there remains a negative link between profitability and the

[3] To mitigate concerns that CEO forgetfulness might depend on the prominence of specific firms, we construct this measure at the industry level by aggregating the forgetfulness of all the firms in each industry, excluding direct competitors of the acquiring firm.

forgotten ratio of negative news. We first document a strong link between the forgotten ratio and the probability of initiating a deal, with a one standard deviation increase in the forgotten ratio of negative news associated with a 2.3 percentage point higher probability of initiating a deal. Subsequently, using a Heckman correction to account for selection bias, we document a strong negative relationship between the forgotten ratio of negative news and future firm profitability. These findings suggest that forgetting negative news not only makes CEOs more likely to engage in low-quality deals ex-ante but also leads to destructive decisions during post-deal integration.

We expect distraction to be more likely when CEOs enter an industry in which they have not previously operated, compared to expanding within the same industry. This is because, if the CEO (acquirer) is already operating in the same industry, news affecting a direct competitor may also be relevant to the deal. In contrast, previous focus in a specific industry may obscure relevant information about other industries. And indeed, we document that the effect is mostly concentrated in deals involving entry into a new industry. Overall, these results support the first hypothesis.

Next, we proceed to the second hypothesis, investigating how the market reacts to the CEOs' faulty memory. We document that a higher forgotten ratio of negative news correlates with a lower mark-up, while a higher forgotten ratio difference (forgotten ratio of positive news minus forgotten ratio of negative news) correlates with a higher mark-up. This link is both statistically significant and economically substantial. A one standard deviation increase in the forgotten ratio of negative news correlates with a 1.01 to 1.03 percentage point decrease in mark-up, while a one standard deviation increase in the forgotten ratio difference correlates with a 1.04 to 1.06 percentage point increase in mark-up. These results indicate that, when the acquirer CEO is likely to have overlooked more bad information about the target, the market perceives the deal as more value-destroying and reacts more negative to the M&A announcement, supporting our second hypothesis that the market is less distracted than the CEO.

As expected, the effect is concentrated in firms with higher transparency and lower information asymmetry. Specifically, the forgotten ratio's impact is more pronounced in firms with low forecast error and low forecast dispersion. A one standard deviation increase in the forgotten ratio of negative

news correlates with a 1.82 percentage point decrease in mark-up for acquirers with low analyst forecast error, compared to a 0.44 percentage point decrease for those with high forecast error. Similarly, the same increase in the forgotten ratio of negative news correlates with a 1.87 percentage point decrease in mark-up for acquirers with low forecast dispersion, compared to a 0.67 percentage point decrease for those with high forecast dispersion. These findings suggest that the effect is stronger when the market can better assess the CEO's bias.

We also investigate whether the link between forgotten ratios and mark-up varies with market sentiment. We consider three indicators of sentiment: the monthly index of first-day IPO returns (RIPO), the monthly index of dividend premium (PDND), and the book-to-market ratio (BM) of the acquirer's industry. We document that the relationship between forgotten ratios and mark-up is significant during periods of high sentiment – as characterized by high RIPO, low PDND – as well as cross-sectionally in industries with low book-to-market ratios. In contrast, during periods of low sentiment, the link between forgotten ratios and mark-up is non-existent.

Next, we investigate the link between the market's assessment of value creation in deals and CEO distraction by examining the relationship between long-term returns after completion and forgotten ratios. To do this, we construct portfolios that mimic trading strategies based on the forgotten ratio. Two portfolios are created: the Low portfolio consists of acquirers with a forgotten ratio difference below zero, while the High portfolio consists of acquirers with a forgotten ratio difference above zero. We document that the abnormal long-term returns from these trading strategies are both economically and statistically significant. The Low portfolio shows a negative alpha, ranging from –0.63 percentage points per month using a one-factor model to –0.54 percentage points per month using a four-factor model for a 6-month holding period. For a 12-month holding period, the negative alpha ranges from –0.31 percentage points per month to –0.21 percentage points per month. The High-Low portfolios yield a positive alpha, ranging from 0.51 percentage points per month using a one-factor model to 0.46 percentage points per month using a four-factor model for a 6-month holding period, and from 0.32 percentage points per month to 0.26 percentage points per month for a 12-month holding period. Similar results are obtained using the Ibbotson Returns Across Time and Securities (RATS) estimation. The

Low portfolio shows negative returns ranging from –1.75 percentage points for a 3-month return to –4.2 percentage points for a 12-month return.

We also consider long-term returns following deal completion and find that a higher forgotten ratio of negative news negatively affects the acquirer's cumulative abnormal return (CAR) after completion, while a higher forgotten ratio difference has a positive effect. A one standard deviation increase in the forgotten ratio of negative news correlates with a 3.11 to 4.66 percentage point decrease in the acquirer's CAR over 12- to 36-month horizons. Conversely, a one standard deviation increase in the forgotten ratio difference correlates with a 3.16 to 3.73 percentage point increase. Overall, these results suggest that the market correctly anticipates lower performance for deals initiated by more distracted CEOs who overlook negative news, both in the short and long run.

The link between long-term returns after completion and forgotten ratios is influenced by institutional ownership. In line with our working hypothesis, we find that higher ownership mitigates the tendency of CEOs to engage in value-destroying deals. In particular, we show that the relationship between long-term returns after completion and forgotten ratios persists regardless of the level of institutional ownership and the time horizon. However, the impact is weaker when institutional ownership is higher. Specifically, higher institutional ownership reduces the impact by 4.18 percentage points over a 1-year horizon, 5.09 percentage points over a 2-year horizon, and 4.37 percentage points over a 3-year horizon.

Lastly, we consider the implications of the acquirer's memory faults for the target. On the one hand, the buyer's higher (over)confidence could strengthen the target's bargaining power, leading to greater value capture. On the other hand, this (over)confidence might lead to worse long-term value creation, reducing value for both the buyer and the target. Our findings show that the forgotten ratio of negative news decreases the mark-up for the target. A one standard deviation increase in the forgotten ratio of negative news correlates with a 1.93 to 2.015 percentage point decrease in mark-up, while one standard deviation increase in the forgotten ratio difference correlates with a 1.94 to 2.03 percentage point increase. This suggests that the acquirer's faulty memory does not translate into value for the target. This is further confirmed by the significant negative relationship between the forgotten ratio of negative

news and the offer premium, with a one standard deviation increase in the forgotten ratio of negative news correlating with a 4.61 percentage point decrease in the offer premium. Overall, these results suggest that the acquirer's faulty memory does not translate into value for the target. One possible reason is the means of payment: when target shareholders are compensated with equity rather than cash, they share the long-term fate of the firm run by a CEO with faulty memory.

We contribute to several strands of literature: First, we enhance the M&A literature by examining factors influencing the success of M&A deals (e.g., Harford 2005). While extensive research explores whether M&A deals create value (e.g., Moeller et al. 2004; Betton et al. 2008; Savor and Lu 2009), long-term post-merger performance often remains suboptimal (Loughran and Vijh 1997; Rau and Vermaelen 1998). A classic explanation for the poor performance of M&As is the agency problem: the incentives of CEOs are not aligned with those of shareholders (e.g., Jensen 1986; Lang, Stulz, and Walkling. 1991). However, even in the absence of such agency costs, cognitive constraints and behavior biases of CEOs may also result in value-destroying M&As. Specifically, our study identifies that CEOs' faulty memory of negative news can lead to poor deal outcomes.

Second, we contribute to the literature on memory and attention (e.g., DellaVigna and Pollet 2009; Hirshleifer, Lim, and Teoh 2009; Bordalo, Gennaioli, and Shleifer 2017). While it is documented that individuals and retail investors are subject to limited attention and faulty memory (e.g., Jiang et al. 2024; Charles 2024; Enke, Schwerter, and Zimmermann 2004), there is limited empirical evidence on how memory impacts CEOs—especially in the context of one of the most significant corporate decisions: M&As. Furthermore, our findings add to the literature on CEO overconfidence (e.g., Malmendier and Tate 2005, 2008) by demonstrating how memory impacts the degree of overconfidence in CEOs. Specifically, we show that a CEO's ability to pay attention and recall events can contribute to their overconfidence. Forgetting negative events, in particular, may exacerbate CEO overconfidence and lead to value-destroying M&As.

Lastly, this paper relates to the literature on the informativeness of financial markets (e.g., Edmans, Goldstein, and Jiang 2012, 2015; Goldstein 2023). We document that when M&As potentially driven by CEOs' faulty memory are announced, the markets quickly price in these value-destroying deals. This

suggests that the information aggregation in financial markets effectively makes the overall markets less prone to faulty memory compared to individual CEOs, highlighting the role of financial markets in providing information and facilitating the "feedback effect."

# 2. Data

## 2.1 Data sources and sample

We gather our data from multiple datasets to ensure a comprehensive analysis. Firstly, we use the Thomson Reuters SDC Platinum Mergers and Acquisitions database, which includes information on all M&A deals announced between 1997 and 2018. To maintain the relevance and consistency of our sample, we exclude certain types of deals such as share repurchases, privatizations, exchange offers, remaining interest acquisitions, specific asset acquisitions, spin-offs, split-offs, and recapitalizations. Additionally, we require that both the acquirers and targets are US public companies, with acquirers seeking to purchase more than 50% of the target.

Earnings announcements for companies across various industries are obtained from the I/B/E/S dataset, enabling us to calculate earnings surprises for each announcement. To define distraction events, we use the Hoberg-Phillips TNIC dataset, which provides similarity scores between acquirers and other firms. For firms' accounting data, we turn to the COMPUSTAT dataset, and for financial market data, such as stock prices, we use the CRSP dataset. By merging and integrating these datasets, we construct a comprehensive sample of 9,900 M&A deals for our study.

## 2.2. Variable definitions

The main variable of interests is the "forgotten ratio," which measures the extent to which the CEO of the acquiring firm overlooks earnings news in the target industry due to distraction. The construction of this variable involves several steps. Firstly, we calculate the earnings surprise (SUE) for each earnings announcement made by firms in the target industry within 365 days prior to the M&A announcement. The earnings surprise is computed by subtracting the median analyst forecast from the actual earnings per share (EPS) of the stock and then dividing it by the stock price in the previous month

(e.g., Kothari 2001; DellaVigna and Pollet 2009). To classify the industry of firms, we follow the Fama-French 49 industry classification.

Drawing upon the literature on attention, particularly the work of Hirshleifer, Lim, and Teoh (2009), we argue that CEOs do not process news about an industry in a uniform, rational manner. Instead, their processing is influenced by the presence of other news, particularly news that demands greater attention from the acquiring firm's CEOs or CEO. In line with this framework, we define a non-peer firm's earnings surprise as "forgotten" if any of the acquiring firm's peer firms announce their earnings on the same day; otherwise, the earnings surprise is "remembered." The acquirer's peer firms are identified as the 100 firms with the highest similarity scores,[4] using the similarity score constructed by Hoberg and Phillips (2010; 2016). The peer firms are expected to have high product market similarities and therefore compete directly with the acquirer, naturally drawing more of the CEOs' attention when news arises.

To operationalize the concept of forgetting, we define a binary variable, $forgotten\ dummy_{i,t}$. This variable takes a value of one if any of the acquirer *i*'s peer firms make an earnings announcement on day *t*. Conversely, it takes a value of zero if no peer firm announces earnings on that day. We then c the weighted average of the forgotten (and remembered) earnings surprises for all non-peer firms in the target industry (denoted as firm *g*) within 365 days prior to the M&A announcement, separately for positive and negative earnings news. The weights for these calculations are based on the market capitalization of each firm prior to the earnings announcement. The formulas for calculating these weighted averages are as follows:

a. For positive earnings news ($SUE_{g,t} > 0$):

$$forgotten\ positive\ SUE_{i,j,t} = \frac{\sum_g \sum_{-365 \le t \le -1} SUE_{g,t} * forgotten\ dummy_{i,t} * market\ cap_{g,t-1}}{\sum_g \sum_{t-365,t-1} market\ cap_{g,t-1}}$$

b. For negative earnings news ($SUE_{g,t} < 0$):

[4] Our results are robust to different thresholds to define peer firms, such as considering firms with the 10% highest similarity scores as peer firms.

$$forgotten\ negative\ SUE_{i,j,t} = \frac{\sum_g \sum_{-365 \le t \le -1} SUE_{g,t} * forgotten\ dummy_{i,t} * market\ cap_{g,t-1}}{\sum_g \sum_{t-365,t-1} market\ cap_{g,t-1}}$$

Similarly, we calculate the weighted averages for the remembered earnings news by replacing $forgotten\ dummy_{i,t}$ with $(1 - forgotten\ dummy_{i,t})$ in the formulas.

Finally, we calculate the forgotten ratios for positive and negative earnings news separately. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from non-peer firms in the target industry that the acquiring firm's CEO is likely to overlook. Additionally, we compute the difference between the forgotten ratio of positive news and the forgotten ratio of negative news. This measure captures the extent to which the CEO forgets more positive earnings news than negative earnings news in the target industry. The formulas for calculating the forgotten ratios are as follows:

$$forgotten\ ratio\ positive_{i,j,t} = \frac{forgotten\ positive\ SUE_{i,j,t}}{forgotten\ positive\ SUE_{i,j,t} + remembered\ positive\ SUE_{i,j,t}}$$

$$forgotten\ ratio\ negative_{i,j,t} = \frac{forgotten\ negative\ SUE_{i,j,t}}{forgotten\ negative\ SUE_{i,j,t} + remembered\ negative\ SUE_{i,j,t}}$$

$$forgotten\ ratio\ difference_{i,j,t} = forgotten\ ratio\ positive_{i,j,t} - forgotten\ ratio\ negative_{i,j,t}$$

As to the other control variables, the acquirer lagged size is the log value of the acquirer's market capitalization in millions in the month prior to the M&A announcement. The acquirer lagged return is the 6-month cumulative return of the acquirer's stock before the M&A announcement. The acquirer lagged ROA is the ROA (ROA = ib/at) of the acquirer in the fiscal year prior to the M&A announcement. The acquirer lagged FCF is the FCF (FCF= (ib + dp)/at) of the acquirer in the fiscal year prior to the M&A announcement. The acquirer lagged leverage is the leverage (Leverage= (dltt + dlc)/at) of the acquirer in the fiscal year prior to the M&A announcement. The acquirer industry lagged return is the 6-month cumulative value-weighted return of all the stocks in the acquirer industry before the M&A announcement. The target industry lagged return is the 6-month cumulative value-weighted return of all the stocks in the target industry before the M&A announcement. The target lagged size is

the log value of the target market capitalization in millions in the month prior to the M&A announcement. The target lagged return is the 6-month cumulative return of the target stock before the M&A announcement. The value of transaction is the value of the M&A transaction from SDC. % of shares acquired is the percentage of the target's shares acquired by the acquirer in the transaction.

We report the summary statistics in Table 1. The *forgotten ratio positive* (i.e., forgotten ratio of positive news) has an average value of 0.5478 and a standard deviation of 0.2765. The 10th, 50th (median), and 90th percentiles of this variable are 0.1711, 0.5338, and 0.9655, respectively. The *forgotten ratio negative* (i.e., forgotten ratio of negative news) has a mean of 0.4600 and a standard deviation of 0.3188. Its 10th, 50th, and 90th percentile values are 0.0472, 0.4205, and 0.9548, respectively. The *forgotten ratio difference*, defined as the difference between the forgotten ratio of positive news and the forgotten ratio of negative news, has an average value of 0.0878 and a standard deviation of 0.3795. Its 10th, 50th, and 90th percentile values are -0.3933, 0.0712, and 0.5989, respectively. We observe significant cross-sectional variations across different acquirers with respect to the three forgotten ratios. Regarding control variables such as stock returns, average profitability (ROA and ROI), and firm leverage, their values align with those reported in existing literature. Additionally, the acquirer and target market capitalization is around 17.38 billion and 14.96 billion respectively, which is not only in line with the literature but also suggests that the firms in our sample are medium-big ones.

## 3. Memory and Profitability

We begin by investigating whether the CEOs' lack of attention faulty memory have real implications in terms of firm performance, focusing on the change in earnings after the M&A announcement. Specifically, we estimate the following specification:

$$Long\ term\ profitability_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t} \quad (1)$$

Here, $Longterm\ profitability_{i,j,t}$ represents the average profitability of the acquirer $i$ after the completion of the M&A deal with target $j$ at time $t$. We consider two measures of profitability: the average return on assets (ROA) and return on investment (ROI), both adjusted for industry averages.

These measures are calculated over three periods: 1-year, 2-year, and 3-year intervals. The key variables of interest are the forgotten ratios, as detailed in Section 2. The forgotten ratio of positive (or negative) news represents the percentage of positive (or negative) earnings surprises of non-peer firms in the target industry that the acquirer is likely to forget. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news captures the extent to which the acquirer overlooks more positive earnings surprises over negative earnings surprises in the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer $i$ including the acquirer's market cap, 6-month stock returns, past ROI, FCF, and leverage before the M&A announcement and $N_{j,t}$ includes a list of control variables relating to the target $j$. We include the acquirer industry dummies and year dummies in all specifications.

The results are presented in Table 2. Panel A shows the outcomes for ROA over 1, 2, and 3 years post-completion, while Panel B reports the ROI results for the same periods. Our findings reveal that a higher forgotten ratio of negative news is consistently and significantly related to lower future profitability, whether measured by ROA or ROI. These effects are both statistically significant and economically meaningful. Specifically, a one standard deviation increase in the forgotten ratio of negative news correlates with a 0.49 percentage point decrease in industry-adjusted ROA within 1 year (0.36 and 0.31 percentage points for 2 and 3 years, respectively) and a 1.01 percentage point decrease in industry-adjusted ROI within 1 year (0.64 and 0.58 percentage points for 2 and 3 years, respectively). Conversely, forgotten ratio of positive news is positively correlated with future profitability, while the relationship is not statistically significant. This is not surprising, as we can only observe the deals that occurred and not the potential deals that might have happened had the CEO not been distracted and ignored good news. Combining the two forgotten ratios, we find that a higher forgotten ratio difference, capturing the extent to which the CEO neglects more positive news relative to negative news, is positively and significantly related to future profitability. These findings support our first hypothesis, demonstrating that the forgotten ratio of negative news effectively captures the extent of value-destroying activities by CEOs.

We further hypothesize that such value reduction is more pronounced in cases of low institutional ownership, which is a proxy for inadequate oversight by owners (e.g., Chen, Harford, and Li 2007). To

test this, we re-estimate the relationship between the forgotten ratios and post-M&A profitability, stratifying the sample by institutional ownership. The results, detailed in Table 3 (with additional specifications in Table A2), estimate acquirers' ROA and ROI over 12, 24, and 36 months post-completion. Columns 1, 3, and 5 include acquirers with below-median institutional ownership, while Columns 2, 4, and 6 include those with above-median institutional ownership. The dependent variables are the acquirers' 1-year ROA, average 2-year ROA, and average 3-year ROA in Panel A, and the same measures for ROI in Panel B, all adjusted for industry averages.

The results show a stronger negative effect of the forgotten ratio of negative news in cases of low institutional ownership. For firms with below-average institutional ownership, a one standard deviation increase in the forgotten ratio of negative news is associated with a 0.65 percentage point decrease in 1-year ROA, compared to a 0.32 percentage point decrease for firms with above-average institutional ownership. Similar patterns are observed over 2 and 3 years, with more pronounced effects for low institutional ownership.

Finally, we examine whether the decision to initiate a deal is influenced by the CEO's memory lapses and whether, conditional on this decision, there remains a negative link between profitability and the forgotten ratio of negative news. We estimate a Heckman correction model to adjust for selection bias in the M&A sample. The first stage involves the following probit regressions to model the likelihood of deal initiation.

$$M\&A\ deal\ indicator_{i,g,t} = \alpha + \beta_1 \times \#\ of\ antitrust\ cases_{i,g,t-1} + \beta_2 \times Forgotten\ ratio_{i,g,t} + \gamma \times M_{i,t-1} + \delta \times N_{g,t-1} + \epsilon_{i,g,t} \quad (2)$$

where $M\&A\ deal\ indicator_{i,g,t}$ is an indicator that is equal to one if industry g is the target industry in which the M&A deal takes place at time t; $M\&A\ deal\ indicator_{i,g,t}$ is equal to zero if industry g is not the target industry in which the M&A deal takes place at time t. $\#\ of\ antitrust\ cases_{i,g,t-1}$ is the cumulative number of antitrust cases involving industry g until time t – 1. Specifically, we obtain records of legal actions initiated by the U.S. government against companies for alleged violations of antitrust laws from DOJ's website (https://www.justice.gov/atr/antitrust-case-filings-alpha).

We manually identify the industry of each defendant company and calculate the cumulative number of cases involving each of the Fama-French 49 industry. This represents our identifying restriction of the first stage. We document a strong positive correlation between the number of antitrust cases in the industry and the probability the deal with take place in such industry. In particular, one standard deviation higher number of cases is related to a 13.52 percentage points higher probability of the deal happening in that industry. This is consistent with the law and finance literature (e.g., Bittlingmayer 1985; Davies, Ormosi, and Graffenberger 2015) and suggests that when the industry's cartel ability is disrupted by the regulator, mergers are more likely either because the players in the same industry try to recreate their bargaining power by merging or because outside players see the opportunity arising for a better deal.

The forgotten ratios are constructed as described in Section 2 and are expanded to all Fama-French 49 industries. The forgotten ratio of positive (or negative) news represents the percentage of positive (or negative) earnings surprises of non-peer firms in industry g that the acquirer is likely to overlook. In the second stage, we re-estimate the regression models of Table 2 by including the Inverse Mills Ratio (IMR) that is derived from the first stage.

We report the results in Table 4. Column (1) shows that acquirer firms are more likely to initiate deals in industries with a history of more antitrust cases. More importantly, there is also a strong link between forgotten ratio of negative news and the probability of initiating a deal in an industry. In particular, one standard deviation higher forgotten ratio of negative news is related to a 2.3 percentage points higher probability of initiating a deal. Columns (2) to (4) report the relationship between forgotten ratios and acquirer future profitability, measured by industry-excess ROA over 1 to 3 years. The results are consistent with Table 2: Even after accounting for the choice of deals, there remains a strong negative relationship between the forgotten ratio of negative news and future firm profitability. This suggests that forgetting negative news not only makes CEOs more likely to engage in low-quality deals ex-ante but also leads to destructive decisions during post-deal integration.

We also expect that distraction is more likely when CEOs enter an industry in which they have not previously operated, compared to expanding within the same industry. This is because, if the CEO

(acquirer) is already operating in the same industry, news affecting a direct competitor may also be relevant to the deal. In contrast, previous focus in a specific industry may obscure relevant information about other industries. We test this hypothesis by stratifying the sample by whether the acquirer and target are in the same or different industries. The results as reported in appendix Table A3. Panel A covers cross-industry deals, while Panel B focuses on same-industry deals. We find that the negative relationship between the forgotten ratio of negative news and future profitability is primarily driven by cross-industry deals. For these deals, a one standard deviation increase in the forgotten ratio of negative news correlates with a 0.63 percentage point decrease in industry-adjusted ROA within 1 year (0.52 and 0.50 percentage points for 2 and 3 years, respectively). In contrast, the relationship is weaker and statistically insignificant for same-industry deals, with smaller decreases in industry-adjusted ROA. Therefore, our findings indicate that the effect is mostly concentrated in deals involving entry into a new industry when CEOs are more subject to the distraction from direct competitors.

# 4. The Market Assessment

Next, we test our second hypothesis and investigate how the market reacts to the CEO's faulty memory in the short-term. If the market is less distracted than the CEO, it will likely account for the CEO's degree of distraction and price it accordingly. To study the value creation/destruction as perceived by the market, we focus on the acquirer CAR following the M&A announcement. We estimate:

$$Acquiror\ CAR_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t} \quad (3)$$

where $Acquiror\ CAR_{i,j,t}$ refers to the cumulative abnormal returns of the acquirer *i* after the announcement of the M&A decision on target *j* at time *t*. The dependent variables are either the abnormal return 3 days around the deal or the mark-up return. The mark-up period is defined as from day 0 through day 126 relative to the announcement day. The cumulative abnormal returns during the mark-up periods are estimated using the market model, with CRSP value-weighted market portfolios from day -379 to day -127, prior to the M&A announcement. The main variables of interest are the *forgotten ratios*, including the forgotten ratio of positive (or negative) news, and forgotten ratio difference (positive minus negative). $M_{i,t}$ includes a list of control variables relating to the acquirer *i*

and $N_{j,t}$ includes a list of control variables relating to the target $j$. We include the acquirer industry dummies and year dummies in all specifications.

Table 5 presents our findings on mark-up returns, showing that a higher forgotten ratio of negative news decreases mark-up, while a higher forgotten ratio difference increases it. This suggests that, when the acquirer CEO is likely to have overlooked more bad information about the target, the market perceives the deal as more value-destroying and reacts more negatively to the M&A announcement. These effects are both statistically significant and economically substantial. In our sample, the average (median) mark-up return is –0.67 (–1.84) percentage points. An increase of one standard deviation in the forgotten ratio of negative news is associated with a decrease in mark-up returns by 1.01 to 1.03 percentage points, whereas an increase of one standard deviation in the forgotten ratio difference is associated with an increase in mark-up returns by 1.04 to 1.06 percentage points. In untabulated results, we find no significant impact of forgotten ratios on the run-up or the three-day announcement return, suggesting that the market reacts to CEOs' faulty memory gradually.[5]

We also re-estimate the regression models of Table 5 by including the Inverse Mills Ratio (IMR) from Table 4 to adjust for the selection bias. The results are consistent with previous findings and are reported in the appendix Table A4. After accounting for the choice of deals, there is a strong negative relationship between forgotten ratio of negative news and acquirer CAR following the M&A announcement, supporting a negative correlation between ignored negative information and value creation.

As we argued, the market reaction should be more pronounced when there is greater transparency and lower information asymmetry regarding the firm. To test this, we use two measures for the information environment: analysts forecast error (AFE) and analyst forecast dispersion (AFD). In Table 6, we analyze subsamples of M&A deals based on analysts' forecasts. Panel A divides the sample by the acquirer's average analyst forecast error (AFE) before the M&A announcement, calculated as the absolute difference between actual and forecasted EPS, deflated by the previous month's stock price.

[5] The run-up period is defined as from day –42 through day –1 before the announcement day following Schwert (1996).

Panel B divides the sample by the acquirer's average analyst forecast dispersion (AFD) before the M&A announcement, calculated as the standard deviation of analyst forecasts divided by the previous month's stock price.

The results indicate that the effects of the forgotten ratios are more pronounced in firms with low forecast error and low forecast dispersion. In particular, a one standard deviation increase in the forgotten ratio of negative news results in a 1.82 percentage point decrease in mark-up for firms with low AFE, compared to a 0.44 percentage point decrease for firms with high AFE. Similarly, a one standard deviation increase in the forgotten ratio difference results in a 2.01 percentage point increase in mark-up for firms with low AFE, compared to a 0.24 percentage point increase for firms with high AFE.

Similarly, for AFD, a one standard deviation increase in the forgotten ratio of negative news results in 1.87 percentage points lower mark-up for firms with low AFD, compared to 0.67 percentage points lower mark-up for firms with high AFD. One standard deviation increase in the forgotten ratio difference results in 2.25 percentage points higher mark-up for firms with low AFD, compared to 0.24 percentage points higher mark-up for firms with high AFD. These results suggest that the forgotten ratio of negative news negatively influences market appreciation of the deal, with a stronger effect in firms with less uncertainty, allowing the market to better assess CEO bias.

Next, we explore how the link between forgotten ratios and mark-up varies with market sentiment. On the one hand, during periods of overvaluation and high sentiment, investor optimism might lead to a muted response to negative events, causing weaker market reactions when CEOs overlook negative news in M&A decisions. On the other hand, the market might expect CEOs to be more biased by limited memory during high sentiment and overvaluation periods, resulting in stronger reactions.

To test these competing forces, we use three proxies of market sentiment: the monthly index of first-day IPO returns (RIPO), the monthly index of dividend premium (PDND), and the book-to-market ratio (BM) of the acquirer's industry. We conduct subsample analyses based on market sentiment. Following Ibbotson, Sindelar, and Ritter (1994), the monthly RIPO index is the nipo-weighted average first-day returns of IPOs over the prior twelve months. The M&A deal is in the low (high) RIPO

subsample if the M&A is announced in the month with below (above) the median RIPO index. Following Baker and Wurgler (2004), the monthly PDND index is the value-weighted dividend premium over the prior twelve months. The M&A deal is in the low (high) PDND subsample if the M&A is announced in the month with below (above) the median PDND index. As to the book-to-market ratio (BM), we calculate the book-to-market ratio for each of the Fama-French 49 industries each month. The M&A deal is in the low (high) BM subsample if the book-to-market ratio of the acquirer industry's is below (above) the median book-to-market ratio in the month prior to the M&A announcement.

The results are presented in Table 7. Panel A divides the sample by the monthly index of first-day IPO returns (RIPO), showing that the link between forgotten ratios and mark-up is stronger during high sentiment periods (high RIPO**).** Panel B divides the sample by the monthly index of dividend premium (PDND), indicating that the relationship between forgotten ratios and mark-up is stronger is stronger during periods of high sentiment (low PDND). Panel C divides the sample by BM, finding that the effect of forgotten ratios is more pronounced in industries of low sentiment (low BM). In contrast, during low sentiment periods or in industries with low sentiment, the link between forgotten ratios and mark-up is non-existent. These findings suggest that the market might expect CEOs to be more biased by their limited memory in high sentiment and overvaluation periods or industries, resulting in stronger reactions.

Finally, we assess market responses separately for cross-industry and same-industry deals in appendix Table A5. Panel A shows that the negative relationship between forgotten ratio of negative news and mark-up, and the positive relationship between forgotten ratio difference and mark-up, are primarily driven by cross-industry deals. Specifically, one standard deviation higher forgotten ratio negative is associated with 1.04 percentage points lower mark-up. Also, one standard deviation higher forgotten ratio difference is associated with 0.91 percentage points higher mark-up. For same-industry deals (Panel B), these relationships are not statistically significant.

Overall, our results demonstrate that the forgotten ratio significantly impacts mark-up returns, with stronger effects in cross-industry deals, low forecast error and dispersion firms, and under high market sentiment. The market's ability to assess CEO bias plays a crucial role in these dynamics.

# 5. The Long-Term Market Assessment

We now consider the link between (the market's long-term assessment of) the value creation of the deal and CEO distraction. We proceed in two ways. First, we consider a standard portfolio approach and then we focus on the long-term returns after the completion of the deal.

## 5.1 The Portfolio Approach

We begin with the portfolio approach, constructing portfolios that mimic trading strategies based on the forgotten ratio difference, which measures the extent to which the CEO overlooks more positive news relative to negative news. Specifically, we create two portfolios. The Low Portfolio includes acquirers with a forgotten ratio difference below zero (cases where the CEO overlooks more negative news about the target), while the High Portfolio includes the acquirers with a forgotten ratio difference above zero (cases where the CEO overlooks more positive news about the target).

Table 8 presents our findings. Panels A and B report returns from a calendar-time value-weighted portfolio strategy, where the weight is based on the market capitalization of the acquirer before the M&A announcement. After the M&A announcement, acquirer stocks are sorted into either the Low or High portfolio and held for 6 months (Panel A) or 12 months (Panel B). The "High – Low" column represents a trading strategy with a long position in the High portfolio and a short position in the Low portfolio. We evaluate returns using the Fama-French three-factor model and a four-factor model that includes an additional momentum factor.

For a 6-Month Holding Period, the Low portfolio generates a negative alpha, ranging from –0.63 percentage points per month (one-factor model) to –0.54 percentage points per month (four-factor model), while the High-Low portfolios delivers a positive alpha, ranging from 0.51 percentage points per month (one-factor model) to 0.46 percentage points per month (four-factor model). For the 12-Month Holding Period, the Low portfolio's negative alpha ranges from –0.31 percentage points per month to –0.21 percentage points per month, while the High-Low portfolios generates a positive alpha, ranging from 0.32 percentage points per month to 0.26 percentage points per month.

Finally, in Panel C, we adopt the Ibbotson Returns Across Time and Securities (RATS) estimation combined with the Fama-French three-factor model. The returns are estimated for two groups based on the forgotten ratio difference over four intervals: [1,3], [1,6], [1,9], and [1,12] months following the M&A announcement. Consistent with portfolio-based results, the Low portfolio displays negative returns ranging from –1.75 percentage points (3-month return) to –4.2 percentage points (12-month return).

Overall, these results show that the abnormal long-term returns from trading strategies based on the forgotten ratio difference are consistently both economically and statistically significant. The Low portfolio consistently underperforms, while the High-Low strategy yields positive returns. These findings reinforce the significance of CEOs' faulty memory in predicting post-M&A performance.

## 5.2 The Post-Completion Returns

We now consider the long-term returns after the completion of the deal. We estimate:

$$Long\ term\ CAR_{i,j,t} = \alpha + \beta \times Forgotten\ ratio\ difference_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t} \quad (4)$$

where $Longterm\ CAR_{i,j,t}$ represents the cumulative abnormal returns (CAR) of the acquirer *i* following the completion of the M&A deal on target *j* at time *t*. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The main variables of interest are the *forgotten ratios*, including the forgotten ratio of positive (or negative) news, and forgotten ratio difference (positive minus negative). $M_{i,t}$ includes a list of control variables relating to the acquirer *i* and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications.

We present the results in Table 9, focusing on the acquirer's Cumulative Abnormal Returns (CAR) after completion over different time periods: 12 months (Columns 1 and 2), 24 months (Columns 3 and 4), and 36 months (Columns 5 and 6). Our findings indicate that the forgotten ratio of negative news is negatively correlated with the acquirer's CAR after completion, whereas the forgotten ratio difference is positively correlated with it. Specifically, a one standard deviation increase in forgotten ratio of negative news correlates with between 3.11 percentage points and 4.66 percentage points lower

acquirer's long-term CAR after completion. A one standard deviation higher forgotten ratio difference correlates with 3.16 percentage points and 3.73 percentage points higher acquirer's long-term CAR after completion. Consistently, the results are primarily driven by CEOs overlooking negative news about the target across all analyses.

We further investigate whether the relationship between long-term returns after completion and forgotten ratios varies with institutional ownership (IO). We divide the sample into two subsamples based on IO of acquirers prior to the M&A announcement and report the results in Table 10. Columns 1 and 3 pertain to acquirers with below-median IO, while Columns 2 and 4 focus on acquirers with above-median IO. We estimate the acquirer's CAR after completion over 12 months (Panel A), 24 months (Panel B), and 36 months (Panel C).

Our analysis reveals a consistent link between long-term returns after completion and forgotten ratios irrespective of institutional ownership levels and time horizons. However, the influence is attenuated in the presence of higher institutional ownership. Specifically, higher IO diminishes the impact by 4.18 percentage points (over 12 months), 5.09 percentage points (over 24 months), and 4.37 percentage points (over 36 months). For acquirers with lower institutional ownership, a one standard deviation increase in negative forgotten ratio correlates with 5.49 percentage points (12 months), 7.48 percentage points (24 months), and 6.95 percentage points (36 months) lower CAR. In contrast, acquirers with higher institutional ownership show a smaller impact, with a one standard deviation increase in negative forgotten ratio relating to 1.31 percentage points (12 months), 2.38 percentage points (24 months), and 2.58 percentage points (36 months) lower CAR.

These findings underscore the role of institutional ownership in mitigating the adverse effects of CEO cognitive biases on post-M&A performance, albeit with varying degrees of effectiveness across different time horizons.

## 6. Discussion

Lastly, one remaining question is what the effect of the acquirer's faulty memory for the target is. Indeed, on the one hand, the higher (over)confidence of the buyer could enhance the target's bargaining

power, enabling the target to capture more value in the deal. On the other hand, a higher (over)confidence of the buyer may just result in a worse long-term value creation and therefore lower value for both buyer and target. To investigate this issue, we start by analyzing the target's CAR around the M&A announcement. The following specification is estimated:

$$Target\ CAR_{i,j,t} = \alpha + \beta \times Forgotten\ ratio\ difference_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t} \quad (5)$$

where $Target\ CAR_{i,j,t}$ refers to the cumulative abnormal returns of the target *j* after the announcement of the M&A decision by the acquirer *i* at time *t*. The other variables are defined as in the previous specifications.

We report the results in Table 11. As for the case of the acquirer, the forgotten ratio of negative news reduces the mark up, while the forgotten ratio difference increases it. One standard deviation higher forgotten ratio of negative news is related to between 1.93 percentage points and 2.015 percentage points lower mark-up for the target. One standard deviation higher forgotten ratio difference is related to between 1.94 percentage points and 2.03 percentage points higher mark-up for the target. Also, there is no effect on the run-up or the one-day announcement return. Again, the results are mostly driven by acquirer's faulty memory of negative news, and this result suggests that the faulty memory of the acquirer does not translate in value for the target.

To further test whether the faulty memory of acquirer affects the target's bargaining power, we examine the connection between the forgotten ratio and the offer premium—specifically, the premium that the acquirer offers over the target's share price one day prior to the announcement, sourced from the SDC Platinum databases. Our findings on the offer premium are detailed in Table 12, revealing a significant negative relationship between the forgotten ratio of negative news and the offer premium. Notably, a one standard deviation increase in the forgotten ratio of negative news is associated with a 4.61 percentage points lower offer premium. These results further underscore that the cognitive biases of acquirer CEOs do not translate into value creation for the target.

Collectively, these outcomes demonstrate a negative correlation between the forgotten ratio of negative news and market appreciation of the deal for both the acquirer and the target. This indicates

that shareholders of the target do not benefit from the overconfidence of the acquirer's CEO; instead, they also suffer from such low-quality deals. To understand why this occurs, we examine whether this impact varies based on the method of payment—specifically, equity-for-equity swap versus cash pay. In an equity-for-equity swap, target shareholders become shareholders of the acquirer firm, thus they share in the negative effects of the deal.

To explore this channel, we analyze the main specifications by segmenting the sample based on the method of payment. The results, summarized in Table 13, reveal that the observed adverse effects associated with forgotten ratio of negative news are concentrated in deals where payment is predominantly made in equity. Specifically, when the deal is paid with over 80% stock, the negative impact of acquirer CEO's faulty memory (forgotten ratio of negative news) is nearly three times larger than for deals paid with less than 80% stock. This suggests that the negative impact of acquirer's faulty memory on target shareholders is attributable to their conversion into shares of a firm that is unlikely to derive significant benefits from the deal.

## Conclusion

We investigate the role of memory in financial markets, contrasting its efficiency between corporate CEOs and market participants. Our hypothesis posits that CEOs, constrained by limited attention, often base decisions on incomplete information due to simultaneous releases of relevant news from competing firms. This distraction leads them to overlook crucial information when making decisions, especially in mergers and acquisitions (M&As).

In contrast, financial markets aggregate diverse information from multiple sources, exhibiting less distraction and bias on average in their decision-making processes. To test this hypothesis, we examine how markets react to CEO "forgetfulness" during M&As. Specifically, we conjecture that CEOs distracted by economic news from direct competitors may fail to properly evaluate information crucial to bidding companies, resulting in potentially value-destructive deals.

We define a proxy for the extent to which CEO distraction leads to the neglect of industry news pertaining to target companies ("forgotten ratio"). Our findings show a negative correlation between the

forgotten ratio of negative news and the future profitability (ROA or ROI) of M&A deals, suggesting that a higher forgotten ratio of negative news predicts lower deal quality. This effect is exacerbated in firms with lower institutional ownership, underscoring the CEO's influence on deal initiation.

Having established the negative impact of CEO memory faults on M&A quality, we analyze how markets respond. We argue that markets, being less distracted than CEOs, swiftly incorporate CEO distraction levels into pricing. Consistent with this conjecture, we observe that higher forgotten ratio of negative news is associated with reduced mark-ups and negative long-term stock performance pre- and post-deal completion. This effect is particularly pronounced in firms with lower transparency and higher information asymmetry, especially those with low forecast error and dispersion. Interestingly, our findings reveal that heightened acquirer CEO confidence does not translate into increased bargaining power for targets, which experience lower stock market returns and offer premiums. One contributing factor may be the method of payment: targets compensated with equity share the long-term fate of firms led by CEOs with memory faults, potentially diluting perceived benefits.

In conclusion, our study highlights the pivotal role of memory in corporate decision-making and its implications for market efficiency and M&A outcomes. CEO distraction significantly impacts deal quality and market performance, underscoring the importance of mitigating cognitive biases in strategic decisions.

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# Table 1: Summary Statistics

This table reports the summary statistics of main variables. The construction of forgotten ratios is described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. Acquirer market capitalization is the log value of the acquirer's market capitalization in millions in the month prior to the M&A announcement. Acquirer's return is the 6-month cumulative return of the acquirer's stock before the M&A announcement. Acquirer ROA is the ROA (ROA = ib/at) of the acquirer in the fiscal year prior to the M&A announcement. Acquirer FCF is the FCF (FCF= (ib + dp)/at) of the acquirer in the fiscal year prior to the M&A announcement. Acquirer leverage is the leverage (Leverage= (dltt + dlc)/at) of the acquirer in the fiscal year prior to the M&A announcement. Acquirer industry return is the 6-month cumulative value-weighted return of all the stocks in the acquirer's industry before the M&A announcement. Target industry return is the 6-month cumulative value-weighted return of all the stocks in the target's industry before the M&A announcement. Target market capitalization is the log value of the target's market capitalization in millions in the month prior to the M&A announcement. Target return is the 6-month cumulative return of the target's stock before the M&A announcement. Value of Transaction is the value of the M&A transaction from SDC. % of shares acquired is the percentage of the target's shares acquired by the acquirer in the transaction from SDC.

| **Variables:** | **Mean** | **S.D.** | **P10** | **P50** | **P90** |
|---|---|---|---|---|---|
| Forgotten ratio positive | 0.5478 | 0.2765 | 0.1711 | 0.5338 | 0.9655 |
| Forgotten ratio negative | 0.4600 | 0.3188 | 0.0472 | 0.4205 | 0.9548 |
| Forgotten ratio difference (positive – negative) | 0.0878 | 0.3795 | -0.3933 | 0.0712 | 0.5989 |
| Acquirer market capitalization | 14.4097 | 2.2605 | 11.5092 | 14.3494 | 17.4709 |
| Acquirer returns | 0.1052 | 0.4499 | -0.2471 | 0.0661 | 0.4330 |
| Acquirer ROA | 0.0140 | 0.1790 | -0.0415 | 0.0308 | 0.1065 |
| Acquirer FCF | 0.0500 | 0.1710 | -0.0009 | 0.0648 | 0.1562 |
| Acquirer leverage | 0.2583 | 0.2073 | 0.0081 | 0.2319 | 0.5294 |
| Acquirer industry returns [t-6, t-1] | 1.1154 | 0.1870 | 0.9255 | 1.1043 | 1.3017 |
| Target industry returns [t-6, t-1] | 1.1172 | 0.1828 | 0.9275 | 1.1067 | 1.3035 |
| Target market capitalization | 13.9089 | 2.5171 | 10.6308 | 13.8779 | 17.3127 |
| Target returns [t-6, t-1] | 0.0682 | 0.4844 | -0.3549 | 0.0491 | 0.4414 |
| Value of transaction | 18.7737 | 2.0612 | 16.1669 | 18.7500 | 21.4470 |
| % of shares acquired | 88.7458 | 21.70 | 50.00 | 100.00 | 100.00 |

# Table 2: Acquirer's Long-term Profitability after M&A Completion

This table presents the results from estimating the regression model as follows:

$$Long\ term\ profitability_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Longterm\ profitability_{i,j,t}$ represents the average profitability of the acquirer *i* following the completion of the M&A deal on target *j* at time *t*. Within Panels A and B of the table, the dependent variables correspond to the average return on assets (ROA) and return on investment (ROI), respectively, both measured in excess of their industry averages. The average ROA and ROI are calculated over three distinct periods: 1-year (Columns 1 and 2), 2-year (Columns 3 and 4), and 3-year (Columns 5 and 6). The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer *i* and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Acquirer's ROA after completion**

| Dependent Variable: | Acquirer's ROA after completion | | | | | |
|---|---|---|---|---|---|---|
| | 1 year | | 2-year average | | 3-year average | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0059 | | 0.0041 | | 0.0020 | |
| | (0.94) | | (0.92) | | (0.55) | |
| Forgotten ratio negative | -0.0154*** | | -0.0112*** | | -0.0096*** | |
| | (-3.57) | | (-3.08) | | (-3.06) | |
| Forgotten ratio difference | | 0.0112*** | | 0.0081*** | | 0.0062*** |
| | | (2.91) | | (3.15) | | (2.98) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 8514 | 8514 | 7938 | 7938 | 7458 | 7458 |
| adj. R-sq | 0.194 | 0.194 | 0.225 | 0.225 | 0.255 | 0.255 |

**Panel B: Acquirer's ROI after completion**

| Dependent Variable: | Acquirer's ROI after completion | | | | | |
|---|---|---|---|---|---|---|
| | 1-year | | 2-year average | | 3-year average | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0093 | | 0.0112 | | 0.0077 | |
| | (0.77) | | (1.23) | | (1.00) | |
| Forgotten ratio negative | -0.0316*** | | -0.0200*** | | -0.0182*** | |
| | (-3.28) | | (-3.32) | | (-4.12) | |
| Forgotten ratio difference | | 0.0219** | | 0.0162*** | | 0.0136*** |
| | | (2.55) | | (3.12) | | (3.57) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 7480 | 7480 | 6876 | 6876 | 6358 | 6358 |
| adj. R-sq | 0.159 | 0.159 | 0.195 | 0.195 | 0.234 | 0.234 |

# Table 3: Institutional Ownership & Acquirer's Long-term Profitability after M&A Completion

This table presents the results from estimating the regression model for different subsamples as follows:

$$Long\ term\ profitability_{i,j,t+x} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Longterm\ profitability_{i,j,t+x}$ represents the average profitability of the acquirer $i$ following the completion of the M&A deal on target $j$ at time $t$. The sample is divided into two subsamples based on the acquirer's institutional ownership (IO) prior to the M&A announcement. Columns 1, 3 and 5 include acquirers with below-median IO, while Columns 2, 4 and 6 include acquirers with above-median IO. The dependent variables are the acquirer's industry-excess return on assets (ROA) over 1-year, 2-year, and 3-year periods in Panel A, as well as the acquirer's industry-excess return on investment (ROI) in Panel B. ROA and ROI are all measured in excess of their respective industry averages. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. $M_{i,t}$ includes a list of control variables relating to the acquirer $i$ and $N_{j,t}$ includes a list of control variables relating to the target $j$. We include the acquirer industry dummies and year dummies in all specifications. P-values for testing the coefficient difference in main variables between the two subsamples are provided below their corresponding coefficients. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Acquirer's industry-excess ROA after completion**

| Dependent Variable: | ROA (1 year) | | ROA (2-year average) | | ROA (3-year average) | |
|---|---|---|---|---|---|---|
| | Low IO | High IO | Low IO | High IO | Low IO | High IO |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0055 | 0.0045 | 0.0010 | 0.0054 | -0.0033 | 0.0054 |
| | (0.70) | (0.65) | (0.17) | (1.05) | (-0.77) | (1.22) |
| Coefficient difference: p-value | 0.9403 | | 0.6299 | | 0.2813 | |
| Forgotten ratio negative | -0.0202*** | -0.0102* | -0.0189*** | -0.0034 | -0.0174*** | -0.0017 |
| | (-3.11) | (-2.00) | (-3.85) | (-0.89) | (-3.64) | (-0.45) |
| Coefficient difference: p-value | 0.3593 | | 0.0475 | | 0.023 | |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 4214 | 4300 | 3892 | 4046 | 3623 | 3835 |
| adj. R-sq | 0.224 | 0.144 | 0.253 | 0.197 | 0.292 | 0.215 |

**Panel B: Acquirer's industry-excess ROI after completion**

| Dependent Variable: | ROI (1 year) | | ROI (2-year average) | | ROI (3-year average) | |
|---|---|---|---|---|---|---|
| | Low IO | High IO | Low IO | High IO | Low IO | High IO |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0120 | 0.0044 | 0.0130 | 0.0086 | 0.0042 | 0.0105 |
| | (0.77) | (0.36) | (1.00) | (0.98) | (0.40) | (1.26) |
| Coefficient difference: p-value | 0.7595 | | 0.8066 | | 0.6865 | |
| Forgotten ratio negative | -0.0429** | -0.0218** | -0.0317*** | -0.0078 | -0.0312*** | -0.0040 |
| | (-2.34) | (-2.59) | (-3.31) | (-1.20) | (-4.43) | (-0.63) |
| Coefficient difference: p-value | 0.3156 | | 0.1079 | | 0.0354 | |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 4214 | 4300 | 3892 | 4046 | 3623 | 3835 |
| adj. R-sq | 0.224 | 0.144 | 0.253 | 0.197 | 0.292 | 0.215 |

# Table 4: The Heckman Correction for Acquirer's Long-term Profitability

This table reports the Heckman model to correct for selection bias in the M&A sample. In the first stage, we estimate the probit regressions as follows:

$$M\&A\ deal\ indicator_{i,g,t} = \alpha + \beta_1 \times \#\ of\ antitrust\ cases_{i,g,t-1} + \beta_2 \times Forgotten\ ratio_{i,g,t} + \gamma \times M_{i,t-1} + \delta \times N_{g,t-1} + \epsilon_{i,g,t}$$

where $M\&A\ deal\ indicator_{i,g,t}$ is an indicator that is equal to one if industry g is the target industry in which the M&A deal takes place at time t; $M\&A\ deal\ indicator_{i,g,t}$ is equal to zero if industry g is not the target industry in which the M&A deal takes place at time t. $\#\ of\ antitrust\ cases_{i,g,t-1}$ is the cumulative number of antitrust cases involving industry g until time t – 1. The forgotten ratios are constructed as described in Section 2 and are expanded to all Fama-French 49 industries. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from industry *g* that the acquiring firm's CEO is likely to overlook. In the second stage, we re-estimate the regression models of Table 2 by including the Inverse Mills Ratio (IMR) that is derived from the first stage.

| Dependent Variable: | Indicator of M&A in industry g | Acquirer's industry-excess ROA | | |
|---|---|---|---|---|
| | | 1-year | 2-year average | 3-year average |
| | (1) | (2) | (3) | (4) |
| # of antitrust cases in industry g | 0.1229*** | | | |
| | (5.75) | | | |
| Inverse mills ratio | | 0.1598*** | 0.0834** | 0.0647** |
| | | (2.96) | (2.35) | (2.22) |
| Acquirer i's forgotten ratio positive of industry g | -0.0241 | 0.0056 | 0.0039 | 0.0018 |
| | (-0.67) | (0.95) | (0.92) | (0.51) |
| Acquirer i's forgotten ratio negative of industry g | 0.0720** | -0.0145*** | -0.0105*** | -0.0091*** |
| | (2.15) | (-3.38) | (-2.90) | (-2.90) |
| Industry control | Yes | Yes | Yes | Yes |
| Acquirer control | Yes | Yes | Yes | Yes |
| Target control | No | Yes | Yes | Yes |
| Deal control | No | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 485293 | 8514 | 7938 | 7458 |
| pseudo R-sq | 0.013 | | | |
| adj. R-sq | | 0.219 | 0.241 | 0.270 |

# Table 5: Acquirer's Mark-Up after M&A Announcement

This table presents the results from estimating the regression model as follows:

$$Acquiror\ CAR\ [0{,}126]_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Acquiror\ CAR\ [0, 126]_{i,j}$ refers to the 126-day cumulative abnormal returns of the acquirer *i* after the announcement of the M&A decision on target *j* at time *t*. The cumulative abnormal returns are estimated using the market model, with CRSP value-weighted market portfolios from day -379 to day -127, prior to the M&A announcement. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. $M_{i,t}$ includes a list of control variables relating to the acquirer $i$ and $N_{j,t}$ includes a list of control variables relating to the target $j$. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

| Dependent Variable: | Acquirer's CAR [0,126] | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0220 | 0.0221 | 0.0223 | | | |
| | (1.38) | (1.39) | (1.39) | | | |
| Forgotten ratio negative | -0.0316** | -0.0322** | -0.0321** | | | |
| | (-2.62) | (-2.67) | (-2.65) | | | |
| Forgotten ratio difference | | | | 0.0274** | 0.0278** | 0.0278** |
| | | | | (2.43) | (2.46) | (2.44) |
| Industry control | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer control | Yes | Yes | Yes | Yes | Yes | Yes |
| Target control | No | Yes | Yes | Yes | Yes | Yes |
| Deal control | No | No | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 9900 | 9900 | 9900 | 9900 | 9900 | 9900 |
| adj. R-sq | 0.059 | 0.060 | 0.061 | 0.059 | 0.061 | 0.061 |

# Table 6: Analysts' Forecasts & Acquirer's Mark-Up after M&A Announcement

This table presents the results from estimating the regression model for different subsamples as follows:

$$Acquiror\ CAR\ [0{,}126]_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Acquiror\ CAR\ [0{,}126]_{i,j,t}$ refers to the 126-day cumulative abnormal returns of the acquirer *i* after the announcement of the M&A decision on target *j* at time *t*. In Panel A, the sample is divided into two subsamples based on the acquirer's average analyst fancast error (AFE) before the M&A announcement. AFE is calculated as the absolute value of the difference between the actual earnings per share (EPS) and the forecasted EPS consensus (the median analyst forecast), deflated by the stock price in the previous month. In Panel B, the sample is divided into two subsamples based on the acquirer's average analyst fancast dispersion (AFD) before the M&A announcement. AFD is calculated as the standard deviation of analyst forecast divided by the stock price in the previous month. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer *i* and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications. P-values for testing the coefficient difference in main variables between the two subsamples are provided below their corresponding coefficients. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Subsample analysis by the analyst forecast error (AFE)**

| Dependent Variable: | Acquirer's CAR [0,126] | | | |
|---|---|---|---|---|
| | Low AFE | High AFE | Low AFE | High AFE |
| | (1) | (2) | (3) | (4) |
| Forgotten ratio positive | 0.0480* | -0.0039 | | |
| | (1.73) | (-0.22) | | |
| Test of coefficient difference: p-value | 0.019 | | | |
| Forgotten ratio negative | -0.0571** | -0.0139 | | |
| | (-2.76) | (-1.01) | | |
| Test of coefficient difference: p-value | 0.0221 | | | |
| Forgotten ratio difference | | | 0.0530** | 0.0063 |
| | | | (2.45) | (0.53) |
| Test of coefficient difference: p-value | | | 0.0027 | |
| Industry controls | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 4510 | 4463 | 4510 | 4463 |
| adj. R-sq | 0.088 | 0.060 | 0.089 | 0.060 |

**Panel B: Subsample analysis by the analyst forecast dispersion (AFD)**

| Dependent Variable: | Acquirer's CAR [0,126] | | | |
|---|---|---|---|---|
| | Low AFD | High AFD | Low AFD | High AFD |
| | (1) | (2) | (3) | (4) |
| Forgotten ratio positive | 0.0599* | -0.0126 | | |
| | (2.05) | (-0.60) | | |
| Test of coefficient difference: p-value | 0.0011 | | | |
| Forgotten ratio negative | -0.0586*** | -0.0209 | | |
| | (-3.21) | (-1.49) | | |
| Test of coefficient difference: p-value | 0.0505 | | | |
| Forgotten ratio difference | | | 0.0592*** | 0.0062 |
| | | | (3.03) | (0.52) |
| Test of coefficient difference: p-value | | | 0.0008 | |
| Industry controls | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 4254 | 4198 | 4254 | 4198 |
| adj. R-sq | 0.071 | 0.057 | 0.072 | 0.056 |

# Table 7: Market Sentiment & Acquirer's Mark-Up after M&A Announcement

This table presents the results from estimating the regression model for different subsamples as follows:

$$Acquiror\ CAR\ [0{,}126]_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Acquiror\ CAR\ [0{,}126]_{i,j,t}$ refers to the 126-day cumulative abnormal returns of the acquirer *i* after the announcement of the M&A decision on target *j* at time *t*. In Panel A, the sample is divided into two subsamples based on the monthly index of first-day IPO returns (RIPO). Following Ibbotson, Sindelar, and Ritter (1994), the monthly RIPO index is the nipo-weighted average first-day returns of IPOs over the prior twelve months. The M&A deal is in the low (high) RIPO subsample if the M&A is announced in the month with below (above) the median RIPO index. In Panel B, the sample is divided into two subsamples based on the monthly index of dividend premium (PDND). Following Baker and Wurgler (2004), the monthly PDND index is the value-weighted dividend premium over the prior twelve months. The M&A deal is in the low (high) PDND subsample if the M&A is announced in the month with below (above) the median PDND index. In Panel C, the sample is divided into two subsamples based on the book-to-market ratio (BM) of the acquirer's industry. We calculate the book-to-market ratio for each of the Fama-French 49 industries each month. The M&A deal is in the low (high) BM subsample if the book-to-market ratio of the acquirer industry's is below (above) the median book-to-market ratio in the month prior to the M&A announcement. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer *i* and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications. P-values for testing the coefficient difference in main variables between the two subsamples are provided below their corresponding coefficients. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Subsample analysis – IPO first-day returns (RIPO)**

| Dependent Variable: | Acquirer's CAR [0,126] | | | |
|---|---|---|---|---|
| | Low RIPO | High RIPO | Low RIPO | High RIPO |
| | (1) | (2) | (3) | (4) |
| Forgotten ratio positive | 0.0041 | 0.0383* | | |
| | (0.21) | (2.06) | | |
| Test of coefficient difference: p-value | 0.1068 | | | |
| Forgotten ratio negative | -0.0105 | -0.0471** | | |
| | (-1.35) | (-2.75) | | |
| Test of coefficient difference: p-value | 0.0452 | | | |
| Forgotten ratio difference | | | 0.0078 | 0.0432** |
| | | | (0.84) | (2.80) |
| Test of coefficient difference: p-value | | | 0.0183 | |
| Industry controls | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 4905 | 4995 | 4905 | 4995 |
| adj. R-sq | 0.062 | 0.069 | 0.062 | 0.069 |

**Panel B: Subsample analysis – dividend premium (PDND)**

| Dependent Variable: | Acquirer's CAR [0,126] | | | |
|---|---|---|---|---|
| | Low PDND | High PDND | Low PDND | High PDND |
| | (1) | (2) | (3) | (4) |
| Forgotten ratio positive | 0.0126 | 0.0272 | | |
| | (0.71) | (1.48) | | |
| Test of coefficient difference: p-value | 0.4956 | | | |
| Forgotten ratio negative | -0.0477** | -0.0111 | | |
| | (-2.72) | (-1.08) | | |
| Test of coefficient difference: p-value | 0.0471 | | | |
| Forgotten ratio difference | | | 0.0323** | 0.0181 |
| | | | (2.26) | (1.74) |
| Test of coefficient difference: p-value | | | 0.3513 | |
| Industry controls | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 4947 | 4953 | 4947 | 4953 |
| adj. R-sq | 0.072 | 0.071 | 0.072 | 0.071 |

**Panel C: Subsample analysis – acquirer industry book-to-market (BM)**

| Dependent Variable: | Acquirer's CAR [0,126] | | | |
|---|---|---|---|---|
| | Low BM | High BM | Low BM | High BM |
| | (1) | (2) | (3) | (4) |
| Forgotten ratio positive | 0.0237 | 0.0061 | | |
| | (1.48) | (0.34) | | |
| Test of coefficient difference: p-value | 0.4025 | | | |
| Forgotten ratio negative | -0.0394*** | -0.0069 | | |
| | (-2.93) | (-0.50) | | |
| Test of coefficient difference: p-value | 0.0718 | | | |
| Forgotten ratio difference | | | 0.0325** | 0.0066 |
| | | | (2.80) | (0.62) |
| Test of coefficient difference: p-value | | | 0.0813 | |
| Industry controls | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 4837 | 5063 | 4837 | 5063 |
| adj. R-sq | 0.044 | 0.139 | 0.044 | 0.139 |

# Table 8: Returns from Trading Strategies after M&A Announcement

This table reports the abnormal long-term returns from trading strategies based on the *forgotten ratio difference,* which is constructed as described in Section 2 and captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. We construct two portfolios: the Low portfolio consists of acquirers whose *forgotten ratio difference* is below zero, while the High portfolio consists of acquirers whose *forgotten ratio difference* is above zero. Panel A and B report returns using a calendar-time value-weighted portfolio strategy, where the weight is the market capitalization of the acquirer prior to the M&A announcement. Following the M&A announcement, the acquirer' stocks are sorted into either the low or high portfolio and held for 6 months (Panel A) or for 12 months (Panel B). "High – Low" represents a trading strategy involving a long position in the High portfolio and a short position in the Low portfolio. The 3-factor model includes Fama-French three factors, and the 4-factor model includes an additional momentum factor. Panel C represents returns using the Ibbotson Returns Across Time and Securities (RATS) estimation combined with the Fama-French three factor model. Returns are estimated for two groups based on the forgotten ratio difference and over four intervals: [1,3], [1,6], [1,9], and [1,12] months following the M&A announcement. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Portfolio returns with 6-month holding period**

| Forgotten ratio difference | Portfolio | Alphas from | | |
|---|---|---|---|---|
| | monthly return | CAPM | 3-factor | 4-factor |
| Low (Forgotten ratio difference < 0) | 0.0014 | -0.0063*** | -0.0059*** | -0.0054*** |
| | (0.42) | (-3.12) | (-3.15) | (-2.87) |
| High (Forgotten ratio difference > 0) | 0.0069** | -0.0012 | -0.0011 | -0.0008 |
| | (2.08) | (-0.75) | (-0.73) | (-0.51) |
| High - Low | 0.0055** | 0.0051** | 0.0048** | 0.0046** |
| | (2.58) | (2.38) | (2.25) | (2.14) |

**Panel B: Portfolio returns with 12-month holding period**

| Forgotten ratio difference | Portfolio | Alphas from | | |
|---|---|---|---|---|
| | monthly return | CAPM | 3-factor | 4-factor |
| Low (Forgotten ratio difference < 0) | 0.0060* | -0.0031* | -0.0038*** | -0.0021* |
| | (1.68) | (-1.88) | (-2.81) | (-1.86) |
| High (Forgotten ratio difference > 0) | 0.0090*** | 0.0001 | -0.0007 | 0.0005 |
| | (2.63) | (0.09) | (-0.63) | (0.59) |
| High - Low | 0.0030*** | 0.0032*** | 0.0031*** | 0.0026** |
| | (2.66) | (2.83) | (2.75) | (2.33) |

**Panel C: Returns across time and securities (RATS)**

| Forgotten ratio difference | RATS | | | |
|---|---|---|---|---|
| | [1,3] | [1,6] | [1,9] | [1,12] |
| Low (Forgotten ratio difference < 0) | -0.0175*** | -0.023*** | -0.0277*** | -0.042*** |
| | (-4.27) | (-3.88) | (-3.76) | (-4.84) |
| High (Forgotten ratio difference > 0) | -0.0021 | -0.0050 | -0.0056 | -0.0094 |
| | (-0.65) | (-1.06) | (-0.95) | (-1.37) |

# Table 9: Acquirer's Long-term Returns after M&A Completion

This table presents the results from estimating the regression model as follows:

$$Long\ term\ CAR_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Longterm\ CAR_{i,j,t}$ represents the cumulative abnormal returns (CAR) of the acquirer *i* following the completion of the M&A deal on target *j* at time *t*. The acquirer's CAR after completion are estimated over 12-month (Columns 1 and 2), 24-month (Columns 3 and 4), and 36-month (Columns 5 and 6) periods. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer *i* and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

| Dependent Variable: | Acquirer's CAR after completion | | | | | |
|---|---|---|---|---|---|---|
| | 12-month | | 24-month | | 36-month | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0647** | | 0.1174 | | 0.0367 | |
| | (2.23) | | (1.38) | | (0.64) | |
| Forgotten ratio negative | -0.0976*** | | -0.1471*** | | -0.1462*** | |
| | (-3.10) | | (-4.56) | | (-3.06) | |
| Forgotten ratio difference | | 0.0832*** | | 0.1341** | | 0.0983* |
| | | (3.61) | | (2.65) | | (2.07) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 8514 | 8514 | 8514 | 8514 | 8514 | 8514 |
| adj. R-sq | 0.051 | 0.051 | 0.054 | 0.054 | 0.063 | 0.062 |

# Table 10: Acquirer's Long-term Returns after M&A Completion and Institutional Ownership

This table presents the results from estimating the regression model for different subsamples as follows:

$$Long\ term\ CAR_{i,j,t} = \alpha + \beta \times Forgotten\ ratio\ difference_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Longterm\ CAR_{i,j,t}$ represents the cumulative abnormal returns (CAR) of the acquirer *i* following the completion of the M&A deal on target *j* at time *t*. The sample is divided into two subsamples based on the acquirer's institutional ownership (IO) prior to the M&A announcement. Columns 1 and 3 include acquirers with below-median IO, while Columns 2 and 4 include acquirers with above-median IO. The acquirer's CAR after completion are estimated over 12-month (Panel A), 24-month (Panel B), and 36-month (Panel C) periods. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer $i$ and $N_{j,t}$ includes a list of control variables relating to the target $j$. We include the acquirer industry dummies and year dummies in all specifications. P-values for testing the coefficient difference in main variables between the two subsamples are provided below their corresponding coefficients. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Acquirer's CAR over 12 months after completion**

| Dependent Variable: | CAR [1, +12 months] | | CAR [1, +24 months] | | CAR [1, +36 months] | |
|---|---|---|---|---|---|---|
| | Low IO | High IO | Low IO | High IO | Low IO | High IO |
| | (1) | (2) | (3) | (4) | (3) | (4) |
| Forgotten ratio positive | 0.0964** | 0.0288 | 0.1980 | 0.0379 | 0.0670 | 0.0134 |
| | (2.51) | (0.95) | (1.72) | (0.65) | (0.75) | (0.36) |
| Coefficient difference: p-value | 0.1611 | | 0.0446 | | 0.5483 | |
| Forgotten ratio negative | -0.1723*** | -0.0412** | -0.2346*** | -0.0748** | -0.2179*** | -0.0809** |
| | (-3.35) | (-2.38) | (-4.47) | (-2.37) | (-2.93) | (-2.13) |
| Coefficient difference: p-value | 0.0056 | | 0.0178 | | 0.0721 | |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 4214 | 4300 | 4214 | 4300 | 4214 | 4300 |
| adj. R-sq | 0.065 | 0.041 | 0.062 | 0.052 | 0.077 | 0.045 |

# Table 11: Target's Mark-Up after M&A Announcement

This table presents the results from estimating the regression model as follows:

$$Target\ CAR\ [0{,}126]_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Target\ CAR\ [0{,}126]_{i,j,t}$ refers to the 126-day cumulative abnormal returns of the target *j* after the announcement of the M&A decision by the acquirer *i* at time *t*. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer *i* such as the acquirer's size and its 6-month stock returns before the M&A announcement. $N_{j,t}$ includes a list of control variables relating to the target *j*, such as the target's size and its 6-month stock returns before the M&A announcement. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

| Dependent Variable: | Target's CAR [0,126] | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0415* | 0.0390 | 0.0388* | | | |
| | (1.79) | (1.71) | (1.75) | | | |
| Forgotten ratio negative | -0.0629*** | -0.0604*** | -0.0606*** | | | |
| | (-3.27) | (-3.14) | (-3.13) | | | |
| Forgotten ratio difference | | | | 0.0535*** | 0.0511*** | 0.0511*** |
| | | | | (3.11) | (3.16) | (3.18) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | No | Yes | Yes | No | Yes | Yes |
| Deal controls | No | No | Yes | No | No | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 9900 | 9900 | 9900 | 9900 | 9900 | 9900 |
| adj. R-sq | 0.029 | 0.054 | 0.071 | 0.029 | 0.054 | 0.071 |

# Table 12: M&A Offer Premium

This table presents the results from estimating the regression model as follows:

$$Offer\ Premium_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where the offer premium, obtained from the SDC Platinum databases, is the premium that the acquirer is offering over the target's share price a day prior to announcement. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer $i$ and $N_{j,t}$ includes a list of control variables relating to the target $j$. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

| Dependent Variable: | Offer premium (premium 1 day prior to announcement) | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 3.6654 | 3.8114* | 3.3199* | | | |
| | (1.40) | (1.74) | (1.73) | | | |
| Forgotten ratio negative | -5.3927** | -5.2204** | -4.7146* | | | |
| | (-2.22) | (-2.21) | (-1.99) | | | |
| Forgotten ratio difference | | | | 4.6260** | 4.5947** | 4.0955** |
| | | | | (2.41) | (2.66) | (2.44) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | No | Yes | Yes | No | Yes | Yes |
| Deal controls | No | No | Yes | No | No | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 3107 | 3107 | 3107 | 3107 | 3107 | 3107 |
| adj. R-sq | 0.052 | 0.101 | 0.193 | 0.052 | 0.101 | 0.193 |

# Table 13: Payment Method & Target's Mark-Up after M&A Announcement

This table presents the results from estimating the regression model for two subsamples as follows:

$$Target\ CAR\ [0,126]_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Target\ CAR\ [0,126]_{i,j,t}$ refers to the 126-day cumulative abnormal returns of the target *j* after the announcement of the M&A decision by the acquirer *i* at time *t*. In Columns (1) and (3), the regressions are estimated within the subsample of M&A deals where the deal is paid with over 80% stock; In Columns (1) and (3), the regression is estimated for the subsample of M&A deals where the deal is paid with less than 80% stock. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer *i* and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications. P-values for testing the coefficient difference in main variables between the two subsamples are provided below their corresponding coefficients. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

| Dependent Variable: | Target's CAR [0,126] | | | |
|---|---|---|---|---|
| | Over 80% stock | Below 80% stock | Over 80% stock | Below 80% stock |
| | (1) | (2) | (3) | (4) |
| Forgotten ratio positive | 0.0977 | 0.0263 | | |
| | (1.48) | (1.41) | | |
| Test of coefficient difference: p-value | 0.1417 | | | |
| Forgotten ratio negative | -0.1420*** | -0.0489** | | |
| | (-4.49) | (-2.59) | | |
| Test of coefficient difference: p-value | 0.0457 | | | |
| Forgotten ratio difference | | | 0.1214*** | 0.0391*** |
| | | | (3.13) | (2.99) |
| Test of coefficient difference: p-value | | | 0.0292 | |
| Industry controls | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 1477 | 8423 | 1477 | 8423 |
| adj. R-sq | 0.104 | 0.068 | 0.104 | 0.068 |

# Appendix

## Table A1: Definitions of variables

| | |
|---|---|
| Acquirer market capitalization | The market capitalization of the acquirer in the month prior to the M&A announcement (from CRSP)<br>$Log(1 + number\ of\ shares\ outstanding \times stock\ price)$ |
| Acquirer return | The monthly return of the acquirer's stock in the month before the M&A announcement (from CRSP) |
| Acquirer ROA | The ROA of the acquirer in the fiscal year prior to the M&A announcement (from COMPUSTAT)<br>$ROA = ib/at$ |
| Acquirer FCF | The FCF of the acquirer in the fiscal year prior to the M&A announcement (from COMPUSTAT)<br>$FCF = (ib + dp)/at$ |
| Acquirer leverage | The leverage of the acquirer in the fiscal year prior to the M&A announcement (from COMPUSTAT)<br>$Leverage = (dltt + dlc)/at$ |
| Acquirer industry return | The 6-month cumulative value-weighted return of all the stocks in the acquirer's industry (Fama-French 49 industry classification) before the M&A announcement (from CRSP) |
| Target industry return | The 6-month cumulative value-weighted return of all the stocks in the target's industry (Fama-French 49 industry classification) before the M&A announcement (from CRSP) |
| Target market capitalization | The market capitalization of the target in the month prior to the M&A announcement (from CRSP)<br>$Log(1 + number\ of\ shares\ outstanding \times stock\ price)$ |
| Target return | The monthly return of the target's stock in the month before the M&A announcement (from CRSP) |
| Value of Transaction | The value of the M&A transaction (from SDC)<br>$Log(1 + ValueofTransaction)$ |
| % of shares acquired | The percentage of the target's shares acquired by the acquirer in the transaction (from SDC) |

| | |
|---|---|
| Acquirer industry-excess ROA | The acquirer's industry-excess ROA is the acquirer's ROA in excess of the average ROA of the acquirer's industry.<br>$Acquiror\ industry\ excess\ ROA_{i,t} = ROA_{i,t} - Industry\ average\ ROA_t$ |
| Acquirer industry-excess ROI | The acquirer's industry-excess ROI is the acquirer's ROI in excess of the average ROI of the acquirer's industry.<br>$Acquiror\ industry\ excess\ ROI_{i,t} = ROI_{i,t} - Industry\ average\ ROI_t$ |
| Acquirer's CAR [0,126] | The acquirer's cumulative abnormal returns from the M&A announcement day (event day 0) to day 126 after the announcement (the "markup" period), estimated from the market model with CRSP value-weighted market portfolios for days -379 to -127. |
| Target's CAR [0,126] | The target's cumulative abnormal returns from the M&A announcement day (event day 0) to day 126 after the announcement (the "markup" period), estimated from the market model with CRSP value-weighted market portfolios for days -379 to -127. |
| Analyst forecast error | The analyst forecast error is the absolute value of the analyst forecast consensus of EPS minus the actual EPS.<br>$Analyst\ forecast\ error_{i,t} = \lvert Medium\ analyst\ forecast\ of\ EPS_{i,t} - Actual\ EPS_{i,t} \rvert$ |

## Table A2: Acquirer's Long-term Profitability after M&A Completion

This table presents the results from estimating the regression model as follows:

$$Long\ term\ profitability_{i,j,t+x} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t+x}$$

where $Longterm\ profitability_{i,j,t+x}$ represents the average profitability of the acquirer *i* following the completion of the M&A deal on target *j* at time *t*. The dependent variables are the acquirer's industry-excess return on assets (ROA) over 1-year (Panel A), average industry-excess ROA over 2-year (Panel B), and average industry-excess ROA over 3-year (Panel C) periods, as well as the acquirer's industry-excess return on investment (ROI) over 1-year (Panel D), average industry-excess ROI over 2-year (Panel E), and industry-excess average ROI over 3-year (Panel F) periods. ROA and ROI are all measured in excess of their respective industry averages. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer $i$ and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Acquirer's industry-excess ROA after completion (1 year)**

| Dependent Variable: | Acquirer's industry-excess ROA after completion (1 year) | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0060 | 0.0060 | 0.0059 | | | |
| | (0.98) | (0.97) | (0.94) | | | |
| Forgotten ratio negative | -0.0149*** | -0.0150*** | -0.0154*** | | | |
| | (-3.35) | (-3.44) | (-3.57) | | | |
| Forgotten ratio difference | | | | 0.0110** | 0.0111*** | 0.0112*** |
| | | | | (2.81) | (2.85) | (2.91) |
| # of peer firms in target's industry | -0.0001 | -0.0001 | -0.0001 | -0.0001 | -0.0001 | -0.0001 |
| | (-1.30) | (-1.33) | (-0.94) | (-1.30) | (-1.32) | (-0.93) |
| Acquirer industry returns [t-6, t-1] | -0.0111 | -0.0110 | -0.0096 | -0.0112 | -0.0111 | -0.0097 |
| | (-0.68) | (-0.68) | (-0.59) | (-0.68) | (-0.69) | (-0.60) |
| Target industry returns [t-6, t-1] | -0.0141 | -0.0133 | -0.0145 | -0.0140 | -0.0133 | -0.0145 |
| | (-1.04) | (-0.95) | (-1.05) | (-1.03) | (-0.95) | (-1.04) |
| Acquirer market capitalization | 0.0108*** | 0.0107*** | 0.0116*** | 0.0108*** | 0.0108*** | 0.0116*** |
| | (6.41) | (6.56) | (7.81) | (6.43) | (6.58) | (7.85) |
| Acquirer returns [t-6, t-1] | -0.0103 | -0.0090 | -0.0084 | -0.0101 | -0.0089 | -0.0083 |
| | (-0.66) | (-0.62) | (-0.59) | (-0.65) | (-0.61) | (-0.58) |
| Acquirer ROA | 0.0901 | 0.0898 | 0.0881 | 0.0900 | 0.0896 | 0.0880 |
| | (1.03) | (1.02) | (1.00) | (1.03) | (1.02) | (1.00) |
| Acquirer size | 0.1915* | 0.1919* | 0.1941* | 0.1918* | 0.1921* | 0.1943* |
| | (1.79) | (1.79) | (1.80) | (1.80) | (1.80) | (1.81) |
| Acquirer leverage | 0.0195 | 0.0192 | 0.0199 | 0.0195 | 0.0192 | 0.0199 |
| | (1.43) | (1.42) | (1.50) | (1.43) | (1.42) | (1.49) |
| Target market capitalization | | 0.0002 | 0.0002 | | 0.0001 | 0.0002 |
| | | (0.53) | (0.64) | | (0.51) | (0.61) |
| Target returns [t-6, t-1] | | -0.0026 | -0.0022 | | -0.0025 | -0.0021 |
| | | (-0.26) | (-0.21) | | (-0.25) | (-0.20) |
| Value of transaction | | | -0.0024*** | | | -0.0024*** |
| | | | (-3.29) | | | (-3.25) |
| % of shares acquired | | | 0.0001 | | | 0.0001 |
| | | | (1.23) | | | (1.22) |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 9900 | 9900 | 9900 | 9900 | 9900 | 9900 |
| adj. R-sq | 0.059 | 0.060 | 0.061 | 0.059 | 0.061 | 0.061 |

**Panel B: Acquirer's industry-excess ROA after completion (2-year average)**

| Dependent Variable: | Acquirer's industry-excess ROA after completion (2-year average) | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0042 | 0.0041 | 0.0041 | | | |
| | (0.95) | (0.94) | (0.92) | | | |
| Forgotten ratio negative | -0.0109*** | -0.0109*** | -0.0112*** | | | |
| | (-2.90) | (-2.99) | (-3.08) | | | |
| Forgotten ratio difference | | | | 0.0080*** | 0.0080*** | 0.0081*** |
| | | | | (2.99) | (3.03) | (3.15) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | No | Yes | Yes | No | Yes | Yes |
| Deal controls | No | No | Yes | No | No | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 7938 | 7938 | 7938 | 7938 | 7938 | 7938 |
| adj. R-sq | 0.223 | 0.223 | 0.225 | 0.223 | 0.223 | 0.225 |

**Panel C: Acquirer's industry-excess ROA after completion (3-year average)**

| Dependent Variable: | Acquirer's industry-excess ROA after completion (3-year average) | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0021 | 0.0020 | 0.0020 | | | |
| | (0.59) | (0.57) | (0.55) | | | |
| Forgotten ratio negative | -0.0093** | -0.0092*** | -0.0096*** | | | |
| | (-2.83) | (-2.90) | (-3.06) | | | |
| Forgotten ratio difference | | | | 0.0061** | 0.0060** | 0.0062*** |
| | | | | (2.78) | (2.81) | (2.98) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | No | Yes | Yes | No | Yes | Yes |
| Deal controls | No | No | Yes | No | No | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 7458 | 7458 | 7458 | 7458 | 7458 | 7458 |
| adj. R-sq | 0.252 | 0.252 | 0.255 | 0.252 | 0.252 | 0.255 |

**Panel D: Acquirer's industry-excess ROI after completion (1-year)**

| Dependent Variable: | Acquirer's industry-excess ROI after completion (1-year) | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0103 | 0.0099 | 0.0093 | | | |
| | (0.86) | (0.82) | (0.77) | | | |
| Forgotten ratio negative | -0.0308*** | -0.0310*** | -0.0316*** | | | |
| | (-3.15) | (-3.20) | (-3.28) | | | |
| Forgotten ratio difference | | | | 0.0218** | 0.0218** | 0.0219** |
| | | | | (2.49) | (2.54) | (2.55) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | No | Yes | Yes | No | Yes | Yes |
| Deal controls | No | No | Yes | No | No | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 7480 | 7480 | 7480 | 7480 | 7480 | 7480 |
| adj. R-sq | 0.157 | 0.157 | 0.159 | 0.157 | 0.157 | 0.159 |

**Panel E: Acquirer's industry-excess ROI after completion (2-year average)**

| Dependent Variable: | Acquirer's industry-excess ROI after completion (2-year average) | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0119 | 0.0116 | 0.0112 | | | |
| | (1.30) | (1.27) | (1.23) | | | |
| Forgotten ratio negative | -0.0200*** | -0.0197*** | -0.0200*** | | | |
| | (-3.30) | (-3.31) | (-3.32) | | | |
| Forgotten ratio difference | | | | 0.0164*** | 0.0162*** | 0.0162*** |
| | | | | (3.07) | (3.08) | (3.12) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | No | Yes | Yes | No | Yes | Yes |
| Deal controls | No | No | Yes | No | No | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 6876 | 6876 | 6876 | 6876 | 6876 | 6876 |
| adj. R-sq | 0.192 | 0.193 | 0.195 | 0.192 | 0.193 | 0.195 |

**Panel F: Acquirer's industry-excess ROI after completion (3-year average)**

| Dependent Variable: | Acquirer's industry-excess ROI after completion (3-year average) | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0085 | 0.0082 | 0.0077 | | | |
| | (1.10) | (1.07) | (1.00) | | | |
| Forgotten ratio negative | -0.0181*** | -0.0178*** | -0.0182*** | | | |
| | (-3.99) | (-4.06) | (-4.12) | | | |
| Forgotten ratio difference | | | | 0.0139*** | 0.0135*** | 0.0136*** |
| | | | | (3.47) | (3.49) | (3.57) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | No | Yes | Yes | No | Yes | Yes |
| Deal controls | No | No | Yes | No | No | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 6358 | 6358 | 6358 | 6358 | 6358 | 6358 |
| adj. R-sq | 0.230 | 0.231 | 0.234 | 0.230 | 0.231 | 0.234 |

## Table A3: Acquirer's Long-term Profitability: Cross-Industry vs. Same-Industry Deals

This table presents the results from estimating the regression model as follows:

$$Long\ term\ profitability_{i,j,t} = \alpha + \beta \times Forgotten\ ratio\ difference_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Longterm\ profitability_{i,j,t}$ represents the average profitability of the acquirer *i* following the completion of the M&A deal on target *j* at time *t*. Panel A includes the subsample of deals where the acquirer and the target are in different industries, and Panel B includes the subsample of deals where the acquirer and the target are in the same industry. The dependent variables correspond to the average return on assets (ROA), measured in excess of their industry averages, and are calculated over three distinct periods: 1-year (Columns 1 and 2), 2-year (Columns 3 and 4), and 3-year (Columns 5 and 6). The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer *i* and $N_{j,t}$ includes a list of control variables relating to the target *j*. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Cross-Industry Deals**

| Dependent Variable: | Acquirer's ROA after completion | | | | | |
|---|---|---|---|---|---|---|
| | 1 year | | 2-year average | | 3-year average | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0073 | | 0.0030 | | -0.0015 | |
| | (1.12) | | (0.51) | | (-0.29) | |
| Forgotten ratio negative | -0.0197*** | | -0.0162*** | | -0.0156*** | |
| | (-3.16) | | (-3.24) | | (-3.01) | |
| Forgotten ratio difference | | 0.0144** | | 0.0105** | | 0.0082** |
| | | (2.77) | | (2.62) | | (2.18) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 4031 | 4031 | 3765 | 3765 | 3534 | 3534 |
| adj. R-sq | 0.173 | 0.173 | 0.197 | 0.197 | 0.246 | 0.245 |

**Panel B: Same-Industry Deals**

| Dependent Variable: | Acquirer's ROA after completion | | | | | |
|---|---|---|---|---|---|---|
| | 1-year | | 2-year average | | 3-year average | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0017 | | 0.0016 | | 0.0002 | |
| | (0.19) | | (0.22) | | (0.04) | |
| Forgotten ratio negative | -0.0110 | | -0.0079 | | -0.0044 | |
| | (-1.37) | | (-1.23) | | (-0.84) | |
| Forgotten ratio difference | | 0.0070 | | 0.0052 | | 0.0026 |
| | | (1.21) | | (1.06) | | (0.60) |
| Industry controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Target controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 4483 | 4483 | 4173 | 4173 | 3924 | 3924 |
| adj. R-sq | 0.210 | 0.210 | 0.258 | 0.258 | 0.276 | 0.277 |

## Table A4: The Heckman Correction for Acquirer's Mark-Up after M&A Announcement

This table reports the Heckman model to correct for selection bias in the M&A sample. In the first stage, we estimate the probit regressions as follows:

$$M\&A\ deal\ indicator_{i,g,t} = \alpha + \beta \times \#\ of\ antitrust\ cases_{i,g,t-1} + \gamma \times M_{i,t-1} + \delta \times N_{g,t-1} + \epsilon_{i,g,t}$$

where $M\&A\ deal\ indicator_{i,g,t}$ is an indicator that is equal to one if industry g is the target industry in which the M&A deal takes place at time t; $M\&A\ deal\ indicator_{i,g,t}$ is equal to zero if industry g is not the target industry in which the M&A deal takes place at time t. $\#\ of\ antitrust\ cases_{i,g,t-1}$ is the cumulative number of antitrust cases involving industry g until time t – 1. The forgotten ratios are constructed as described in Section 2 and are expanded to all Fama-French 49 industries. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, that the acquiring firm's CEO is likely to overlook in industry *g*. In the second stage, we re-estimate the regression models of Table 5 by including the Inverse Mills Ratio (IMR) that is derived from the first stage.

| Dependent Variable: | Indicator of M&A in industry g | Acquirer's CAR [0,126] | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| # of antitrust cases in industry g | 0.1229*** | | | |
| | (5.75) | | | |
| Inverse mills ratio | | -0.8338 | -0.8401 | -0.7915 |
| | | (-1.00) | (-1.02) | (-0.96) |
| Acquirer i's forgotten ratio positive of industry g | -0.0241 | 0.0221 | 0.0222 | 0.0224 |
| | (-0.67) | (1.39) | (1.40) | (1.40) |
| Acquirer i's forgotten ratio negative of industry g | 0.0720** | -0.0339** | -0.0345*** | -0.0343** |
| | (2.15) | (-2.79) | (-2.84) | (-2.81) |
| Industry control | Yes | Yes | Yes | Yes |
| Acquirer control | Yes | Yes | Yes | Yes |
| Target control | No | Yes | Yes | Yes |
| Deal control | No | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes |
| N | 485293 | 9900 | 9900 | 9900 |
| pseudo R-sq | 0.013 | | | |
| adj. R-sq | | 0.059 | 0.061 | 0.061 |

## Table A5: Acquirer's Mark-Up: Cross-Industry vs. Same-Industry Deals

This table presents the results from estimating the regression model as follows:

$$Acquiror\ CAR\ [0{,}126]_{i,j,t} = \alpha + \beta \times Forgotten\ ratio_{i,j,t} + \gamma \times M_{i,t} + \delta \times N_{j,t} + \epsilon_{i,j,t}$$

where $Acquiror\ CAR\ [0, 126]_{i,j}$ refers to the 126-day cumulative abnormal returns of the acquirer *i* after the announcement of the M&A decision on target *j* at time *t*. The cumulative abnormal returns are estimated using the market model, with CRSP value-weighted market portfolios from day -379 to day -127, prior to the M&A announcement. Panel A includes the subsample of deals where the acquirer and the target are in different industries, and Panel B includes the subsample of deals where the acquirer and the target are in the same industry. The main variables of interest are the forgotten ratios, which are constructed as described in Section 2. The forgotten ratio of positive news (forgotten ratio positive) and the forgotten ratio of negative news (forgotten ratio negative) represent the proportion of positive and negative earnings news, respectively, from the target industry that the acquiring firm's CEO is likely to overlook. The difference between the forgotten ratio of positive news and the forgotten ratio of negative news (forgotten ratio difference) captures the extent to which the CEO forgets more positive earnings news than negative earnings news from the target industry. $M_{i,t}$ includes a list of control variables relating to the acquirer $i$ and $N_{j,t}$ includes a list of control variables relating to the target $j$. We include the acquirer industry dummies and year dummies in all specifications. T-statistics are reported in parentheses and the superscripts of *, **, and *** indicate significance levels of 10%, 5%, and 1%, respectively.

**Panel A: Cross-Industry Deals**

| Dependent Variable: | Acquirer's CAR [0,126] | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0124 | 0.0131 | 0.0135 | | | |
| | (0.66) | (0.71) | (0.73) | | | |
| Forgotten ratio negative | -0.0326** | -0.0324** | -0.0319** | | | |
| | (-2.38) | (-2.30) | (-2.26) | | | |
| Forgotten ratio difference | | | | 0.0239* | 0.0241* | 0.0239* |
| | | | | (2.03) | (2.05) | (2.02) |
| Industry control | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer control | Yes | Yes | Yes | Yes | Yes | Yes |
| Target control | No | Yes | Yes | Yes | Yes | Yes |
| Deal control | No | No | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 4629 | 4629 | 4629 | 4629 | 4629 | 4629 |
| adj. R-sq | 0.054 | 0.055 | 0.055 | 0.054 | 0.055 | 0.055 |

**Panel B: Same-Industry Deals**

| Dependent Variable: | Acquirer's CAR [0,126] | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Forgotten ratio positive | 0.0315 | 0.0314 | 0.0313 | | | |
| | (1.07) | (1.05) | (1.05) | | | |
| Forgotten ratio negative | -0.0283 | -0.0296 | -0.0305 | | | |
| | (-1.42) | (-1.51) | (-1.55) | | | |
| Forgotten ratio difference | | | | 0.0297 | 0.0304 | 0.0308 |
| | | | | (1.36) | (1.39) | (1.41) |
| Industry control | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer control | Yes | Yes | Yes | Yes | Yes | Yes |
| Target control | No | Yes | Yes | Yes | Yes | Yes |
| Deal control | No | No | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Acquirer industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 5271 | 5271 | 5271 | 5271 | 5271 | 5271 |
| adj. R-sq | 0.064 | 0.067 | 0.069 | 0.065 | 0.067 | 0.069 |