Managerial Attention to Financial Markets

Zhenkai Ran*

This Version: January 2026

Internet Appendix: Available here

Abstract

I develop a direct measure of managerial attention to financial markets using managers' own discussion on market conditions during earnings calls covering nearly all U.S. public firms from 2007–2023. Attention varies widely across industries, across firms, and within firms over time. Managers who pay greater attention to markets exhibit higher investment-price sensitivity. Attention also enhances managers' ability to access external capital when financing needs arise, at least through enabling them to respond more effectively to changing market conditions. Ultimately, managerial attention is a first-order behavioral mechanism through which financial markets exert real effects.

Keywords: Attention to Financial Markets, Earnings Calls, Machine Learning, Real Effects of Financial Markets

(JEL: G14, G32, G41)

* Zhenkai Ran is at Cambridge Judge Business School, University of Cambridge. Email: zr245@cam.ac.uk. I am extremely grateful to Andrei Kirilenko and Raghavendra Rau for their continuous support as my PhD supervisors. I thank Yanlin Bao, Hoa Briscoe-Tran, Murillo Campello, Sean Cao, Te-Feng Chen, Elroy Dimson, Yuanyuan Gao, Zhe Geng, Jiyuan (Justin) Huang, Madhu Kalimipalli, Oğuzhan Karakaş, Bart Lambrecht, Daniel Nathan, Bang Dang Nguyen, Elias L. Ohneberg, M. Fabricio Perez, Stefano Ramelli, Lucio Sarno, Kevin Schneider, Nancy Su, Yiguo Sun, Ilias Tsiakas, Junxuan Wang, Lucy (Luxi) Wang, Chishen Wei, John Wei, Eric Wilson, Hong Xiang, Xiao Xiao, Mao Ye, Yeqin Zeng, Xintong Zhan, Yi Zhang, and participants in CEAM Cavalcade, Durham Job Market Paper Conference, Swiss Finance Institute "Rising Scholar Conference in Finance" at UZH, Junior Academics Research Seminars (JARS) in Finance, 21st Annual Olin Finance Conference at WashU, University of Cambridge, University of Guelph, Wilfrid Laurier University, Monash Business School, Hong Kong Polytechnic University, HKUST (GZ), and School of Management at Fudan University for helpful discussions and suggestions. I gratefully acknowledge financial support from Centre for Endowment Asset Management (CEAM), Cambridge Judge Business School, Queens' College, Cambridge, University of Cambridge Keynes Fund for Applied Economics, and CJBS Dean's Research Excellence Prize. All errors remain my own.

1. Introduction

Many foundational theories—including price feedback theory (Bond, Edmans, and Goldstein, 2012) and market-timing theory (Baker and Wurgler, 2002)—predict that when managers actively monitor financial markets, they can incorporate information embedded in prices into real corporate decisions. Stock prices may reveal information about investment opportunities, while conditions in equity and debt markets convey signals about firms' cost of capital and financing capacity. If managers attend to and process these signals, financial markets should exert real effects on corporate investment and financing policies.

A large empirical literature studies these predictions by examining correlations between market prices and corporate actions. Numerous studies document that investment is more sensitive to stock prices when prices are assumed to be more informative, such as when insider trading is constrained or when firms draw on complementary information sources such as financial media (e.g., Chen, Goldstein, and Jiang, 2007; Edmans, Jayaraman, and Schneemeier, 2017; Kwan, Lin, Liu, and Gurun, 2024). Related work shows that firms issue equity or debt more aggressively during favorable market conditions, consistent with market-timing behavior (e.g., Baker and Wurgler, 2002; Ma, 2019). However, as emphasized by Gelsomin and Hutton (2023), these studies typically *infer* the role of managerial learning—or, more broadly, the real effects of financial markets—from changes in investment–price sensitivity across settings where the information content of prices is presumed to vary, rather than from *direct* evidence on managers' engagement with market signals. As a result, the same empirical patterns are observationally consistent with alternative channels, including unobserved factors influencing both prices and corporate policies, as well as investor influence that operates through private engagement with management while the same investors simultaneously affect stock prices through their trading activity. Similarly, correlations between security issuance and market conditions may reflect unobservable firm characteristics—such as governance quality, endogenous financing margins, or managerial biases—rather than active market timing (e.g., Jung, Kim, and Stulz, 1996; Hennessy and Whited, 2004; Malmendier, Tate, and Yan, 2011).

This challenge reflects a broader measurement problem. The real effects of financial markets operate through two jointly necessary channels: the usefulness of market signals and

managers' attention to those signals. While existing research has devoted substantial effort to measuring and refining the first channel, the second has remained largely unobserved. Without a direct measure of managerial attention, empirical tests cannot disentangle learning from markets from correlations driven by omitted variables. This limitation is particularly important when attention is a scarce cognitive resource (Kahneman (1973)), and managers have limited attention (e.g., Yermack, 2014; Neyland, 2020; Ben-Rephael, Carlin, Da, and Israelsen, 2025). In such settings, the risk of false positive inference—misattributing observed correlations between market conditions and corporate policies to the real effects of financial markets—becomes especially pronounced.

In this paper, I address this missing behavioral channel by developing a novel and *direct measure* of managerial attention to financial markets—the *Index of Attention to Financial Markets* (IAFM)—constructed from managers' own discussions of market conditions during earnings calls. This measure allows me to examine whether managers who pay more attention to financial markets behave differently from those who pay less attention, and whether these behavioral differences align with theoretical predictions. The underlying idea is straightforward: if financial markets have real effects, managers should respond more strongly to market signals when they devote more attention to them.

Earnings calls provide an ideal setting for capturing such attention because these quarterly events combine structured presentations with spontaneous Q&A sessions, revealing both strategic priorities and top-of-mind concerns. Since earnings calls are time-constrained, managers must allocate their limited speaking time selectively. Greater discussion of financial market conditions therefore plausibly indicates higher attention allocation to such information—an assumption I validate through extensive testing. The near-universal use of earnings calls by public firms also enables a systematic and scalable measurement approach across a large panel (98,010 firm-year observations, 2007–2023).

Starting from a set of seed words that are unambiguously related to financial markets, I use machine learning keyword discovery techniques (Mikolov et al. 2013; specifically, *word2vec*) to construct a comprehensive dictionary capturing the language managers use to discuss market conditions. I then score transcripts with a tf-idf approach, producing firm-level measures of *equity* and *debt* market attention. Equity attention reflects the monitoring

assumed by canonical theories such as price feedback and market timing, while debt attention captures monitoring of an important financing source that conveys distinct signals about investment and financing opportunities (e.g., Graham, Leary, and Roberts 2015; Ma 2019; Davis and Gondhi 2024).

I validate that the IAFM captures meaningful variation in attention, in line with economic intuition. For example, financial firms exhibit the highest attention to both equity and debt markets, consistent with their business models that inherently rely on continuous market monitoring. Firms led by finance-expert CEOs devote significantly greater attention to financial markets, consistent with the idea that specialized financial expertise enhances market awareness. Moreover, the two IAFM dimensions respond distinctly to relevant market movements: equity-market attention increases following positive firm-specific stock returns, whereas debt-market attention rises with changes in interest rates.

Beyond the validation exercises, a striking empirical finding is the substantial heterogeneity in how much managers attend to financial markets. Attention varies across firms (about 30% of total variation), across industries (roughly 40%), and even within firms over time (about 30%). This pattern challenges the long-standing implicit assumption in many theoretical models—that all managers should devote a homogeneous or fixed level of attention to market signals. Instead, it implies that differences in managerial attention are a first-order driver of why market prices affect real decisions more strongly for some firms than others. By documenting and quantifying this dispersion, the paper offers new behavioral micro-foundations for heterogeneity in the real effects of financial markets.

I then explore the implications of having a strong attention to financial markets on business outcomes. My empirical strategy is organized around testing the two fundamental roles that financial markets serve in corporate decision-making: (1) providing information about business opportunities to guide investment policy, and (2) conveying information about the cost of capital to guide financing policy. First, for investment policy, firms whose managers allocate greater attention to financial markets exhibit significantly greater investment-price sensitivity. A 10% increase in equity market attention enhances capital expenditure sensitivity to Tobin's Q by 1.85%, while a 10% increase in debt market attention increases this sensitivity by 2.58%. The effect is most pronounced in situations where the

manager is particularly likely to learn from market signals: when insider trading is limited, when industry competition is high, when price is informative, when firms face financial constraints, and when attention carries a positive tone. The resulting attention-induced investment responses also predict stronger subsequent operating performance and positive stock-market reactions without evidence of return reversals. These results provide the first *direct* evidence, based on revealed managerial behavior, for the feedback theory.

Second, for financing policy, I find that attention to financial markets serves as a critical organizational capability that enhances firms' ability to access external capital at the *extensive margin* when financing needs arise. A 10% increase in equity market attention is associated with a 1.66% higher likelihood of issuing equity in response to financing deficits, while a 10% increase in debt market attention corresponds to an 11.85% higher likelihood of issuing debt. Thus, managers who actively monitor financial market conditions appear to develop expertise in assessing cost of capital dynamics. Importantly, each form of attention also predicts issuance in the "other" market: a 10% increase in equity-market attention is associated with a 1.99% higher likelihood of issuing debt, while a 10% increase in debt-market attention corresponds to a 4.17% higher likelihood of issuing equity. These patterns cannot be explained by managers simply disclosing, or signaling, intended financing plans during calls; if that were the case, attention to the "other" market should exhibit no—or even negative—predictive power. Rather, the evidence is more consistent with the idea that attention captures distinct informational advantages that may help managers identify and seize financing opportunities across multiple markets.

To formally test this hypothesis, I examine whether attention alters the responsiveness of financing choices to *market-specific* conditions. I restrict the sample to firms that issue from a single source in a given year, thereby holding financing needs roughly constant and reducing concerns that attention merely proxies for capital demand. The results show that equity-market attention enhances responsiveness to equity conditions—firms are more likely to issue equity over debt when firm valuations or equity market sentiment are high—while debt-market attention sharpens responsiveness to debt conditions—firms are more likely to shift toward equity when interest rates rise. This dimension-specific responsiveness suggests that attention allows managers to time financing decisions more effectively by choosing the

relatively cheaper source of capital. It provides the first *direct* empirical evidence from observed managerial attention in support of market-timing theory and Ma (2019), showing that firms' ability to exploit financing windows and cross-arbitrage their own securities hinges on how much attention managers actually devote to monitoring financial markets.[1]

Furthermore, since I have shown that attention enhances firms' financing capabilities, it becomes crucial now to disentangle two mechanisms that may drive the attention-induced investment-price sensitivity: (1) improved extraction of information about fundamental business opportunities (as predicted by price feedback theory), or/and (2) better assessment of financing conditions that enables more flexible investment responses when capital constraints are relaxed. To isolate the first channel, I examine firms that do not raise external funds during investment. Among these firms, equity market attention continues to strengthen investment-price sensitivity, consistent with managers learning about investment opportunities from stock prices. In contrast, the effect of debt market attention on investment-price sensitivity disappears without external financing, suggesting it primarily operates through easing financing constraints. Further, I show that controlling for Gormsen and Huber's (2024) *perceived* cost of capital absorbs the effect of debt-market attention but not equity-market attention—though debt-market attention remains significant when controlling only for *actual* implied cost of capital. This indicates that debt-market attention mainly shapes how managers *perceive* financing conditions.[2]

Additional tests indicate that the results are not sensitive to specific methodological choices in constructing the IAFM measures. I first analyze attention separately from management presentations and Q&A sessions, and find that both components exhibit statistically significant effects on investment and financing decisions.[3] The results are also

[1] Because periods of strong equity performance often coincide with lower, time-varying adverse selection costs, my results may also be interpreted as consistent with managers *timing* such fluctuations—an interpretation also aligned with pecking order theory (Myers and Majluf 1984).

[2] An implication is that managerial attention not only reflects but also shapes perceptions of financing frictions—helping explain why perceived and true costs of capital diverge (Gormsen and Huber 2024). Attentive managers learn from price signals and reduce uncertainty about financing conditions, whereas inattentive managers tend to overestimate financing costs and underinvest even when capital is accessible.

[3] I also find that the effects based on Q&A-derived measures are, on average, economically larger. This helps address an alternative explanation where managers have already formulated investment and financing decisions independent of financial market conditions but subsequently reference market conditions in earnings calls primarily to provide *post-hoc* rationalization to investors. If this "*post-hoc rationalization*" or "*reverse-causality*"

robust to alternative measurement choices, including using term frequency without inverse document frequency weighting, constructing the IAFM with only 25 seed words per dimension, and replacing the continuous IAFM measures with binary indicators.

A potential concern is that the observed link between managerial attention and corporate policies merely reflects mechanical transmission of market conditions into firms' cost of capital, rather than managers actively processing market information—an "attention-as-sideshow" story. However, the interaction terms between attention and market variables remain positive and significant even after directly controlling for market conditions such as Tobin's Q, bond yields, total implied cost of capital, sentiment, interest rates, equity returns, and equity volatility. The results are also robust to directly controls for managers' attention to volatility and liquidity shocks. Moreover, attention exerts an incremental behavioral effect even when a primary-market channel operates—for example, attentive managers are more likely to shift from debt to equity when interest rates rise and to expand investment when bond yields fall, even after accounting for the direct effects of these price changes.

Another concern is that the documented relationship between managerial attention and corporate policies may reflect lifecycle, firm-stage characteristics, or investor pressure, rather than attention itself. For example, more mature firms may both appoint CEOs with stronger market orientation and pursue financing or investment strategies that are more sensitive to market conditions—possibly in response to investor pressure—creating endogenous matching between firm characteristics and managerial types. I address this concern in several ways. First, I control for firm and industry-by-year fixed effects, which addresses endogenous matching based on only time-invariant firm characteristics or common industry shocks. Second, I exploit within-firm variation around CEO turnovers and show that even around plausibly exogenous CEO transitions—specifically cases where predecessor CEOs retire at age 65 or older—firms led by high-attention successors tend to exhibit greater investment–price sensitivity and stronger responsiveness to financing needs. These findings suggest that, *at the very least*, managerial attention is a *necessary* mechanism for translating

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explanation was driving the results, we would expect stronger effects in the more carefully scripted presentations, where managers exert greater control over the narrative. Instead, the larger effects are observed in the relatively unscripted Q&A discussions.

market signals into real corporate actions. In other words, even if a firm's industry, lifecycle stage, or investor pressure may determine that it should respond to market signals or time financing around market conditions, implementing those policies in practice requires managers who actually pay attention to markets. Without the informational role of financial markets—and managerial attention to those signals—firms would be unable to execute such optimal decisions. This is still in line with the causal role of financial markets operating through managers' active monitoring of market information.[4]

To test whether managerial attention affects investment decisions through economically relevant information channels, I examine industry-specific responses to market signals using the energy sector as a natural comparison. Because energy firms are directly exposed to commodity price fluctuations, they rely more heavily on signals from commodity markets than on traditional equity or debt markets. I develop an *IAFM Other Assets* measure that captures attention to commodity, currency, and derivatives markets, and show that Energy firms consistently exhibit the highest levels of such attention. Consistent with the proposed mechanism, only Energy firms—those for whom commodity prices are informative—adjust their investment more sensitively to commodity price changes when attention is high, while traditional financial market signals matter more for non-Energy firms. This pattern supports the view that attention-induced investment responsiveness operates through channels relevant to firm-specific fundamentals—or, at the very least, provides an out-of-sample test (by studying a market setting different from my main analysis) showing that attention is a key channel through which market prices influence investment decisions.

This paper revisits a fundamental but largely untested assumption underlying much of corporate finance theory: that managers actively pay attention to financial markets. The real effects of financial markets fundamentally depend on two necessary channels—(1) the usefulness of market signals and (2) managers' attention to financial markets. Foundational theories such as price feedback (as summarized in Bond, Edmans, and Goldstein 2012) and market timing (Baker and Wurgler 2002) have developed rich predictions about the first

[4] It is inconsistent with the alternative "*no-attention-needed*" or "*no-real-effects*" view, under which a firm would pursue exactly the same policies regardless of whether managers are attentive to financial markets because market prices then contain no additional information beyond fundamentals already known to the firm.

channel, while implicitly treating the second as given. Similarly, a large empirical literature has inferred the real effects of financial markets from correlations between prices and corporate policies, without direct evidence on whether managers actually monitor or process market information. This paper directly measures that missing behavioral channel—managerial attention to financial markets—and documents substantial heterogeneity in attention across firms, industries, and time.

Building on this behavioral foundation, the paper provides a new lens for testing and refining central theories of corporate finance. Bond, Edmans, and Goldstein argue that the real effects of financial markets originate from the informational role of prices.[5] Yet, while prior empirical studies have documented correlations between price informativeness and investment–price sensitivity, the causal mechanisms have remained largely theoretical because managerial attention—the necessary behavioral link—has been unobservable. This paper provides the first direct evidence, based on revealed managerial behavior, that market prices affect investment decisions specifically when managers pay attention to them. By decomposing attention into equity, debt, and other market dimensions (e.g., commodities, volatility, liquidity), I also show that managers extract and act on distinct information from different market signals, each shaping corporate decisions through different mechanisms.

This revealed-behavior approach also complements recent survey-based and Bloomberg-based evidence. Goldstein, Liu, and Yang (2025) survey Chinese listed firms on whether they monitor financial markets, but their responses largely come from non-decision-makers—board secretaries and investor-relations staff—rather than CEOs or CFOs who actually shape corporate policies. Moreover, their binary survey measure cannot capture the intensity, multidimensionality, or dynamics of managerial attention, nor the interaction between managers' and analysts' attention.[6] In contrast, my text-based measure—constructed

[5] For theoretical papers, see, for example, Goldstein and Guembel (2008), Goldstein, Ozdenoren, and Yuan (2013), Hirshleifer, Subrahmanyam, and Titman (2006), Sockin and Xiong (2015), Goldstein and Yang (2019), and Goldstein and Yang (2022), among many others. For empirical papers, see, for example, Luo (2005), Chen, Goldstein, and Jiang (2007), Bakke and Whited (2010), Foucault and Fresard (2012), Edmans, Jayaraman, and Schneemeier (2017), and Dessaint, Foucault, Fresard, and Matray (2019), Ye, Zheng, and Zhu (2023), Kwan, Lin, and Liu (2024), and Cao, Goldstein, He, and Zhao (2025) among many others.

[6] For example, the study uses managers' 2022 survey responses to explain firm behaviors from 2012–2021, even though managerial attitudes and personnel may have changed over time. This design potentially introduces survivorship bias, as only firms still active in 2022 are observed, and causal interpretation becomes problematic.

from earnings-call transcripts—captures actual managerial behavior as it unfolds in real time, reflecting both how managers allocate attention across multiple financial market dimensions (equity, debt, liquidity and volatility shocks, commodities, and others) and how they interact with analysts' questions during Q&A sessions. Spanning sixteen years of longitudinal variation, this approach enables a richer and more causal identification of how managerial attention mediates the link between market signals and real corporate decisions.

This paper also refines the empirical foundations of market-timing and capital-structure research (e.g., Baker and Wurgler 2002; Henderson, Jegadeesh, and Weisbach 2006; Huang and Ritter 2009). Previous studies inferred timing behavior from issuance outcomes relative to valuation proxies, which are easily confounded by unobservable factors such as governance quality, endogenous financing margin, or managerial bias (e.g., Jung, Kim, and Stulz, 1996; Hennessy and Whited, 2004; Malmendier, Tate, and Yan, 2011). By directly observing whether managers monitor market conditions, I isolate the behavioral precondition for market timing: recognizing and acting on financing windows. In doing so, I complement the pioneering survey evidence of Graham and Harvey (2001), showing that managers not only claim to consider market timing, but that variation in their actual attention to financial markets systematically explains when and how they exploit financing opportunities.

Finally, the paper contributes to the behavioral finance literature by providing the first comprehensive documentation of managerial attention to financial markets. Decades of research have examined how investors allocate attention and how it shapes asset pricing outcomes (e.g., Peng and Xiong 2006; Barber and Odean 2008; Engelberg, and Gao 2011; Chen, Tang, Yao, and Zhou 2022), yet the attention patterns of managers—the decision-makers who ultimately translate market signals into corporate policies—have remained unmeasured and largely theoretical.

My paper is organized as follows. Section 2 describes the data. Section 3 outlines the methodology for constructing the IAFM measure. Section 4 validates the IAFM. Sections 5

Moreover, firms may ex post justify past strategies—after seeing their investments align with stock-price movements, managers might claim they had been "learning from markets," making survey responses endogenous to past outcomes rather than true ex-ante attention.

and 6 examine the implications of IAFM for investment and financing policies, respectively. Section 7 presents robustness checks. Section 8 concludes.

2. Data

I retrieve yearly fundamentals data from Compustat Annual, and stock market data from CRSP. I obtain CEO's scaled wealth-performance sensitivity (WPS) data from http://alexedmans.com/data/ and managerial stock ownership from ExecuComp. I collect M&A from SDC Platinum database, and insider trading data from Thomson Reuters Insider Filing database. Bond yield data is obtained from WRDS Bond Returns.

I construct firm-level IAFM measures by analyzing transcripts of quarterly earnings calls conducted by U.S. publicly listed companies. All transcripts are sourced from the Capital IQ database, covering the complete set of 327,328 English-language calls from 2007 through 2023.[7] Since most of the accompanying data are annual, I aggregate the quarterly IAFM measures to the firm-year level unless otherwise noted. The earnings call transcript dataset consists of 98,010 firm-year observations across 14,582 distinct firms. Conditioning on the availability of firm fundamentals data, the final sample comprises 60,820 firm-year observations across 7,673 firms with non-missing fundamentals data.

3. Quantifying Attention to the Financial Market

3.1 Word Embedding and *word2vec*

To quantify firm-level attention to financial markets, I employ the machine learning keyword discovery method developed by Li, Mai, Shen, and Yan (2021). This approach offers significant advantages over conventional methods such as pre-specified word lists, which traditionally require manual expert categorization of common contextual terminology. For example, financial market discussions employ nuanced terminology that is difficult to classify manually. Unlike general sentiment analysis, financial market attention utilizes specialized phrases and idioms like “watermark clause” (a specialized contract provision in investment management) that are challenging to systematically identify without computational tools. Furthermore, financial market attention is inherently multidimensional.

[7] Out of 327,328 earnings calls, 316,805 include both the manager presentation and Q&A sections, 10,301 include only the manager presentation, and 222 include only the Q&A section.

Human experts struggle to consistently categorize terms across multiple dimensions (e.g., my IAFM dimensions: equity market and debt market). Additionally, financial vocabulary evolves rapidly with market innovations. Static dictionaries quickly become outdated as financial practices transform. Terms like "ETF", "credit risk transfer bond", "curve control", and "LIBOR/SOFR" emerged as significant financial concepts after the 2000s—developments that traditional dictionaries could not anticipate.

My measurement of firm-level attention to financial markets begins with carefully selected seed words that unambiguously relate to specific IAFM dimensions. Using these seed words as anchors, I implement a word embedding model that learns semantic meanings based on contextual relationships, thereby identifying additional financial market-related words (phrases) directly from earnings call transcripts.[8]

The word embedding model operationalizes a fundamental linguistic principle: words appearing in similar contexts likely carry similar meanings (Harris, 1954). The model represents semantic content through numeric vectors, enabling relationship quantification through vector arithmetic. Specifically, I utilize cosine similarity between word vectors to determine synonymic relationships. This approach allows for the identification of a comprehensive lexicon describing particular financial market dimensions, which then serves as the basis for firm-level scoring.

To address dimensionality challenges when identifying semantically similar words, I implement *word2vec* (Mikolov et al., 2013), which employs neural networks to efficiently generate dense, low-dimensional vectors representing word meanings.[9] As Levy and Goldberg (2014) demonstrate, *word2vec* vectorization effectively performs a singular value decomposition on the neighboring word count matrix. In the implementation, I utilize the *gensim* library in Python, configuring word vectors at 300 dimensions.[10] Two words are considered contextual neighbors when they appear within five words of each other in a

[8] The method captures the meanings of both individual words and multi-word phrases. For simplicity, the term "word" will be used throughout the discussion to refer to either a single word or a phrase.

[9] Ideally, identifying semantically similar words requires constructing word-word co-occurrence matrices that track contextual proximity. However, this approach faces severe computational limitations due to the "curse of dimensionality": vocabularies with thousands of terms generate billions of potential word-pair combinations, rendering direct matrix methods impractical.

[10] The *gensim* library is an open-sourced NLP Python package that I use for training the word2vec model. I use version 4.3.3, which is available at https://github.com/RaRe-Technologies/gensim

sentence, and terms appearing fewer than five times in the corpus are excluded to ensure statistical reliability.

3.2 IAFM Dimensions and Seed Words

The starting point to measure how much attention earnings call participants pay to financial markets is to construct a two-dimensional IAFM framework. I choose to measure the attention to two distinct aspects of the financial market: equity market and debt market.

I measure equity-market attention because, as discussed earlier, several theories including feedback effect (Bond et al., 2012) and market timing theory (Baker and Wurgler, 2002) primarily rely on managerial attention to equity markets. Then, I measure attention to the debt market as the second IAFM dimension, focusing on bond markets, interest rates, and credit market conditions, because debt represents a key financing source (e.g., Graham, Leary, and Roberts 2015) and contains information relevant for investment decisions (e.g., Davis and Gondhi, 2024)

[Insert Table 1 about here]

Table 1 displays the seed words for each IAFM dimension. Each dimension contains 25 seed words that unambiguously relate to aspects of financial markets. The equity dimension focuses on stock valuation concepts (e.g., "market_valuation," "overvalued"), while the debt dimension encompasses bond market terminology and interest rate concepts (e.g., "bond_yield," "credit_spread"). These two dimensions collectively provide a comprehensive framework for understanding the complex ways in which firms attend to financial markets.

3.3 Constructing the IAFM Dictionary

Prior to the application of seed words for the identification of financial market-related terminology in earnings call transcripts, I follow Li, Mai, Shen, and Yan (2021) by using the Stanford CoreNLP to prepare the textual corpus for subsequent analysis.[11] This stage is important for improving the accuracy and reliability of subsequent word embedding models by standardizing linguistic features and capturing multi-word expressions that carry unified meanings. Detailed preprocessing procedures are described in Internet Appendix II.

[11] The CoreNLP package is an open-source Natural Language Processing (NLP) toolkit for a variety of tasks (Manning et al. 2014). I use version 4.5.8 which is available at https://stanfordnlp.github.io/CoreNLP.

After preprocessing and parsing earnings call transcripts, I train the *word2vec* model to generate 300-dimensional vector representations for each word in the corpus, including my predefined seed words. These word vectors serve as the foundation for constructing an expanded, context-specific dictionary that measures attention to financial markets. As an example, for the equity-market attention dimension of the IAFM, there are twenty seed words. To illustrate the approach mathematically, let the vector representation for the first seed word "closing_price" be $V^1 = [x_1^1, x_2^1, \dots, x_{300}^1]$, the vector for the second seed word "equity_market" be $V^2 = [x_1^2, x_2^2, \dots, x_{300}^2]$, and so forth, with the vector for the 25th seed word represented as $V^{25} = [x_1^{25}, x_2^{25}, \dots, x_{300}^{25}]$. I computed the centroid vector by averaging all seed word vectors within the dimension $\bar{V}^{equity} = \frac{1}{25}\sum_{i=1}^{25}[x_1^i, x_2^i, \dots, x_{300}^i]$. Next, I calculate the cosine similarity between this centroid vector and each unique word in the earnings call corpus. From these calculations, I selected the top 500 words with the highest positive cosine similarity to $\bar{V}^{equity}$ as candidates for the equity market attention dictionary, while excluding named entities automatically recognized by the CoreNLP package. For words that appeared in dictionaries for multiple IAFM dimensions, I assigned the word only in the dimension where it has the highest cosine similarity to the average seed word vector.

Table IA1 Panel A lists the top 50 most representative words for each IAFM dimension. The high similarity scores across both dimensions—ranging from 0.86 for "share_price" in the Equity dimension to 0.83 for "credit_spread" in the Debt dimension—indicate strong semantic coherence within each IAFM dimension. The low semantic overlap between dimensions suggests that the *word2vec* methodology effectively identifies contextually relevant terminology while maintaining distinct theoretical constructs for each aspect of firm attention to financial markets.

3.4 Generating Firm-Level IAFM Measures

After constructing the IAFM across the two dimensions (Equity and Debt), I measure attention to financial markets at the firm-year level for each dimension. I treat each earnings call's management presentation section and the Q&A session with analysts as separate documents and score each document independently. To compute the final earnings call-level score, I use an equal-weighted average of scores from both the management's prepared statements and the analyst Q&A segments. This equal-weighting approach ensures balanced

representation of both the strategic, prepared communications of management and their spontaneous responses to analyst inquiries, regardless of their relative lengths. If one of these sections is missing from a particular call, I use only the available portion.

To calculate the firm-year level IAFM for each dimension, I employ the term frequency-inverse document frequency (tf-idf) approach, which accounts for both the frequency of dictionary terms and their specificity across the corpus. The calculation proceeds through three steps. First, for each word w in dimension dim appearing in document d, I calculate the term frequency $tf(w,d) = count(w,d)$, which represents the number of occurrences of word w in document d. I also calculate the inverse document frequency $idf(w) = log\,(N/df(w))$, where N is the total number of documents in the document corpus and $df(w)$ is the number of documents containing word w. Second, the document-level IAFM score for dimension dim is calculated as: $IAFM(d,dim) = \sum_{w\in\{dim\cap d\}} tf(w,d) \times idf(w)$. This approach gives higher weight to terms that are both frequently used in a particular document and relatively rare across the entire corpus, thereby capturing the distinctive attention patterns of each firm to specific financial market dimensions. Finally, for firms with multiple earnings calls within a fiscal year, I average the call-level IAFM scores to produce a firm-year measure.

Table IA1 Panel B shows distinctive patterns in the frequency of financial market-related terminology across the two IAFM dimensions. In the Equity dimension, “equity” (20.36%) and “valuation” (10.86%) dominate the discourse, reflecting firms' primary focus on equity valuation concepts. The Debt dimension vocabulary is concentrated around interest rate and bond-related terminology, with “interest_rate” (20.24%) and “bond” (13.17%) commanding the highest contributions, followed by “interest_rate_environment” (4.67%) and “treasury” (4.44%), highlighting firms' attention to borrowing costs and fixed income markets.

[Insert Table 2 about here]

Table 2 Panel A demonstrates significant heterogeneity in firm-level attention to financial markets across the sample of 7,673 U.S. public firms from 2007 to 2023. The IAFM Equity measure exhibits significant variation (mean of 3.05 with standard deviation of 4.44), while IAFM Debt shows even greater relative dispersion (mean of 2.29 with standard deviation of 5.04). The presence of zero values at the 25th percentile for Debt markets

suggests that a large portion of firms do not discuss this aspect at all during earnings calls. Panel B presents statistics after excluding financial firms and utilities, which is methodologically important as these firms naturally exhibit different baseline attention to financial markets. After this exclusion, the mean IAFM Equity score drops significantly from 3.05 to 1.93 (a 37% decrease), and IAFM Debt declines even more dramatically from 2.29 to 0.81 (a 65% decrease), reflecting the outsized attention that financial firms and utilities pay to both equity and debt markets. This pronounced variation in IAFM measures across the restricted sample provides a rich foundation for investigating how differential attention to financial markets relates to corporate policies and outcomes.

3.5 Variance Decomposition of IAFM Measures

Table 3 presents the incremental R^2 (%) from adding specific fixed effects to firm-year level regressions of IAFM Equity and IAFM Debt. This variance decomposition reveals the relative importance of different sources of variation in firms' attention to financial markets. For IAFM Equity, industry fixed effects account for the largest portion of variation (38.12%), followed by firm fixed effects (30.4%), and residual firm-year variation (28%). Year fixed effects and industry-by-year interaction effects contribute relatively little (0.28% and 3.2%, respectively). The pattern is similar for IAFM Debt, with industry fixed effects explaining 44.77% of variation, firm fixed effects accounting for 33.9%, and residual firm-year variation representing 17.79%. Again, year fixed effects (0.64%) and industry-by-year interaction effects (2.9%) contribute minimally.

[Insert Table 3 about here]

These results indicate that managerial attention to financial markets is primarily determined by persistent industry and firm characteristics rather than time-specific factors. The industry component suggests that firms within the same industry tend to exhibit similar patterns of attention to financial markets, likely reflecting shared business models, competitive environments, and regulatory frameworks. The large firm-fixed component points to stable firm-specific characteristics that influence attention allocation, such as corporate culture, governance structures, or business strategies. The residual firm-year component (28% for Equity and 17.79% for Debt) represents time-varying, firm-specific

factors that affect attention allocation, potentially including changes in leadership, strategic initiatives, or idiosyncratic events.

The pronounced dispersion in IAFM measures shows that managerial attention to financial markets is far from homogeneous. In contrast to canonical corporate-finance and price-feedback models that rely on a representative-manager assumption—implicitly treating all managers as monitoring market signals with equal intensity—the evidence reveals substantial heterogeneity in attention, shaped by persistent firm- and industry-level factors. This highlights heterogeneous managerial attention as a fundamental micro-foundation explaining why even seemingly identical market signals could produce divergent real responses across firms. The variance decomposition thus provides important context for interpreting the economic implications of IAFM in subsequent sections.

4. Validation of the IAFM Measure

Section 4 evaluates whether IAFM captures latent managerial attention to financial markets. The validation exercises are guided by four ideas. First, if IAFM reflects economically meaningful attention, it should vary systematically across industries in line with differences in firms' exposure to financial markets (Section 4.1). Second, attention should covary with managers' incentives to monitor market information, as proxied by managerial ownership (Section 4.2). Third, attention should be higher among managers with greater financial expertise, such as finance-expert CEOs (Section 4.3). Finally, if IAFM captures active monitoring rather than static traits, it should respond to movements in equity and debt market conditions when those signals are most salient (Section 4.4). Together, these tests assess whether IAFM behaves as a coherent, behavior-based measure of managerial attention.

4.1 Industry Variation in Attention to Financial Markets

Table 4 presents the industry distribution of IAFM measures and provides a first validation of the index. The results reveal substantial heterogeneity across industries in how managers allocate attention to financial markets, in patterns that align closely with industry-specific business models and economic exposures.

[Insert Table 4 about here]

Panel A shows that managers in Finance (Fama-French Industry 11) exhibit the highest attention to equity markets (mean IAFM Equity = 7.67), more than twice the overall

sample average of 3.05 reported in Table 2. This pronounced attention is expected given these firms' core business of facilitating market transactions and equity investments. Utilities (Fama-French Industry 8) also demonstrate high equity market attention (mean = 4.61), reflecting their investor focus as dividend-paying stocks and their regulatory frameworks that often tie returns to equity capital. Management at Energy firms (Oil, Gas, and Coal Extraction and Products) shows the third-highest equity market attention (mean = 3.38), likely due to these firms' sensitivity to market valuation in a capital-intensive industry with volatile commodity exposur. At the lower end of the distribution, Healthcare (Industry 10), Business Equipment (Industry 6), and Consumer Nondurables (Industry 1) exhibit substantially lower equity market attention. These industries rely more on internal innovation, product development, or relatively stable demand, making short-term equity market fluctuations less informative about their operating fundamentals.

Panel B shows a similarly structured pattern for debt market attention. Finance firms again rank highest (mean IAFM Debt = 8.77), reflecting their reliance on borrowing, lending, and interest rate management. Utilities follow (mean = 2.03), consistent with their high leverage and sensitivity to borrowing costs. Capital-intensive industries such as construction, transportation, and building materials (Industry 12) also exhibit elevated debt market attention (mean = 1.46), reflecting their dependence on credit market conditions. In contrast, Healthcare and Business Equipment show relatively low attention to debt markets, consistent with their lower leverage and greater reliance on equity or internal funds.

[Insert Fig 1 about here]

Figure 1 reveals that IAFM measures respond distinctively to major economic events, with industries reacting based on their exposure to specific market conditions. During the 2008 financial crisis, Finance firms predictably increased equity market attention, but more notably, Manufacturing and Business Equipment firms doubled their debt market attention, reflecting heightened concerns about credit availability. The 2015 oil price collapse triggered targeted responses, with Utilities and Chemicals exhibiting pronounced spikes in equity market attention due to their energy price sensitivity. The 2018 US-China trade war sparked widespread increases in equity market attention, particularly in sectors directly affected by trade tensions—Chemicals (69%), Business Equipment (26%), and Consumer Non-Durables

(50%)—as firms monitored market reactions to supply chain disruptions. The COVID-19 pandemic produced a more bifurcated pattern: sectors facing operational challenges (Manufacturing, Chemicals, Healthcare) decreased equity market attention by 20-30% to focus on immediate business concerns, while simultaneously increasing debt market attention by 18-32% due to liquidity concerns. Throughout all periods, Finance firms maintained consistently higher attention to both markets, with Utilities ranking second, validating that the IAFM measures effectively capture industry-specific economic exposures and priorities.

4.2 Managerial Ownership

This subsection examines the relationship between managerial incentives and financial market attention as a validation test of the IAFM measure. Agency theory suggests that managers' equity stakes and compensation structures should influence their attentiveness to financial markets, as these align managerial interests with share price performance (e.g., Morck, Shleifer, and Vishny, 1988). If the IAFM truly captures meaningful variation in firm-level attention to financial markets, we would expect systematic relationships between managerial incentives and IAFM scores that reflect theoretical predictions about incentive alignment and agency conflicts.

To test this hypothesis, I employ two complementary measures of managerial incentives. First, I use the scaled wealth-performance sensitivity (WPS) developed by Edmans, Gabaix, and Landier (2009), which measures the dollar change in CEO wealth for a 100 percentage point change in stock price, scaled by annual pay.[12] This measure captures the sensitivity of a manager's total wealth—including direct ownership and stock options—to firm performance. Second, I examine simple managerial ownership percentages to provide a more straightforward measure of skin in the game. I regress log-transformed IAFM measures on these incentive variables and their squared terms, controlling for year-end Tobin's Q (Year-End Q), firm size (Ln(Total Assets)), cash holdings, leverage, past sales growth, dividend yield, and institutional ownership. All independent variables are lagged by one year to mitigate reverse causality concerns. I also account for both firm- and year-fixed effects. In this validation test as well as the rest of regressions in this paper, I remove all financial firms

[12] As the yearly WPS database from http://alexedmans.com/data/ only extends to the fiscal year 2018, the most recent fiscal year with WPS data in our regressions (as I lag WPS by one year) would be 2019.

(SIC code 6000-6999) and utilities (4900-4999). It is because financial firms naturally exhibit higher baseline attention to financial markets as an inherent part of their operations rather than as a discretionary choice, as demonstrated in Table 3. Similarly, utilities face extensive regulatory constraints that may suppress the financial market attention. Definitions of variables can be found in Table IA2.

[Insert Table 5 about here]

Table 5 shows that both incentive measures exhibit inverted U-shaped relationships with management's attention to financial markets. For WPS (Columns (1)-(2)), a one-standard deviation increase in WPS ($\times 10^3$) is associated with a 5.94% increase in equity market attention, with this effect attenuated at higher levels. However, WPS shows no significant relationship with debt market attention, suggesting that equity-linked compensation specifically heightens managers' focus on equity markets. For managerial ownership (Columns (3)-(4)), a one-standard deviation increase is associated with approximately an 8.32% increase in attention to equity markets and a 5.34% increase in debt market attention, with both effects attenuated at higher ownership levels.

The consistent inverted U-shaped relationship across both measures suggests that as managers acquire initial incentive alignment through either equity-linked compensation or direct ownership, their attention to financial markets increases, consistent with greater alignment between manager and shareholder interests. However, at higher incentive levels, financial market attention begins to decline, potentially reflecting entrenchment effects or reduced reliance on market signals when managers possess significant control rights.

Among control variables, firm size shows a consistently positive relationship with both IAFM dimensions. Larger firms allocate more of their limited attention to financial markets possibly because these markets play a more critical role in their operations—they face more complex financing needs, greater investor scrutiny, and larger absolute impacts from market conditions. Leverage is negatively related to equity market attention but positively related to debt market attention, indicating that highly leveraged firms strategically focus their scarce attention more on debt market conditions and less on equity markets based on their capital structure needs. Cash holdings are positively associated with debt market attention but show no significant relationship with equity market attention.

These findings provide support for the validity of the IAFM measures, as they align with agency theory's prediction that managerial incentives serve as a key mechanism for aligning managerial attention with shareholder interests.

4.3 Finance-expert CEOs

This subsection examines whether firms led by CEOs with financial expertise exhibit greater attention to financial markets, providing another validation test for the IAFM measures. Custódio and Metzger (2014) demonstrate that finance-expert CEOs are more financially sophisticated, managing financial resources more actively and making better communications about firm prospects with outside investors. If the IAFM measures truly capture meaningful variation in attention to financial markets, we would expect firms with finance-expert CEOs to exhibit systematically higher IAFM scores.

Following Custódio and Metzger (2014), I define a finance-expert CEO as one who has prior experience in either Financials sectors, in a finance-related executive role such as accountant, chief financial officer (CFO), treasurer, or vice president of finance, or in a large auditing firm. I restrict to firms governed by a single CEO in a year. As shown in Table 2, about 33% of CEOs are finance experts in my sample.[13] I regress log-transformed IAFM measures on the finance-expert CEO indicator, controlling for other CEO characteristics including gender, tenure, age, and age squared, as well as the standard firm-level control variables used in previous analyses.

[Insert Table 6 about here]

Table 6 provides strong support for the validity of the IAFM measures. Across all specifications, firms with finance-expert CEOs exhibit significantly higher attention to both equity and debt markets. In the basic specification (Columns (1)-(2)), the finance-expert CEO indicator is associated with an 8.78% increase in equity market attention and a 3.85% increase in debt market attention. These effects remain robust when controlling for additional CEO characteristics (Columns (3)-(4)), with coefficients of 8.75% and 4.17% for equity and

[13] The proportion of finance-expert CEOs in my sample is slightly lower than the 41% reported by Custódio and Metzger (2014). This discrepancy partly stems from differences in sample coverage: my sample spans the full BoardEx-COMPUSTAT universe, while theirs is restricted to firms matched with ExecuComp, which focuses on the S&P 1500. Time trends also plays a role: my sample covers the period from 2007 to 2023, whereas theirs spans 1993 to 2007.

debt market attention, respectively. When including firm fixed effects (Columns (5)-(6)), the coefficients become smaller but remain statistically significant. The results suggest that replacing a non-finance-expert CEO with a finance-expert CEO is associated with a 5.65% increase in equity market attention and a 3.31% increase in debt market attention.

Among the CEO control variables. I find that female CEOs, on average, exhibit lower attention to both equity and debt markets in the cross-sectional specifications, though this effect is less significant for equity market attention with firm fixed effects. Firms governed by CEO with longer tenure are associated with higher debt market attention.

These findings provide an external validity check for my IAFM measures, in line with theoretical expectations that financial expertise should translate into greater attention to financial market conditions.

4.4 Equity and Debt Market Conditions

I further validate the IAFM measures by examining how firms dynamically adjust their attention to financial markets in response to changing market conditions. If the IAFM effectively captures variation in financial market attention, we would expect firms to exhibit systematic shifts in attention allocation across different dimensions in response to various market movements.

[Insert Table 7 about here]

I show that firm-specific equity returns significantly predict attention to financial markets. Specifically, I regress the log-transformed IAFM measures (Ln(1 + IAFM)) on firm-level equity returns and return volatility realized over the prior calendar year, using the same set of control variables and sample used in previous tables. Table 7 Panel A shows that a 10-percentage point increase in firm-level annual returns is associated with a 0.29% rise in equity market attention, suggesting that strong stock performance prompts firms to devote more attention to equity valuation discussions. Interestingly, firm-level returns also show a marginal positive relationship with debt market attention (0.13%), suggesting that positive equity performance may lead firms to discuss broader financial market conditions.

Furthermore, firm-level equity volatility exhibits a significant negative relationship with equity market attention. A 10-percentage point increase in firm-specific volatility decreases equity market attention by 1.95%. This pattern suggests that during turbulent

periods for a specific firm, managers may be less inclined to discuss equity valuations, possibly because higher volatility makes equity prices less reliable as signals.

Next, I examine the relationship between the IAFM measures and market-wide equity performance. Table 7 Panel B shows a contrasting pattern: a 10-percentage point increase in market-wide annual returns is associated with a 0.54% decrease in equity market attention. This negative relationship stands in stark contrast to the positive relationship observed with firm-level returns. Besides, market-wide equity returns show no significant relationship with debt market attention, while market-wide volatility exhibits a strong positive relationship with debt market attention but a negative relationship with equity market attention. This suggests that attention is scarce even across different sub-markets within financial markets, leading managers to reallocate their limited cognitive resources toward the market dimension that provides more precise signals during turbulent periods.

This contrast between market-wide and firm-level equity returns sheds light on when and why managers allocate attention to financial markets. The negative association between market-wide returns and equity-market attention indicates that managers focus more on equity markets during broad downturns, consistent with a defensive posture aimed at monitoring adverse external conditions and addressing investor concerns. In contrast, the positive relationship with firm-level returns suggests that managers discuss equity valuations more when their firms outperform, reflecting strategic communication that highlights favorable performance and validates managerial decisions.

Table 7 Panel C examines how interest rate movements affect attention to financial markets. I choose the 7-year U.S. Treasury yield to be the representative interest rate because it aligns with the maturity pattern of publicly traded corporate bonds: the median firm-level time to maturity in the sample is 6.5 years, and the mean is 7.8 years.[14] I find that, after controlling for firm fixed effects, changes in interest rates significantly predict firms' attention to debt markets but not equity markets. Specifically, one standard deviation increase in interest rates (0.668) is associated with a 3.2% increase in debt market attention in the

[14] Firm-level time to maturity is measured as the latest weighted-average (weighted by outstanding amount) time to maturity across all bonds for a firm in a given calendar year.

following year.[15] This relationship aligns with economic intuition, as rising rates directly impact firms' borrowing costs, prompting increased discussion of debt financing terms and strategies. The absence of a significant relationship with equity market attention suggests that interest rate changes primarily affect how firms discuss debt market conditions rather than equity valuations. I also find that attention paid to debt and equity markets decreases when the prior year's interest rate movements were volatile. In Table IA3, I document the relationship between attention to financial markets and Treasury yields with four alternative maturities (6-month, 1-year, 5-year, and 10-year), and the conclusion holds.

Finally, I examine whether cross-sectional differences in firms' cost of debt predict their attention to equity and debt markets. I proxy firm-level cost of debt using each firm's latest average monthly closing yield from the prior calendar year, expressed in real terms and weighted by outstanding bond amounts across all publicly traded bonds. Table 7 Panel D presents regressions of firms' financial market attention against prior-year firm-level bond yields and yield volatility, controlling for industry-by-year fixed effects. The results show that firms with higher bond yields devote greater attention to debt markets and less attention to equity markets compared to firms with lower yields. Thus, the IAFM measures capture economically rational attention allocation, where firms focus their scarce cognitive resources on the financial market dimensions most relevant to their current financing challenges.

Taken together, this subsection provides validation for the IAFM framework by showing dimension-specific responses to relevant market conditions. Firm-specific equity returns primarily drive attention to equity markets, while interest rate changes significantly impact debt market attention

5. Role of Attention in Shaping Investment Policies

Having established the validity of the IAFM measures, I now investigate their economic implications for corporate decision-making. In this section, I examine how firm-level attention to financial markets influences investment-price sensitivity.

5.1 Unconditional Effect of Attention on Investment-Price Sensitivity

[15] Note that the average annual rate of change in the 7-year U.S. Treasury bill yield between 2007 and 2023 is 0.15 (=15%).

A fundamental question in corporate finance is whether managers learn from stock prices when making investment decisions. The "feedback effect" theory suggests that stock prices aggregate diverse information from market participants, providing signals that managers can use when allocating capital (Bond, Edmans, and Goldstein, 2012). If this effect exists, investment-price sensitivity should be stronger when managers pay more attention to financial markets. I test this hypothesis using the following equation:

$$I_{i,t} = \alpha_{t,j} + \eta_i + \beta_1 Q_{i,t-1} + \beta_2 Ln\left(1 + IAFM_{i,t-1}\right) + \beta_3 Ln\left(1 + IAFM_{i,t-1}\right) \times Q_{i,t-1} + \gamma CONTROL_{i,t-1} + \epsilon_{i,t} \quad (1)$$

where $I_{i,t}$ is one of two investment measures: capital expenditures (CAPX and total investment (INVT) for firm i in year t, where the first measure equals 100 × the capital expenditure (Compustat CAPX) divided by lagged total assets (Compustat AT), and the second measure equals 100 × the changes in gross property, plant, and equipment (Compustat PPEGT) plus changes in inventory (Compustat INVT), divided by lagged total assets (Compustat AT). Compared to the first measure, the second measure additionally captures the sales of fixed assets, and changes in inventory. $\alpha_{t,j}$ and η_i represent industry-by-year and firm fixed effects, respectively. $Q_{i,t-1}$ is the (normalized) price and is measured by firm i in year $t-1$. $Ln\left(1 + IAFM_{i,t-1}\right)$ indicates the log-transformed IAFM measure for either IAFM Equity or IAFM Debt, for firm i in year $t-1$. I also control for firm size (Ln(Total Assets)), cash holdings, leverage, past sales growth, dividend yield, and institutional ownership.[16] The presence of the price feedback effect requires both $\beta_1 > 0$ and $\beta_3 > 0$ to hold. Put differently, a firm's investment should be positively correlated with $Q_{i,t-1}$, and such correlation should be greater when managers allocate more attention to financial markets.

[16] It is worth noting that I do not control for market conditions (e.g., stock returns or volatility) in the baseline investment–price-sensitivity regressions because the goal in Section 5 is to estimate the *total effect* of financial markets *operating through managerial attention*. Conceptually, the estimand is a treatment-on-the-treated effect: the difference in investment–price sensitivity between managers who pay attention to financial markets and those who do not. If market conditions influence investment–price sensitivity through shaping managers' attention, then controlling for those market variables would introduce a classic "bad-control" problem: it would partial out precisely the channel through which financial markets are supposed to operate in my framework, thereby underestimating the true total effect of financial markets. Section 7.1 then decomposes this total effect into the primary-market channel and the secondary-market (managerial learning) channel. Omitting market conditions would only be problematic if those variables *directly* affect investment–price sensitivity through affecting financing capacity with managerial attention being a *pure* passive sideshow. I address this alternative "*attention-as-sideshow*" view in Section 7.6, and show that this view is unlikely to explain the results.

[Insert Table 8 about here]

Table 8 Panel A shows that attention to financial markets significantly enhances the sensitivity of capital expenditures to Tobin's Q. In the specifications with both industry-by-year and firm fixed effects (Columns (3)-(4)), which represent my primary focus, the interaction coefficient between IAFM Equity and Tobin's Q is positive and statistically significant (0.0633). This effect is economically significant: firms whose managers devote 10% more attention to equity markets exhibit investment decisions that are 1.85% more responsive to Tobin's Q, relative to the baseline sensitivity of 0.343. Similarly, Column (4), which focuses on debt market attention, shows an even stronger positive interaction coefficient (0.0938), which translates to a 2.58% increase over the baseline sensitivity of 0.363 for a 10% increase in IAFM Debt. These findings support that firms paying greater attention to financial markets are significantly more responsive to price signals when making investments, consistent with the feedback theory of market prices.

The cross-sectional results with only industry-by-year fixed effects (Columns (1)-(2)) show a slightly different pattern. While the interaction between IAFM Debt and Tobin's Q remains positive and significant (0.131), representing a 4.15% increase over the baseline sensitivity of 0.316 for a 10% increase in IAFM Debt, the interaction between IAFM Equity and Tobin's Q is positive yet statistically insignificant. Thus, the relationship between equity market attention and investment-price sensitivity may be driven more by within-firm variation compared to cross-sectional differences.

Panel B extends this analysis to broader measures of investment (INVT). For total investment, in the specifications with both industry-by-year and firm fixed effects (Columns (3)-(4)), the interaction between IAFM Equity and Tobin's Q (0.247) represents a 2.95% increase over the baseline sensitivity for a 10% increase in equity market attention. Similarly, the interaction between IAFM Debt and Tobin's Q (0.269) represents a 2.89% increase over the baseline sensitivity of for a 10% increase in debt market attention. These effects are even more pronounced than those observed for capital expenditures, suggesting that broader investment decisions are particularly responsive to market signals when managers are attentive to financial markets. Besides, in the cross-sectional specifications (Columns (1)-(2)), both IAFM Equity and IAFM Debt show positive and significant interactions with Tobin's Q,

although the magnitude is smaller than in the fixed effects models. Specifically, the interaction coefficients represent increases of 2.06% and 3.04% over the baseline sensitivity for a 10% increase in IAFM Equity and IAFM Debt, respectively.

Overall, these results provide *direct* evidence for the feedback effect theory, with firms exhibiting significantly higher investment-price sensitivity when they have higher attention to financial markets. This effect applies to both equity and debt market attention.

5.2 Heterogeneity Across Firm Groups

I expect the strength of the relation between IAFM and investment-price sensitivity to vary depending on firm characteristics. I examine five key dimensions of heterogeneity: insider trading intensity, competitive pressure, price informativeness, financial constraints, and managerial sentiment, and additionally assess whether the resulting attention-induced investment–price sensitivity translates into value-enhancing real and market outcomes.

First, Bond, Edmans, and Goldstein (2012) argue that the usefulness of secondary markets hinges on the extent to which prices convey information beyond what decision makers already know. Building on this, Edmans, Jayaraman, and Schneemeier (2017) demonstrate theoretically that stricter insider-trading enforcement—by discouraging insiders from trading—lowers competitive trading pressure, thereby incentivizing outside investors to gather additional information and enriching price signals with knowledge unavailable to managers. Therefore, I hypothesize that the influence of IAFM on the investment-price sensitivity will be most pronounced in firms characterized by low insider-trading intensity.

To test this hypothesis, I measure insider-trading intensity as the ratio of shares traded by insiders to total shares traded within a calendar year, focusing exclusively on open market transactions initiated by key executives (CEO, CFO, COO, President, and Chairman of the Board). I then partition the sample into three distinct categories: firms with zero insider trading, firms with below-median insider trading intensity, and firms with above-median insider trading intensity, subsequently estimating regressions separately for each subsample.

Table IA4 supports this prediction. For firms with no insider trading, the interaction between IAFM and Tobin's Q is positive and significant for both capital expenditures and total investment. This effect becomes insignificant for firms with higher insider trading intensity. For example, a 10% increase in equity market attention enhances CAPX-price

sensitivity by 2.05% (=10%×0.0702/0.342) in firms without insider trading but shows no significant effect in firms with insider trading.

Second, firms that operate in more competitive environments have stronger incentives to make the best use of their resources, as they operate with little slack (e.g., Hart, 1983). I hypothesize that the influence of IAFM on the investment-price sensitivity will be most pronounced in firms operating in highly competitive markets. Table IA5 shows that the effect of IAFM on investment-price sensitivity is significant only in highly competitive industries. For capital expenditures, firms in high-competition industries (based on SIC 3-digit HHI) show a positive interaction between IAFM Equity and Tobin's Q (0.0688), while firms in low-competition industries show no significant effect. This pattern is consistent across both IAFM measures and both investment types. Table IA6 suggests these findings using an alternative product market competition measure from Hoberg and Phillips (2016). The results suggest that competitive pressure enhances firms' incentives to incorporate market signals into investment decisions, as failing to do so could result in competitive disadvantage.

Third, I examine whether the value of managerial attention varies with the informativeness of price signals themselves. The probability of informed trading (PIN), developed by Easley and O'Hara (1992) and Easley, Kiefer, and O'Hara (1996), provides a structural measure of price informativeness based on a market microstructure model that estimates the probability that a trade is information-based. Chen, Goldstein, and Jiang (2007) establish that investment-price sensitivity is stronger when prices contain more information that managers do not already possess. Building on this insight, I hypothesize that managerial attention to financial markets should be particularly valuable when price signals are rich in information. To test this prediction, I calculate industry-level PIN measures by averaging firm-level estimates within each three-digit SIC industry, capturing the typical information environment that firms face in their competitive landscape—reflecting common factors such as disclosure requirements, analyst coverage patterns, and business model complexity that affect information production across industry peers. Using industry-level rather than firm-level PIN also mitigates concerns that firm-level PIN may be endogenously affected by managers' own disclosure and trading-related actions, and better isolates the exogenous informativeness of price signals. Consistent with this hypothesis, Table IA7 shows that

managerial attention significantly enhances investment–price sensitivity primarily in high-PIN industries. Table IA8 corroborates these results using product-market PIN measures from Hoberg and Phillips (2016). Thus, these findings indicate that when prices are informative, high levels of attention translate into stronger investment–price sensitivity.

Fourth, economic theory suggests that the incentives of firms to use stock price information depend on their financial situation and the environment they are in. Financially constrained firms have strong incentives to allocate resources efficiently to relax their financial constraints, but these constraints may prevent them from implementing changes that require funding. Consequently, whether financially constrained firms make more use of stock price discovery is an empirical matter.

I employ Linn and Weagley's (2024) (LW) machine-learning-based measure of equity constraint to proxy a firm's financial constraint severity.[17] Firms with an LW constraint measure above the median are classified as financially constrained, while those below the median are considered unconstrained. Table IA9 shows that the effect of IAFM on investment-price sensitivity is strongest among financially constrained firms. For these firms, a 10% increase in equity market attention enhances CAPX-price sensitivity by 2.16%, compared to no significant effect for unconstrained firms. For debt market attention, the effect is even more pronounced (3.22% increase). The conclusion remains robust when I use a composite indicator of financial constraint, which is constructed based on five traditional proxies of financial constraints: dividend, credit ratings, the Kaplan and Zingales (1997) index, the Hadlock and Pierce (2010) index, and Whited and Wu (2006) index. The regression results that utilize this composite indicator are reported in Table IA10.

Fifth, I exploit the sentiment polarity embedded in financial-market discussions. Table IA11 distinguishes between positive-sentiment and negative-sentiment attention—defined as the proportion of sentences in an earnings call that simultaneously reference financial-market terms and contain the positive or negative words identified by Loughran and McDonald

[17] This measure captures firms' differential access to equity financing without relying on traditional proxies that have been criticized in literature (Bodnaruk, Loughran and McDonald 2015; Farre-Mensa and Ljungqvist, 2016). I focus on firms that are constrained in equity financing, as prior research suggests that financial constraints tend to have a more pronounced impact on these firms compared to those that rely primarily on debt financing (e.g., Linn and Weagley, 2024; Hoberg and Maksimovic, 2015).

(2011). The results show that investment–price sensitivity is significantly stronger when attention carries a positive sentiment. For example, the interaction between equity-market attention and Tobin's Q becomes more pronounced when such attention is expressed in a positive tone, whereas the corresponding coefficient under negative sentiment is economically smaller and statistically insignificant. Moreover, sentiment plays no statistically significant role for debt-market attention, suggesting that managers' reactions to debt-market information are less influenced by tone or affect. These findings provide suggestive evidence that attentive managers not only monitor financial markets more closely but also interpret equity-market signals more constructively when conditions are favorable.

Sixth, to assess whether the stronger investment–price sensitivity induced by managerial attention is value-enhancing, I examine both real operating outcomes and market reactions. As shown in Table IA12 Panel A, higher attention is associated with stronger subsequent operating performance, measured by return on assets, when firms adjust investment more sensitively to market valuations. From a market-based perspective, Panels B and C show that earnings-call announcements by high-attention firms generate significant positive abnormal returns both on the announcement day and over the [0,+3] window. Importantly, Panels D and E show no evidence of medium-term return reversals, suggesting that these reactions are unlikely to be driven by temporary mispricing. Thus, the evidence indicates that attention-induced investment–price sensitivity reflects the incorporation of economically relevant information rather than short-lived valuation effects.

Collectively, these heterogeneity analyses show that the relationship between attention to financial markets and investment-price sensitivity is most pronounced when: (1) insider trading is limited, providing more unique information in prices; (2) competitive pressure is high, creating stronger incentives for efficient resource use; (3) price informativeness is high, enhancing the quality of external signals available to managers; (4) financial constraints are binding, increasing the value of market signals for optimal resource allocation; (5) such attention is expressed in a positive tone, indicating a more constructive interpretation of market conditions; and (6) the resulting attention-induced investment responses translate into value-enhancing outcomes

5.3 Why Does Debt Market Attention Facilitate Investment-Price Sensitivity?

Previous subsections demonstrate that attention to financial markets plays a crucial mediating role in corporate decision-making where both equity and debt market attention enhance investment-stock price sensitivity. I focused on the sensitivity of investment to stock prices in previous subsections for two key reasons. First, compared to bond prices, stock prices are more capable of capturing the upside potential of the firm, thereby being more able to incorporate information related to investments. Second, in the literature on the real effects of financial markets on investments (e.g., Chen, Goldstein, and Jiang (2007)), the majority of empirical papers use stock prices as a proxy for the signal source from which managers extract information from financial markets regarding future business opportunities.

In this subsection, I examine why debt market attention facilitates the sensitivity of investment to stock prices. Two channels may be at work. First, debt and equity market attention may be highly correlated, capturing the same underlying construct. Second, debt-market attention may convey distinct yet complementary information—either about business opportunities arising from firms' own traded bond prices (Davis and Gondhi 2024), or about financing conditions such as borrowing costs, interest rate trends, or monetary policy shifts that shape firms' capacity to fund new investments.

To distinguish these channels, I analyze how attention to both markets simultaneously affects investment-price sensitivity, and whether this varies with leverage. In Table IA13, when both IAFM measures are included together, both interaction terms remain positive and significant. Comparing coefficients with Table 8, approximately 11% of the debt-market attention effect can be attributed to correlation with equity-market attention, while the remaining 89% supports the complementary information hypothesis.[18]

Furthermore, if debt-market attention provides complementary financing information, this should be particularly valuable for firms with greater debt exposure. Indeed, for low-leverage firms, only equity-market attention significantly enhances investment-price sensitivity, while debt-market attention shows no significant effect. In contrast, for highly

[18] Specifically, for IAFM Debt, the coefficient decreases from 0.0938 in Table 8 Column (4) to 0.0831 in Table IA13 Panel A Column (1).

leveraged firms, debt-market attention significantly enhances investment-price sensitivity, while equity attention remains significant only for total investment.[19]

To further characterize this distinct information channel, I test whether attentive managers also respond more sensitively to their own bond prices—which may reflect either business fundamentals or financing costs. Using a sample of firms with publicly traded bonds (Table IA14), I find that for total investment, the interaction between IAFM Debt and bond yield is negative and significant (-21.27), indicating that firms with 10% higher debt-market attention increase their investment sensitivity to bond yields by 5.73%. Table IA15 shows these effects are driven more by firm-level credit spreads, suggesting that debt-market attention helps firms extract firm-specific information from their bond pricing.

Together, these findings support the view that debt markets contain investment-relevant information through mechanisms *distinct* from equity markets. In particular, managers who attend to debt markets respond more sensitively to stock prices—especially when leverage is high and even after controlling for equity-market attention—and also to their own bond yields. In Section 7.1, I further examine whether this distinct information reflects improved interpretation of business opportunities or of firms' cost of capital.

6. Role of Attention in Shaping Financing Policies

6.1 Does Attention Facilitate Firms' Ability to Raise Capital?

While Section 5 demonstrates that financial markets provide incremental information about investment opportunities, this section examines the second fundamental role of financial markets: facilitating access to capital. Theoretical and empirical research suggests that managers who better understand market conditions should be more effective at accessing external financing when capital needs arise. Baker and Wurgler (2002) show that firms issue more equity when market valuations are temporarily high, while Ma (2019) demonstrates that firms substitute between debt and equity in response to relative valuation changes across these markets. Begenau and Salomao (2019) document cyclical patterns in debt and equity issuance that reflect differences in funding needs and exposures to financial frictions.

[19] For low-leverage firms, the coefficients are 0.0842 for CAPX and 0.192 for INVT on equity-market attention. For high-leverage firms, the coefficients are 0.0701 for CAPX and 0.230 for INVT on debt-market attention.

If managers who pay greater attention to financial markets develop superior understanding of market conditions and timing, they should be better positioned to access external financing when capital needs arise. To test this hypothesis, I examine whether firms with higher IAFM measures are more likely to tap external financing at the extensive margin when facing financing deficits. I estimate the following specification:

$$\begin{aligned} Net\ Issue\ Indicator_{i,t} \\ &= \alpha_{t,j} + \eta_i + \omega_1 NFD_{i,t} + \omega_2 Ln\left(1 + IAFM_{i,t-1}\right) \\ &+ \omega_3 Ln\left(1 + IAFM_{i,t-1}\right) \times NFD_{i,t} + \gamma CONTROL_{i,t-1} + \epsilon_{i,t} \end{aligned} \quad 2)$$

where $Net\ Issue\ Indicator_{i,t}$ denotes either the net equity issue indicator or the net debt issue indicator for firm i in year t in industry j. The net *equity* issue indicator equals one if there is a positive difference between sales of common stock and stock buybacks, scaled by lagged total assets, and zero otherwise. The net *debt* issue indicator equals one if long-term debt issues minus long-term debt reduction, scaled by lagged total assets, and zero otherwise. $NFD_{i,t}$ represent the net financing deficit (NFD), which equals the sum of cash dividends, net investment, change in working capital, and minus cash flow after interest and tax, scaled by lagged total assets. I control for year-end Tobin's Q, firm size (Ln(Total Assets)), cash holdings, leverage, past sales growth, dividend yield, and institutional ownership. $\alpha_{t,j}$ and η_i denote industry-by-year and firm fixed effects, respectively. ω_3 captures the extent to which attention to financial markets enhances firms' ability to access external financing when capital needs arise. If attention to financial markets helps firms better manage their cost of capital and timing of market access, we should observe $\omega_3 > 0$ for both equity and debt financing, indicating that high-attention firms are more responsive to financing needs and better able to tap external markets.

[Insert Table 9 about here]

Table 9 demonstrates that attention to financial markets enhances firms' responsiveness to financing needs by facilitating access to capital. I begin by examining the cross-sectional patterns in Columns (1)-(3), which include only industry-by-year fixed effects and reveal how differences in attention across firms relate to financing behavior.

Panel A shows that firms with higher attention to equity markets are significantly more responsive in accessing equity financing when needs arise. In Column (1), the interaction coefficient between IAFM Equity and NFD (0.0553) indicates that firms with 10% higher equity market attention show a 1.66% increase in equity financing responsiveness relative to the baseline NFD effect (0.333). Column (2) shows an even stronger pattern for debt market attention, with a 10% increase in IAFM Debt associated with a 4.17% increase in responsiveness (=10%×0.143/0.343). Panel B provides parallel evidence for debt financing. In Column (1), a 10% increase in equity-market attention raises responsiveness by 1.99%. In Column (2), a 10% increase in debt-market attention leads to an 11.85% (=10%×0.507/0.428) increase in debt-financing responsiveness relative to baseline.

When both attention measures are included simultaneously in Column (3) of each panel, both remain statistically significant. The fact that debt (equity) attention also predicts equity (debt) issuance indicates that the effect cannot be explained solely by managers disclosing intended financing plans during calls; if that were the case, attention to the "other" market would exhibit no—or even negative—predictive power. Instead, it is more consistent with the idea that equity- and debt-market attention capture distinct informational advantages, enabling managers to more accurately gauge the *relative* cost of capital and assess conditions in each market. I formally test this mechanism hypothesis in Section 6.2. Columns (4)–(6), which add firm fixed effects, reveal qualitatively similar patterns with somewhat smaller magnitudes, suggesting that the results are not driven by time-invariant firm characteristics.

6.2 Does Attention Facilitate Firms' Ability to Respond to Market Conditions?

Building on the evidence in Section 6.1, I now test whether equity- and debt-market attention capture distinct informational advantages by shaping firms' responsiveness to *market-specific* conditions. To minimize the concern that attention simply reflects capital demand, rather than reflecting a capability that reduces financing frictions (e.g., search frictions, timing frictions) in a given market, I restrict the sample to firm-year observations in which firms raised external funds from a single source—issuing either net equity or net debt, but not both. By holding total external financing needs roughly constant, this restriction allows the financing source to be interpreted primarily as a managerial choice.

Accordingly, equity-market attention should amplify responsiveness to equity-market conditions, while debt-market attention should amplify responsiveness to debt-market conditions. Evidence of such dimension-specific responsiveness would provide more granular support for the mechanism through which attention facilitates access to financial markets—specifically, by enhancing managers' ability to time financing decisions more effectively. To test this prediction, I estimate the following:

$$
\begin{aligned}
Equity\ vs\ Debt_{i,t} &= \alpha_{t,j} + \eta_i + \omega_1 NFD_{i,t} + \omega_2 Ln\left(1 + IAFM_{i,t-1}\right) \\
&+ \omega_3 Ln\left(1 + IAFM_{i,t-1}\right) \times NFD_{i,t} \\
&+ \omega_4 Ln\left(1 + IAFM_{i,t-1}\right) \times Market\ Condition_{i,t} \\
&+ \omega_5 NFD_{i,t} \times Market\ Condition_{i,t} \\
&+ \omega_6 Ln\left(1 + IAFM_{i,t-1}\right) \times NFD_{i,t} \times Market\ Condition_{i,t} \\
&+ \gamma CONTROL_{i,t-1} + \epsilon_{i,t}
\end{aligned} \tag{3}
$$

where the dependent variable, $Equity\ vs\ Debt_{i,t}$, equals one for equity financing and zero for debt financing. Compared to Equation (2), I add a market-conditional term $Market\ Condition_{i,t}$, which captures episodes when equity markets are temporarily more favorable than debt markets (proxies include firm-specific valuation (Tobin's Q), equity market sentiment, or interest rate changes). I also include interactions among $Ln\left(1 + IAFM_{i,t-1}\right)$, $NFD_{i,t}$, and $Market\ Condition_{i,t}$. The focus is on ω_6, which reflects how attention alters the responsiveness of financing choices to equity-favorable conditions.

[Insert Table 10 about here]

Panel A of Table 10 examines how equity market attention interacts with two key equity market conditions: firm-specific valuation (measured by Tobin's Q) and market-wide equity sentiment, proxied using Baker and Wurgler (2006) index (orthogonalized to six macroeconomic conditions).[20] These two conditions are chosen because they directly capture episodes when equity financing is temporarily advantageous relative to debt. Baker and Wurgler (2002), for example, find that firms are more likely to issue equity when their

[20] I thank Jeffrey Wurgler for sharing the data via https://pages.stern.nyu.edu/~jwurgler/.

market values, relative to book values, are high. Lowry (2003) and Lamont and Stein (2006) show that firms react to waves of high sentiment by issuing more equity. I employ two different specifications for market sentiment. Column (1) uses the annual percentage change in equity market sentiment to capture dynamic shifts in investor optimism, while Column (2) employs the level of equity market sentiment to reflect absolute market conditions.

Consistent with the market timing view, ω_6 is positive and significant across both specifications. The three-way interaction between IAFM Equity, NFD, and Tobin's Q yields positive and significant coefficients of 0.0171 and 0.0180, while the interactions with equity market sentiment yield coefficients of 0.0154 (for changes in sentiment) and 0.0990 (for sentiment levels). These results show that attentive firms are disproportionately likely to switch toward equity issuance when firm valuations are high or when sentiment is buoyant, precisely when equity financing windows open. Thus, attention facilitates market timing by allowing firms to reallocate issuance to the relatively cheaper source of capital. In this sense, attention acts as a capability that enables managers to more effectively recognize and exploit financing opportunities when they arise.

Panel B examines how debt market attention influences financing choices in response to interest rate conditions, employing two specifications: Column (1) uses annual changes in interest rates, while Column (2) uses interest rate levels. As discussed in Section 4.4, I use 7-year Treasury yield to proxy interest rate, though the results remain qualitatively the same if I use alternative maturities, including 6 months, 1 year, 5 years, or 10 years. In Column (1), the three-way interaction between IAFM Debt, NFD, and *changes* in interest rates shows a positive and statistically significant coefficient (0.111), indicating that firms with higher debt-market attention are more likely to shift from debt to equity issuance when interest rates rise. In Column (2), the corresponding interaction with interest rate *levels* is also positive albeit statistically insignificant. Together, these results suggest that debt-market attention enhances firms' ability to time financing by reallocating issuance toward the cheaper source of funds when borrowing costs shift.[21]

[21] Although reacting to changes in interest rates is not exactly the same as the market timing described in Baker and Wurgler (2002), which refers to firms' response to equity overvaluation episodes, I interpret it as a form of market timing. The rationale is that interest rate changes are generally temporary, so managers must still "time"

Overall, these results indicate that attention to equity and debt markets facilitates firms' access to external capital *at least* through enabling managers to better identify and exploit market-specific opportunities. They provide the first *direct* empirical evidence based on observed managerial attention in support of the market-timing theory and Ma (2019), showing that managers' ability to time issuance windows and cross-arbitrage their own securities is strengthened when they genuinely monitor financial markets. To the extent that periods of strong equity performance often coincide with lower, time-varying adverse selection cost, my results can also be viewed as consistent with pecking order theory (Myers and Majluf 1984). As an additional exercise, Table IA16 explores whether firms' financing choices respond to changes in firm-specific bond yields. While the sign of coefficient estimates suggests that firms with greater attention to the debt market favor equity over debt following rising bond yields, these coefficients are not statistically significant.

7. Robustness Checks

7.1 Is Attention-Induced Investment-Price Sensitivity Driven More by Information on Business Opportunities or Costs of Capital?

In Section 5, I presented evidence that higher managerial attention to financial markets facilitates firms' sensitivity of investments to market signals, particularly among firms with high attention to market signals. However, this enhanced sensitivity could operate through two distinct channels: (1) improved extraction of information about fundamental business opportunities (the core prediction of price feedback theory), or/and (2) better assessment of financing conditions that enables more flexible investment responses when capital constraints are relaxed. Since Section 6 establishes that attention to financial markets enhances firms' financing capabilities, it becomes crucial to disentangle these mechanisms.

To isolate the business opportunities channel, I employ a sample-splitting approach that controls for the financing mechanism. Specifically, I restrict the analysis to firms that do not tap external financing (defined as having non-positive net external financing) in the year of investment decision. The underlying logic is straightforward: if the investment-price

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their financing by issuing equity—the relatively cheaper source—when debt becomes more expensive due to rising rates.

sensitivity effects were driven purely by improved financing capabilities, they should disappear when firms are not actively accessing external capital markets. Conversely, significant effects that persist among non-financing firms would indicate genuine information extraction about business fundamentals. This approach provides a conservative test of the business opportunities channel, as it excludes firms most actively integrating financial market information across both investment and financing decisions.

Table IA17 shows differences between equity and debt market attention in terms of the mechanisms driving investment-price sensitivity. Panel A shows that for equity market attention, the interaction coefficients remain positive and statistically significant even among firms with non-positive net external financing: 0.0662 for capital expenditures (significant at the 5% level) and 0.166 for total investment (significant at the 10% level). This supports the price feedback mechanism, indicating that equity market attention indeed facilitates managers' ability to extract information about fundamental business opportunities.

In contrast, debt market attention shows a different pattern. As shown in Panel B, among firms with non-positive net external financing, the interaction coefficients become statistically insignificant, and they are only significant for firms with positive net external financing (0.189 for CAPX and 0.447 for INVT). This indicates that debt market attention operates primarily through the cost of capital channel—enhancing managers' ability to respond to investment opportunities by improving their access to financing.

Panel C provides additional corroborating evidence by examining how firms' investment responds to their own bond yields. If debt-market attention enhances investment–bond price sensitivity by prompting managers to expand investment most readily when debt financing costs are lower, such sensitivity should appear only among firms that access external debt markets in the investment year and should disappear when the sample is restricted to firms that do not raise external funds. Consistent with this prediction, that is precisely what I find among firms with publicly traded bonds.

I next provide another test of this mechanism using Gormsen and Huber's (2024) *perceived* cost of capital, which captures managers' own stated beliefs about their financing costs as expressed in earnings calls (e.g., "our WACC is 9%"). This variable offers a unique opportunity to distinguish between the two channels because it reflects managerial

perceptions of financing conditions independent of realized financing actions. If debt-market attention primarily affects investment by altering *perceived* financing costs, its explanatory power should diminish once perceived cost of capital is controlled for. Conversely, if equity-market attention captures information about real business opportunities, its effect should remain robust.

Table IA18 first establishes that IAFM measures are, if anything, negatively correlated with perceived cost of capital in the cross-section and uncorrelated within firms over time. This relationship remains even after controlling for two proxies of the firm's true financing costs: the implied cost of capital and the implied cost of debt, constructed following Gormsen and Huber (2024) and Eskildsen, Ibert, Jensen, and Pedersen (2024). The implied cost of capital is computed as the average of four standard accounting-based estimates—the residual income models of Gebhardt, Lee, and Swaminathan (2001) and Claus and Thomas (2001), and the dividend discount models of Easton (2004) and Ohlson and Juettner-Nauroth (2005). The implied cost of debt is proxied by the ratio of total interest expense to total debt from Compustat. This indicates that attention does not merely proxy for high financing costs or tighter constraints. Instead, more attentive managers appear to *perceive* lower costs of capital, consistent with their being better informed about market conditions.

Next, I include perceived cost of capital directly in the investment–price sensitivity regressions (Table IA19, Panel A). Controlling for this variable leaves the coefficient on Equity Attention × Tobin's Q largely unchanged and still highly significant, supporting that equity-market attention operates at least through the information channel. In contrast, the coefficient on Debt Attention × Tobin's Q becomes statistically insignificant once perceived cost of capital is added, indicating that debt-market attention influences investment mainly by altering managers' financing perceptions and cost-management ability. Panel B shows that roughly half of the decline in the debt-attention coefficient arises from the larger-firm sample used by Gormsen and Huber (2024)—which is intuitive since larger firms rely more on internal cash flows and less on external capital, where debt-market attention is most valuable—while the remaining half is explained by controlling for perceived cost of capital.

Additional evidence in Table IA19 Panel C shows that both equity- and debt-market attention remain significant predictors of investment–price sensitivity when only *true* costs of

capital are controlled for. The distinct result when controlling for *perceived*, rather than *true*, financial constraints implies that debt-market attention reflects a behavioral channel through which attentive managers internalize financing conditions more effectively, enabling them to act on profitable investment opportunities when funding costs are favorable.

Taken together, these results provide a coherent interpretation of how managerial attention affects investment. Equity-market attention strengthens the link between prices and real investment primarily because attentive managers extract decision-relevant information about fundamentals from stock prices. Debt-market attention, in contrast, affects investment mainly by shaping managers' perceptions and management of financing costs, enabling more flexible investment responses when funding conditions change. The joint use of real financing activity and *perceived cost of capital* measures therefore allows me to disentangle these two mechanisms empirically.

At a conceptual level, the overlap between the effects of debt attention and perceived cost of capital also suggests that my attention measure does not merely proxy for existing financing constraints but instead shapes how managers *perceive and interpret* those frictions. Gormsen and Huber (2024) show that only about 20% of the cross-sectional variation in perceived cost of capital corresponds to firms' true cost of capital, with the remaining 80% driven by differences in perception. My findings offer a potential behavioral explanation for this gap: heterogeneity in managerial attention to financial markets. Managers who allocate more attention to market signals are better informed about financing conditions and therefore perceive lower costs of capital. In this sense, attention acts as an interpretive filter through which objective market information becomes subjectively processed.

7.2 Management Presentation versus Q&A

Understanding the distinct roles of management presentations and Q&A sessions in earnings calls provides insights into different forms of managerial attention to financial markets. The management presentation represents the *supply side* of information, reflecting managers' deliberate, strategic communication choices about which financial market dimensions to emphasize. When managers discuss financial markets in prepared remarks, it signals their proactive assessment of which market signals are most relevant for their business strategy.

In contrast, the Q&A session reflects the demand side of information, where analysts steer the discussion toward topics they deem most relevant. Unlike managerial speeches—which Cao, Jiang, Yang, and Zhang (2023) show are more strategically scripted when firms expect higher machine readership—managers' references to financial markets during Q&A arise more organically and spontaneously. These relatively unscripted responses offer a clearer window into how managers process market information in real time and respond to investor concerns about prevailing market conditions. Tables IA20 and IA21 present the economic implications of IAFM measures constructed separately from management presentations and Q&A sessions, respectively. I find that both sources of attention yield statistically significant effects across most specifications.

Besides, across specifications, Q&A-based attention tends to generate slightly larger economic magnitudes. This helps mitigate the concern that my results are driven by an alternative explanation where managers might *post hoc* reference current financial market conditions to rationalize decisions they have already formulated independently of market signals. Managers have incentives to engage in such performative behavior because it enhances the perceived legitimacy and external validation of their choices. If this explanation were driving my results, we would expect stronger effects from management presentations, where managers have greater control over content and more opportunity to craft justifications. However, we do not find such a pattern.

Another concern is that the attention captured in the Q&A section might partly reflect analyst attention rather than managers' own monitoring of financial markets. If analysts steer the conversation toward market conditions, one may worry that the IAFM is picking up investor pressure rather than managerial cognition. The significant results obtained when using attention constructed solely from the management presentation—where executives speak in their own words—help alleviate this concern. Moreover, even if from investors' perspective it may be optimal for the firm to respond to financial markets, such responses can only materialize if managers themselves attend to and operationalize the information conveyed. This is inconsistent with a "*no-attention-needed*" or "*no-real-effects*" view, under which managers would adopt identical policies regardless of their own attention to market

prices because prices would contain no additional information beyond fundamentals already known inside the firm. I also address this alternative explanation in Section 7.7.

7.3 Using the Term Frequency (TF) Approach

A potential concern with the TF-IDF methodology is that the inverse document frequency (IDF) component may introduce noise by disproportionately weighting terms that are infrequent in the overall corpus. Because IDF is computed using term frequencies across all earnings calls—spanning the full sample period and all industries—this approach may generate distortions along both time and industry dimensions.[22] To address this concern, I test the robustness of my findings using only the term frequency (TF) component, which measures the raw frequency of financial market-related terms within each firm's earnings calls without adjusting for their rarity across the entire sample. This approach eliminates potential cross-sectional and temporal contamination in the weighting scheme while providing a more transparent measure of attention intensity. Figure IA1 shows the time-series variation in industry-level TF-only measures, which display a similar pattern to those constructed using the TF-IDF method. Table IA22 presents the regression results. The findings support the robustness of the main results.

7.4 Using Seed Words Only

The *word2vec* expansion methodology, while providing comprehensive coverage of financial market terminology, raises the question of whether the machine learning-based dictionary expansion is necessary for the main results. To address this concern, I test the robustness of findings using only the original 25 seed words per dimension, without any algorithmic

[22] For example, terms that are uncommon in early years but become standard later (or vice versa) may receive inappropriate weights, creating temporal bias. Terms like "enterprise_value" (which falls into IAFM Equity) might be relatively rare before 2010 but increasingly common in recent years as this valuation metric became more standardized in corporate discourse, leading to inflated IDF weights even in periods when such discussions represent standard valuation commentary rather than exceptional attention. Similarly, terminology that is routinely used within certain industries but rare in the broader corpus may be overweighted, even when such language reflects standard industry discourse rather than heightened managerial attention. As an example, mortgage-related terms such as "agency_mbs," "cmbs_market," or "mortgage_spread" (which fall into IFAM Debt) might be routine vocabulary for financial services firms but rare across the full sample, resulting in artificially high weights that overstate the significance of such discussions for banks and REITs where these terms represent normal business operations rather than heightened financial market focus. That said, the latter concern is likely mitigated by the exclusion of financial sector firms from our main analysis.

expansion.[23] Table IA23 presents regression results using only the original seed words. The findings continue to support the main conclusions, though with somewhat attenuated magnitudes. Therefore, the *word2vec* expansion appears to enhance statistical power by providing more comprehensive coverage of financial market terminology, but the fundamental economic relationships are detectable even with a more conservative, manually curated approach.

7.5 Constructing IAFM Using Binary Indicators

Throughout this paper, I have employed log-transformed, continuous measures of IAFM to facilitate interpretation of percentage changes in attention allocation. To ensure robustness, I examine whether results persist using binary indicators that equal one if the corresponding IAFM measure falls within the top two quintiles of the sample distribution in a given year, and zero otherwise.[24] This approach addresses concerns about functional form assumptions and extreme values while providing more intuitive interpretation. Table IA24 shows that my key findings remain intact under this alternative specification.

7.6 Could Attention Be Merely a Passive Sideshow?

An alternative interpretation of the findings is that the observed relationship between managerial attention and corporate policies reflects a purely *mechanical* transmission of market conditions—such as changes in Tobin's Q, sentiment, or interest rates—into firms' cost of capital or financing access, rather than managers actively processing market information. In this alternative "*attention-as-sideshow*" view, financial shocks affect firms through the primary-market channel *alone*, and managerial attention co-moves with those shocks as a *pure* passive by-product.

However, this mechanical explanation implies an empirical prediction that is not supported by the data. If attention merely passively reflected cost-of-capital fluctuations, its interaction with financial-market proxies should be insignificant once those market conditions are directly controlled for in the regression. In that case, attention would add no

[23] Figure IA2 illustrates the time-series variation in industry-level IAFM measures constructed using seed words. These measures follow a pattern similar to those based on an expanded dictionary, though they show a smaller disparity between the financial sector and other sectors. Also, since 2021, energy firms have increasingly focused on the equity market.

[24] The main conclusions hold when using alternative split points, including sample median, terciles, or quartiles.

incremental information: corporate investment and financing policies should be fully explained by Tobin's Q (for investment) and by equity market sentiment, Tobin's Q, or interest rates (for financing) alone. In contrast, across the preceding sections, I find the opposite: interaction terms between attention and these market variables remain positive and statistically significant, indicating that attention actively shapes how managers interpret and act on market signals rather than merely co-moving with them.

For investment policies in particular, this concern is further mitigated when I simultaneously include both equity-market and debt-market attention—together with their respective interactions with Tobin's Q and the firm's bond yield—in the regression, as shown in Section 5.3 and Table IA14. If one believes that attention to the debt market more likely captures variation in firms' financing capability—especially since bond yield directly reflects the firm's cost of debt—then controlling for debt-market attention and its interaction with bond yield should help absorb the mechanical financing-channel effects. Yet, the coefficient on the equity-market-attention interaction remains positive and significant, indicating that equity-market attention contains incremental informational value beyond financing capacity. Main results hold when I control for total implied costs of capital, as in Table IA19 Panel C.

A related concern is that past stock performance—omitted from my baseline regressions and shown in Table 7 to positively predict future attention—may be driving the main results. However, omitting past returns is problematic only if they *directly* affect investment–price sensitivity while attention serves purely as a passive sideshow. If instead market conditions influence corporate policies *through* attention, then controlling for past stock performance would introduce a "bad-control" problem by partialing out the very channel through which financial markets operate. Section 7.1 addresses this concern more directly by restricting the sample to firms that do not tap external capital markets, thereby shutting down the primary-market channel through which past returns might mechanically affect investment. Moreover, Table IA25 explicitly controls for past stock return and volatility, and the main results continue to hold.

To further rule out the possibility that attention merely reflects passive exposure to (higher-order) turbulent market conditions, in Table IA26, I separately measure managerial attention to financial-market volatility and liquidity and control for this component directly.

Even after accounting for this turbulence-driven attention, targeted equity- and debt-market attention continue to exert independent and significant effects on most investment, financing, and market-timing decisions, indicating that the effects of attention extend beyond mechanical responses to market stress.

In sum, the evidence is inconsistent with the view that managerial attention *purely* serves as a passive marker for firms' mechanical exposure to cost-of-capital shocks or market turbulence. While attention or exposure to market disruptions naturally affects investment and financing behavior, targeted attention to equity and debt markets exerts distinct, incremental effects beyond those exposures.

Furthermore, a key insight of this paper is to show that even when a primary-market channel operates, attention contributes an independent behavioral channel—consistent with Song and Stern (2025), who show that managerial inattention dampens firms' responses to monetary-policy shocks. For instance, as shown in Section 6.2, debt-market attention continues to predict managers' tendency to issue equity rather than debt when interest rates rise, beyond the direct effect of rate changes themselves. Similarly, for investment policies, Section 5.3 and Table IA14 show that when both equity- and debt-market attention, along with their respective interactions with Tobin's Q and bond yields, are included in the specification, the coefficient on bond yield captures the direct effect of financing conditions, while the negative debt-market-attention × bond-yield interaction implies that attentive managers adjust investment more promptly to changing borrowing costs. Table IA17 Panel C supports this interpretation, showing that debt-market attention indeed translates into greater investment expansion precisely by enabling managers to capitalize on lower borrowing costs. Together, these findings show that attention shapes firms' real responses to financial markets in ways that cannot be explained by a *purely* mechanical channel.

7.7 CEO Effects and Evidence of "Exogenous" Turnovers

A natural follow-up question in interpreting my findings is the extent to which attention to financial markets reflects individual managerial styles. I start by investigating whether individual CEOs exhibit consistent attention patterns across their tenures. Table IA27 presents a variance decomposition analysis that includes manager fixed effects in addition to the firm and industry-by-year fixed effects examined in Table 3. Manager-specific factors

contribute an incremental 5.7% and 3.2% of the variation in attention to equity and debt markets, respectively, beyond what is explained by firm and industry-by-year effects. This suggests that individual executives do bring distinctive styles to monitoring financial markets.

Next, I examine whether changes in firm-level attention around CEO turnovers affect corporate policies. To measure CEO-specific attention patterns, I calculate each CEO's tenure-specific attention as the equally-weighted average of IAFM scores across their entire tenure period. It provides a practical proxy for the attention level that characterizes each CEO's leadership period, assuming some persistence in managerial approach over time.

One concern of this approach is that tenure-specific attention patterns may be endogenously determined by factors such as endogenous matching between firms and CEOs, firm lifecycle effects, industry, or competitive positions.[25] I address this concern in two ways. First, I include firm and industry-by-year fixed effects in all specifications, which addresses mitigates endogenous matching based only on firm-specific characteristics or common industry shocks. Second, I focus on CEO turnovers where the transition timing is more likely to be exogenous to strategic considerations about attention patterns: cases where the incumbent CEO retires (defined as departing at age 65 or older). Following Custódio and Metzger (2014) and Jenter and Lewellen (2015), I argue that such turnovers are less likely to be driven by strategic considerations about optimal attention allocation, as the timing is largely determined by the outgoing CEO's age rather than firm's lifecycle-specific needs. For example, when a CEO reaches retirement age, the firm may not have access to the ideal successor in terms of attention to financial markets. This approach provides a cleaner test of whether changes in managerial attention to financial markets influence corporate policies.

Table IA28 examines whether CEO tenure–specific attention predicts firms' investment and financing behavior following CEO turnovers. Firms led by CEOs with higher tenure-average attention exhibit greater investment–price sensitivity and stronger responsiveness to financing needs. Consistent with market-timing behavior, high-attention

[25] For example, a CEO who begins their tenure during a crisis period may exhibit systematically different attention patterns compared to one who assumes leadership during stable conditions, making it difficult to disentangle manager-specific effects from circumstantial factors.

CEOs also make firms more responsive to equity market sentiment and firm-specific valuations, while effects related to interest rate sensitivity are statistically insignificant.

Table IA29 presents results restricted to cases where the predecessor CEO retires at age 65 or older. Several key results remain significant. High-attention successors continue to enhance investment-price sensitivity, with particularly large effects for capital expenditures (0.197 for CAPX and 0.611 for INVT when examining equity market attention, and 0.212 for CAPX and 1.016 for INVT when examining debt market attention). The effect of attention on the likelihood of tapping external capital markets remains positive and significant. However, the market timing results, except for responsiveness for firm-specific valuations, become statistically insignificant in this restricted sample, likely due to reduced statistical power.

Another limitation of measuring attention using tenure-averages is the look-ahead bias: future attention patterns may be influenced by outcomes that have not yet occurred when CEOs make their decisions in their early tenure. To address this concern, I conduct an additional robustness check in Table IA30 using a CEO's pre-tenure attention level, measured as the equally-weighted average of IAFM scores during their prior C-suite positions (across both current and prior firms) before assuming their current CEO role. This approach eliminates look-ahead bias but comes with severe data limitations, as it requires observing (both incumbent and incoming) managers in multiple high-level positions with measurable IAFM data (beginning only in 2007). The results show that, around "exogenous" turnovers, CEOs with higher attention backgrounds continue to enhance investment-price sensitivity. However, the financing and market timing results become largely insignificant.

Several important caveats apply to the analysis of this subsection. First, while the timing of a retiring CEO's departure may be plausibly exogenous, the board's choice of successor is not. Boards may strategically select CEOs whose attention patterns align with desired policy changes, creating a matching explanation for the observed relationships. Second, the severe sample restrictions required for clean identification limit the generalizability of findings to the broader population of CEO transitions.

However, *at the very least* the persistence of CEO tenure-specific effects even in the restricted retirement sample suggests that managerial attention serves as a *necessary* implementation mechanism. While a firm's industry and lifecycle may determine that it

should respond to market signals or time financing decisions around market conditions, actually executing these strategies requires managers who actively monitor market information. Without adequate attention to financial markets, firms may struggle to implement otherwise value-maximizing policies, creating a gap between optimal and realized strategies. These results are inconsistent with the alternative "*no-attention-needed*" or "*no-real-effects*" view, under which managers would pursue identical policies regardless of whether they attend to market prices, because financial markets play no real role in the decision-making process (e.g., prices merely reflect fundamentals already known to the firm).

7.8 IAFM Other Assets and Investment Decisions in the Energy Sector

Prior analyses focus on attention to equity and debt markets, where price signals are broadly relevant across firms. This section examines whether the role of attention depends on the economic relevance of the underlying price signal by exploiting natural variation across industries in which market prices are more closely tied to firms' business environments.

For energy firms, commodity prices—particularly oil and gas prices—provide more immediate and relevant information about investment opportunities than traditional equity market signals, given these firms' direct exposure to commodity price fluctuations (Gilje and Taillard, 2017; Shi and Zhang, 2024). Conversely, for non-energy firms, commodity price movements contain minimal information about core business fundamentals, even if such firms occasionally discuss commodity markets due to input costs or macroeconomic exposure. This contrast yields a prediction: attention to commodity markets should be associated with stronger investment responses to commodity price movements primarily for Energy firms.

To examine this industry-specific pattern, I develop the IAFM Other Assets measure using the same methodology as previous IAFM dimensions.[26] This measure captures firms'

[26] I start with 25 seed words (as shown in Table IA31 Panel A) including "commodity_price," "oil_price," and "future_market." Panel B shows that the most representative words demonstrate strong semantic coherence, with "commodity_market" (0.75) and "future_market" (0.74) exhibiting high similarity scores. The most frequent terms include "hedge" (18.44%), "commodity" (8.63%), and "oil_price" (8.35%), in line with the measure's focus on commodity markets. The IAFM Other Assets measure displays substantial industry variation consistent with economic intuition (Table IA31 Panel C). Energy firms exhibit the highest attention to commodity markets (mean = 12.77), followed by Utilities (8.15) and Chemicals (5.02). The measure also responds appropriately to market conditions: on average, a 10% increase in fuel prices predicts a 0.42% increase in commodity market attention the following year (Panel D). Figure IA3 provides further temporal validation. During the 2008 financial crisis, energy firms' attention rose from 12.41 to 14.61; amid the 2015 oil-price collapse, it climbed from 11.04 to 17.49; and following the COVID-19 shock in 2020, it increased from 10.42 to

attention to commodity, currency, and derivatives markets.[27] Table IA32 then tests whether Energy and non-Energy firms respond differently to various price signals when making investment decisions. For non-Energy firms, traditional equity and debt market attention significantly enhance investment-price sensitivity, consistent with the main results. However, Energy firms show no significant relationship between equity/debt market attention and investment-price sensitivity, suggesting these traditional financial market signals may be less relevant for their investment decisions. Instead, Energy firms show significant responsiveness to commodity price signals when they pay attention to commodity markets. The interaction between IAFM Other Assets and fuel price changes is positive and significant for Energy firms (1.50 for CAPX and 2.54 for INVT) but statistically insignificant for non-Energy firms.

These findings support the interpretation that firm policies respond to market signals when those signals are relevant for firms' underlying business environments. At a minimum, the analysis provides an out-of-sample perspective by examining a market setting distinct from the main analysis, showing that attention is an important factor in shaping how commodity price movements translate into producers' investment decisions. More broadly, these findings are inconsistent with a "*no-attention-needed"* view, under which managers would pursue identical policies regardless of whether they monitor market (or energy) prices because financial markets play no meaningful role in the decision-making process. Instead, the evidence suggests that without adequate attention to relevant price signals, firms may fail to implement otherwise value-maximizing responses to market conditions.

7.9 Managerial Attention and WPS

A remaining concern is that the estimated effects of managerial attention simply proxy for managers' interest in equity prices, as measured by the sensitivity of CEO WPS. Before addressing this concern empirically, it is important to clarify why these variables are

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14.47. Throughout 2007–2023, energy firms maintain attention levels three to four times higher than most other industries, consistent with their fundamental reliance on commodity signals.

[27] A key design choice is to construct the measure to capture broader discussions of commodity, currency, and derivatives markets, rather than focusing narrowly on oil price attention. This choice is motivated by two considerations. First, an index based solely on oil price discussions would assign zero or near-zero values to most non-Energy firms, limiting meaningful variation outside the Energy sector. Second, a broader measure reflects the fact that many non-Energy firms discuss commodity markets in different contexts—such as input costs, hedging activities, or macroeconomic exposure—while allowing commodity price movements to matter primarily for firms whose business opportunities are closely tied to these markets.

excluded from the baseline specifications. Conditioning on managerial wealth–price sensitivity creates a "bad control" problem if equity incentives affect corporate policies through increasing managers' incentives to monitor financial markets. Consistent with this mechanism, Section 4.2 shows that WPS is positively associated with IAFM. This relationship is theoretically expected: equity incentives raise the returns to paying attention, thereby channeling managers' limited attention toward financial markets. Under this interpretation, ownership incentives constitute one channel through which managerial attention is amplified—and through which financial markets exert real effects—rather than a competing explanation.

Nevertheless, Table IA33 directly explores this concern by augmenting the baseline investment and financing regressions with WPS (and its squared term), their interactions with market signals, and additional managerial characteristics (gender, tenure, age, and squared age). As expected under the channel interpretation above, several attention coefficients are attenuated once equity incentives are controlled for. Equity-market attention continues to predict total investment–price sensitivity and firms' preference for equity over debt financing when equity market sentiment is high. Both equity- and debt-market attention remain robust predictors of the unconditional likelihood of accessing external debt capital. By contrast, the effects of debt-market attention on investment, and the sensitivity of financing choices to equity prices through equity-market attention and to interest rates through debt-market attention, become statistically insignificant. In untabulated analyses, these conclusions remain qualitatively similar when I additionally control for the raw managerial ownership.

Together, these results support a complementary interpretation in which equity incentives shape the (personal) returns to paying attention, while attention governs how financial market information is translated into corporate investment and financing decisions. The attention effects that survive after controlling for WPS are consistent with broader market monitoring—such as attention to aggregate market conditions or credit market dynamics—that ownership-based incentives capture less fully.

8. Conclusion

This paper studies a missing behavioral mechanism behind the real effects of financial markets: managerial attention. While existing theories emphasize the informational role of prices, they implicitly assume that managers monitor and process market signals. By directly measuring managerial attention to financial markets using managers' own discussions during earnings calls, this paper makes that channel observable.

I develop a novel measure—the Index of Attention to Financial Markets (IAFM)—and document substantial heterogeneity in attention across firms, industries, and time. This dispersion implies that the link between financial markets and corporate policies is not uniform but mediated by the degree of managerial attentiveness. As such, heterogeneity in attention itself becomes a first-order source of heterogeneity in the real effects of financial markets—explaining why even seemingly identical market signals can elicit vastly different corporate responses across firms.

I then show that attention indeed serves as an important behavioral channel through which market information influences corporate decisions. Firms whose managers pay higher attention to financial markets exhibit greater investment-price sensitivity. Moreover, attention shapes financing decisions. Attentive managers are more likely to tap external capital when financing needs arise, and—conditional on issuing—allocate across debt and equity in a manner that reflects prevailing market conditions. Overall, the results show that financial markets affect real decisions not only because prices are useful (or informative), but because managers pay attention to them. By making managerial attention observable, this paper provides a new behavioral foundation for price feedback and market timing and helps explain heterogeneity in corporate investment and financing behavior.

References

Baker, M., & Wurgler, J. (2002). Market timing and capital structure. *The journal of finance*, *57*(1), 1-32.

Baker, M., & Wurgler, J. (2006). Investor sentiment and the cross-section of stock returns. *The journal of Finance*, *61*(4), 1645-1680.

Bakke, T. E., & Whited, T. M. (2010). Which firms follow the market? An analysis of corporate investment decisions. *The Review of Financial Studies*, *23*(5), 1941-1980.

Barber, B. M., & Odean, T. (2008). All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors. *The review of financial studies*, *21*(2), 785-818.

Begenau, J., & Salomao, J. (2019). Firm financing over the business cycle. *The Review of Financial Studies*, *32*(4), 1235-1274.
Bodnaruk, A., Loughran, T., & McDonald, B. (2015). Using 10-K text to gauge financial constraints. *Journal of Financial and Quantitative Analysis*, *50*(4), 623-646.
Bond, P., Edmans, A., & Goldstein, I. (2012). The real effects of financial markets. *Annu. Rev. Financ. Econ.*, *4*(1), 339-360.
Cao, S., Goldstein, I., He, J., & Zhao, Y. (2025). Market Feedback about Emerging Technologies. *Available at SSRN 5647291*.
Cao, S., Jiang, W., Yang, B., & Zhang, A. L. (2023). How to talk when a machine is listening: Corporate disclosure in the age of AI. *The Review of Financial Studies*, *36*(9), 3603-3642.
Chen, Q., Goldstein, I., & Jiang, W. (2007). Price informativeness and investment sensitivity to stock price. *The Review of Financial Studies*, *20*(3), 619-650.
Claus, J., & Thomas, J. (2001). Equity premia as low as three percent? Evidence from analysts' earnings forecasts for domestic and international stock markets. *The journal of finance*, *56*(5), 1629-1666.
Custódio, C., & Metzger, D. (2014). Financial expert CEOs: CEO′ s work experience and firm′ s financial policies. *Journal of financial economics*, *114*(1), 125-154.
Da, Z., Engelberg, J., & Gao, P. (2011). In search of attention. *The journal of finance*, *66*(5), 1461-1499.
Davis, J., & Gondhi, N. (2024). Learning in financial markets: implications for debt-equity conflicts. *The Review of Financial Studies*, *37*(5), 1584-1639.
Dessaint, O., Foucault, T., Frésard, L., & Matray, A. (2019). Noisy stock prices and corporate investment. *The Review of Financial Studies*, *32*(7), 2625-2672.
Easley, D., & O'hara, M. (1992). Time and the process of security price adjustment. *The Journal of finance*, *47*(2), 577-605.
Easley, D., Kiefer, N. M., O'hara, M., & Paperman, J. B. (1996). Liquidity, information, and infrequently traded stocks. *The Journal of Finance*, *51*(4), 1405-1436.
Easton, P. D. (2004). PE ratios, PEG ratios, and estimating the implied expected rate of return on equity capital. *The accounting review*, *79*(1), 73-95.
Edmans, A., Gabaix, X., & Landier, A. (2009). A multiplicative model of optimal CEO incentives in market equilibrium. *The Review of Financial Studies*, *22*(12), 4881-4917.
Edmans, A., Jayaraman, S., & Schneemeier, J. (2017). The source of information in prices and investment-price sensitivity. *Journal of Financial Economics*, *126*(1), 74-96.
Eskildsen, M., Ibert, M., Jensen, T. I., & Pedersen, L. H. (2024). In search of the true greenium. Available at SSRN 4744608.
Farre-Mensa, J., & Ljungqvist, A. (2016). Do measures of financial constraints measure financial constraints?. *The review of financial studies*, *29*(2), 271-308.
Foucault, T., & Frésard, L. (2012). Cross-listing, investment sensitivity to stock price, and the learning hypothesis. *The Review of Financial Studies*, *25*(11), 3305-3350.
Gebhardt, W. R., Lee, C. M., & Swaminathan, B. (2001). Toward an implied cost of capital. *Journal of accounting research*, *39*(1), 135-176.
Gelsomin, E., & Hutton, A. (2023). The learning hypothesis revisited: A discussion of sani, shroff and white (2023). *Journal of Accounting and Economics*, *76*(2-3), 101644.
Gilje, E. P., & Taillard, J. P. (2017). Does hedging affect firm value? Evidence from a natural experiment. *The Review of Financial Studies*, *30*(12), 4083-4132.

Goldstein, I., & Guembel, A. (2008). Manipulation and the allocational role of prices. *The Review of Economic Studies*, *75*(1), 133-164.
Goldstein, I., Ozdenoren, E., & Yuan, K. (2013). Trading frenzies and their impact on real investment. *Journal of Financial Economics*, *109*(2), 566-582.
Goldstein, I., & Yang, L. (2019). Good disclosure, bad disclosure. *Journal of Financial Economics*, *131*(1), 118-138.
Goldstein, I., & Yang, L. (2022). Commodity financialization and information transmission. *The Journal of Finance*, *77*(5), 2613-2667.
Goldstein, I., Liu, B., & Yang, L. (2025). Market feedback: evidence from the horse's mouth. University of Toronto-Rotman School of Management.
Gormsen, N. J., & Huber, K. (2024). *Firms' perceived cost of capital* (No. w32611). National Bureau of Economic Research.
Graham, J. R., Leary, M. T., & Roberts, M. R. (2015). A century of capital structure: The leveraging of corporate America. *Journal of financial economics*, *118*(3), 658-683.
Hadlock, C. J., & Pierce, J. R. (2010). New evidence on measuring financial constraints: Moving beyond the KZ index. *The review of financial studies*, *23*(5), 1909-1940.
Hart, O. D. (1983). The market mechanism as an incentive scheme. *The Bell Journal of Economics*, 366-382.
Harris, Z. S. (1954). Distributional structure. *Word*, *10*(2-3), 146-162.
Henderson, B. J., Jegadeesh, N., & Weisbach, M. S. (2006). World markets for raising new capital. *Journal of Financial Economics*, *82*(1), 63-101.
Hennessy, C. A., & Whited, T. M. (2005). Debt dynamics. *The journal of finance*, *60*(3), 1129-1165.
Hirshleifer, D., Subrahmanyam, A., & Titman, S. (2006). Feedback and the success of irrational investors. *Journal of Financial Economics*, *81*(2), 311-338.
Hoberg, G., & Maksimovic, V. (2015). Redefining financial constraints: A text-based analysis. *The Review of Financial Studies*, *28*(5), 1312-1352.
Hoberg, G., & Phillips, G. (2016). Text-based network industries and endogenous product differentiation. *Journal of political economy*, *124*(5), 1423-1465.
Huang, R., & Ritter, J. R. (2009). Testing theories of capital structure and estimating the speed of adjustment. *Journal of Financial and Quantitative analysis*, *44*(2), 237-271.
Jenter, D., & Lewellen, K. (2015). CEO preferences and acquisitions. *The Journal of Finance*, *70*(6), 2813-2852.
Jung, K., Kim, Y. C., & Stulz, R. (1996). Timing, investment opportunities, managerial discretion, and the security issue decision. *Journal of financial economics*, *42*(2), 159-185.
Kahneman, D. (1973). Attention and Effort. Englewood Cliffs, NJ: Prentice-Hall.
Kaplan, S. N., & Zingales, L. (1997). Do investment-cash flow sensitivities provide useful measures of financing constraints?. *The quarterly journal of economics*, *112*(1), 169-215.
Kwan, A., Lin, T. C., Liu, P. Y., & Gurun, U. G. (2024). Managerial Learning from Decoding Noisy Stock Prices: New (s) Evidence. *Available at SSRN 4253237*.
Lamont, O. A., & Stein, J. C. (2006). Investor sentiment and corporate finance: Micro and macro. *American Economic Review*, *96*(2), 147-151.
Levy, O., & Goldberg, Y. (2014). Neural word embedding as implicit matrix factorization. *Advances in neural information processing systems*, *27*.

Li, K., Mai, F., Shen, R., & Yan, X. (2021). Measuring corporate culture using machine learning. *The Review of Financial Studies*, *34*(7), 3265-3315.
Linn, M., & Weagley, D. (2024). Uncovering financial constraints. *Journal of Financial and Quantitative Analysis*, *59*(6), 2582-2617.
Loughran, T., & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *The Journal of finance*, *66*(1), 35-65.
Lowry, M. (2003). Why does IPO volume fluctuate so much?. *Journal of Financial economics*, *67*(1), 3-40.
Luo, Y. (2005). Do insiders learn from outsiders? Evidence from mergers and acquisitions. *The Journal of Finance*, *60*(4), 1951-1982.
Ma, Y. (2019). Nonfinancial firms as cross-market arbitrageurs. *The Journal of Finance*, *74*(6), 3041-3087.
Malmendier, U., Tate, G., & Yan, J. (2011). Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. *The Journal of finance*, *66*(5), 1687-1733.
Manning, C. D., Surdeanu, M., Bauer, J., Finkel, J. R., Bethard, S., & McClosky, D. (2014, June). The Stanford CoreNLP natural language processing toolkit. In *Proceedings of 52nd annual meeting of the association for computational linguistics: system demonstrations* (pp. 55-60).
Mikolov, T., Sutskever, I., Chen, K., Corrado, G. S., & Dean, J. (2013). Distributed representations of words and phrases and their compositionality. *Advances in neural information processing systems*, *26*.
Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of financial economics*, *20*, 293-315.
Neyland, J. (2020). Love or money: The effect of CEO divorce on firm risk and compensation. *Journal of Corporate Finance*, *60*, 101507.
Ohlson, J. A., & Juettner-Nauroth, B. E. (2005). Expected EPS and EPS growth as determinants of value. *Review of accounting studies*, *10*(2), 349-365.
Peng, L., & Xiong, W. (2006). Investor attention, overconfidence and category learning. *Journal of Financial Economics*, *80*(3), 563-602.
Shi, Z., & Zhang, S. (2024). Oil-Driven Greenium. *Fisher College of Business Working Paper*, (2024-03), 24.
Sockin, M., & Xiong, W. (2015). Informational frictions and commodity markets. *The Journal of Finance*, *70*(5), 2063-2098.
Song, W., & Stern, S. (2024). Firm inattention and the efficacy of monetary policy: A text-based approach. Review of Economic Studies, rdae102.
Subrahmanyam, A., & Titman, S. (1999). The going-public decision and the development of financial markets. *The Journal of Finance*, *54*(3), 1045-1082.
Whited, T. M., & Wu, G. (2006). Financial constraints risk. *The review of financial studies*, *19*(2), 531-559.
Ye, M., Zheng, M. Y., & Zhu, W. (2023). The effect of tick size on managerial learning from stock prices. *Journal of Accounting and Economics*, *75*(1), 101515.
Yermack, D. (2014). Tailspotting: Identifying and profiting from CEO vacation trips. *Journal of financial economics*, *113*(2), 252-269.

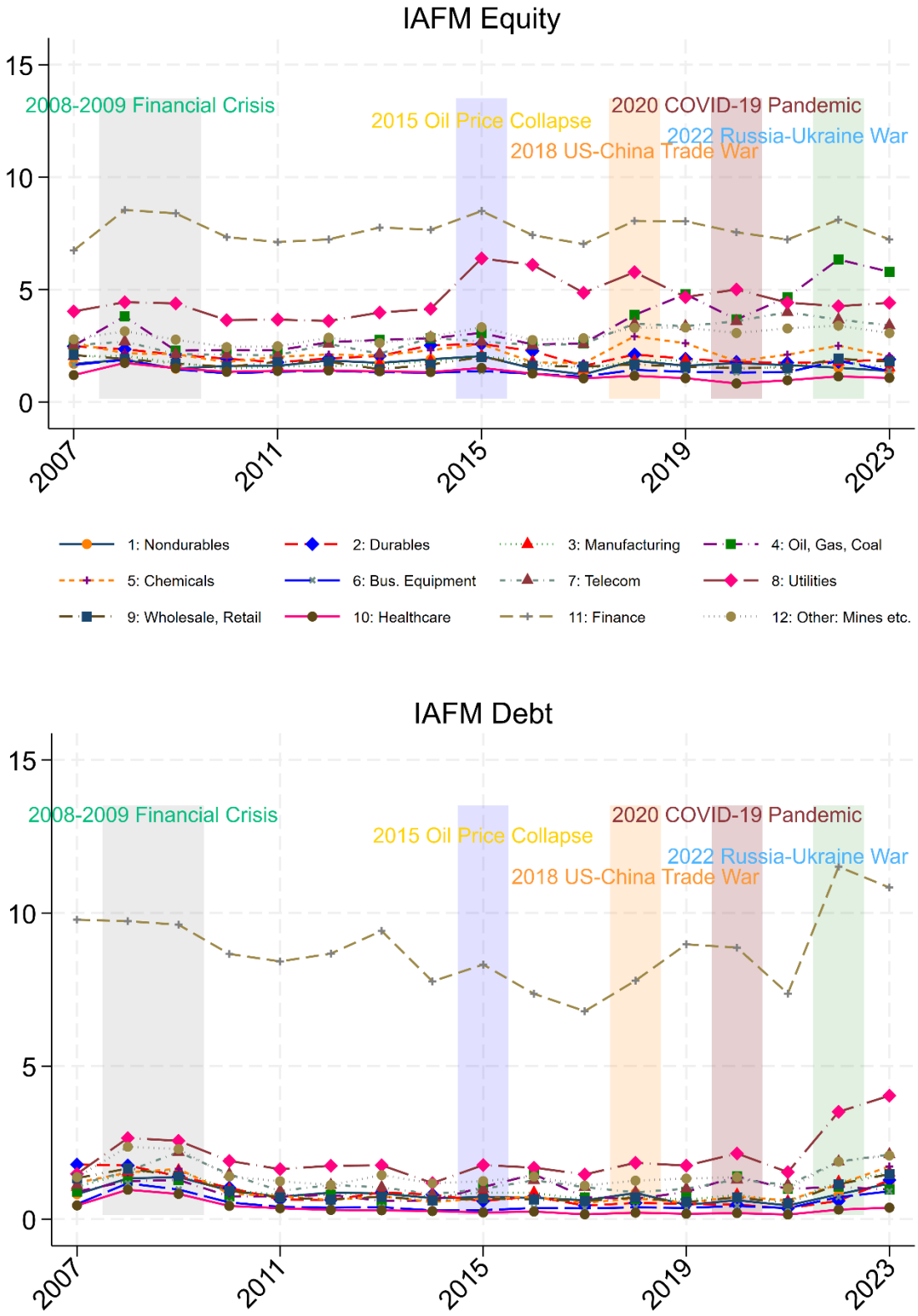


Fig 1: IAFM Measures Across 12 Fama-French Industries Over Time. This figure shows the two tf-idf IAFM measures (IAFM Equity and IAFM Debt) over time for the 12 Fama-French industries. The y-axis indicates the average IAFM measure across firms within each industry, while the x-axis represents the years from 2007 to 2023.

Table 1. Seed Words

This table presents the seed words used to construct the expanded dictionaries for each dimension of the IAFM framework. Each dimension contains 25 seed words. IAFM Equity focuses on equity market-related phrases in earnings calls. IAFM Debt focuses on debt market-related phrases in earnings calls.

Equity	Debt
closing_price	bond_market
equity_market	bond_price
equity_performance	bond_yield
equity_price	borrowing_cost
equity_return	corporate_bond
equity_valuation	credit_market
equity_value	credit_spread
market_cap	credit_yield
market_reaction	debt_market
market_valuation	gilt_market
market_value	gilt_yield
mispriced	government_bond
overvalued	interest_rate
price_-_to_-_book_ratio	interest_rate_risk
price_target	investment_-_grade_bond
share_valuation	loan_market
share_price	municipal_bond
shareholder_return	sovereign_bond
shareholder_value	t_-_bill
stock_market	treasury_bill
stock_performance	treasury_bond
stock_price	treasury_rate
stock_return	treasury_yield
stock_valuation	yield_curve
undervalued	yield_spread

Table 2. Summary Statistics

This table reports summary statistics for firm-level IAFM measures and other characteristics. IAFM Equity and IAFM Debt are TF-IDF-based measures that capture the frequency of equity-related and debt-related phrases, respectively, in earnings call transcripts. All measures are averaged across all quarterly earnings calls within each calendar year. The sample for Panel A includes 7,673 unique U.S. public firms over the period 2007 to 2023, whereas the sample for Panel B exclude financial firms and utilities. Panel C reports summary statistics of non-IAFM firm characteristics, calculated for firms that have non-missing IAFM measures and are not financial firms or utilities. Table A2 provides detailed variable definitions.

	Mean	STD	25%	Median	75%	N
Panel A: IAFM Measures for All U.S. Public Firms						
IAFM Equity	3.05	4.44	0.35	1.41	3.71	60820
IAFM Debt	2.29	5.04	0	0.34	1.93	60820
Panel B: IAFM Measures for U.S. Public Firms Excluding Financial Firms and Utilities						
IAFM Equity	1.93	2.86	0.22	1.01	2.47	47812
IAFM Debt	0.81	1.74	0	0	0.94	47812
Panel C: Non-IAFM Firm Characteristics, Excluding Financial Firms and Utilities						
Year-End Tobin's Q	2.38	2.31	1.17	1.64	2.62	45344
Total Assets ($'mil)	6889.39	19466.22	263.9	1034.43	3986.85	43627
Cash (%)	22.85	24.10	4.88	13.43	32.82	43626
Leverage (%)	25.1	22.44	4.72	21.69	38.52	43435
Sales Growth (%)	14.47	49.00	-3.03	6.82	19.75	52129
Dividend Yield (%)	1.92	8.50	0	0	2.07	60820
Inst. Ownership (%)	51.2	37.61	3.67	60.87	86.26	60820
WPS (X 10^3)	0.03	0.10	0	0	0.01	15666
Mgr. Ownership	0.02	0.05	0	0	0.01	19909
Finance-Expert CEO	0.33	0.47	0	0	1	39963
Bond Yield	0.05	0.04	0.03	0.05	0.06	7573
CAPX (%)	4.98	6.54	1.34	2.9	5.89	43576
INVT (%)	4.91	13.12	0	2.49	7.38	43613
Net Equity Issue Indicator	0.42	0.49	0	0	1	40394
Net Debt Issue Indicator	0.34	0.47	0	0	1	42266
Equity Issue vs Debt Issue	0.59	0.49	0	1	1	19672
NFD	0.08	0.30	-0.04	0	0.07	55519
R&Ds (%)	5.87	11.33	0	0.15	6.76	47812
HHI(SIC 3-digit Industry Sales)	0.19	0.18	0.06	0.13	0.25	47807
Insider Trading Indicator	0.5	0.50	0	1	1	46305
Insider Trading Intensity	2.56	11.38	0.14	0.53	1.77	23304
LW (2024) Financial Constraint	-0.1	0.58	-0.46	-0.19	0.16	38986
PIN (SIC 3-digit)	0.17	0.03	0.15	0.17	0.19	44596

Table 3. Variance Decomposition of IAFM Measures

This table presents the *incremental* R^2 (%) from adding a specific set of fixed effects to firm-year level regressions. IAFM Equity (Column (1)) and IAFM Debt (Column (2)) are TF-IDF-based measures that capture the frequency of equity-related and debt-related phrases, respectively, in earnings call transcripts. All measures are averaged across all quarterly earnings calls within each calendar year. The sample period is 2007-2023.

Dep. Var.: IAFM Dimension:	(1) Equity	(2) Debt
Year FE	0.28%	0.64%
Industry FE	38.12%	44.77%
Industry × Year FE	3.2%	2.9%
Firm FE	30.4%	33.9%
Residual Firm × Year Variation	28%	17.79%
Sum	100%	100%

Table 4. Industry Distribution of IAFM Equity and IAFM Debt
This table presents firm-level IAFM measures across the 12 Fama-French Industries, classified using four-digit SIC codes. Industries are ranked by the average firm-year IAFM score, which is based on a TF-IDF approach capturing the frequency of financial-market-related phrases in earnings calls. IAFM Equity (Panel A) and IAFM Debt (Panel B), respectively, measures the frequency of phrases related to equity and debt. All IAFM measures are computed at the firm-year level by averaging across all quarterly earnings calls within each calendar year. The sample period is 2007-2023. Variable definitions are provided in Table A2.

Panel A: IAFM Equity				
Industry (12 Fama-French Industries)	Mean	STD	Median	N
11 (Finance)	7.67	6.55	5.76	10992
8 (Utilities)	4.61	4.31	3.47	1671
4 (Oil, Gas, and Coal Extraction and Products)	3.38	3.98	2.10	3074
12 (Other: Mines, Construction, Building Materials, Trans, Hotels, Bus Serv, Entertainment)	2.98	4.09	1.59	8257
7 (Telephone and Television Transmission)	2.80	3.51	1.74	1800
5 (Chemicals and Allied Products)	2.18	2.63	1.39	1501
2 (Consumer Durables: Cars, TVs, Furniture, Household Appliances)	2.02	2.64	1.26	1410
3 (Manufacturing: Machinery, Trucks, Planes, Off Furn, Paper, Com Printing)	1.71	2.26	1.04	5107
9 (Wholesale, Retail, and Some Services (Laundries, Repair Shops))	1.71	2.41	0.95	5155
1 (Consumer Nondurables: Food, Tobacco, Textiles, Apparel, Leather, Toys)	1.66	2.08	1.03	2405
6 (Business Equipment: Computers, Software, and Electronic Equipment)	1.41	2.06	0.70	11517
10 (Healthcare, Medical Equipment, and Drugs)	1.22	2.00	0.48	7931
Panel B: IAFM Debt				
Industry (12 Fama-French Industries)	Mean	STD	Median	N
11 (Finance)	8.77	8.62	5.88	10992
8 (Utilities)	2.03	2.89	1.04	1671
12 (Other: Mines, Construction, Building Materials, Trans, Hotels, Bus Serv, Entertainment)	1.46	2.70	0.55	8257
7 (Telephone and Television Transmission)	1.26	1.82	0.57	1800
3 (Manufacturing: Machinery, Trucks, Planes, Off Furn, Paper, Com Printing)	0.94	1.61	0.34	5107
4 (Oil, Gas, and Coal Extraction and Products)	0.92	1.60	0.34	3074
5 (Chemicals and Allied Products)	0.87	1.33	0.34	1501
9 (Wholesale, Retail, and Some Services (Laundries, Repair Shops))	0.87	1.66	0.23	5155
1 (Consumer Nondurables: Food, Tobacco, Textiles, Apparel, Leather, Toys)	0.82	1.64	0.23	2405
2 (Consumer Durables: Cars, TVs, Furniture, Household Appliances)	0.80	1.39	0.23	1410
6 (Business Equipment: Computers, Software, and Electronic Equipment)	0.52	1.42	0.00	11517
10 (Healthcare, Medical Equipment, and Drugs)	0.32	0.85	0.00	7931

Table 5. Managerial Equity Ownership

This table reports regression results investigating whether managerial ownership predicts firm-level attention to financial markets. The dependent variable is the tf-idf measure of IAFM Equity for Columns (1) and (3), and IAFM Debt for Columns (2) and (4). In Columns (1) and (2), the main independent variables are the scaled wealth–performance sensitivity (WPS (X 10^3)) and its squared term (WPS (X 10^3)^2). WPS measures dollar change in CEO wealth for a one percentage point change in firm value, divided by annual pay as in Edmans, Gabaix, and Landier (2009). In Columns (3) and (4), the main independent variables are managerial ownership (Mgr. Ownership) and its squared term (Mgr. Ownership^2). Control variables include end-of-year Tobin's Q, firm size (ln(Assets)), cash holdings, leverage, sales growth, dividend yield, and institutional ownership. Firm and 3-digit industry-by-year fixed effects are included. All independent variables are lagged by one year. The sample period is 2007-2023. Standard errors are clustered at the 3-digit industry-by-year level. T-statistics are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Dep. Var.: Ln(1+IAFM)	(1)	(2)	(3)	(4)
Dimension:	Equity	Debt	Equity	Debt
WPS (× 10^3)	0.594**	-0.166		
	(2.362)	(-0.815)		
WPS (× 10^3)^2	-0.757***	0.103		
	(-2.593)	(0.424)		
Mgr. Ownership			1.664***	1.067**
			(3.342)	(2.530)
Mgr. Ownership^2			-5.202***	-4.269***
			(-2.700)	(-2.822)
Year-End Q	-0.0153**	0.0100**	-0.0187***	0.000220
	(-2.512)	(2.253)	(-3.468)	(0.0780)
Ln(Total Assets)	0.0382**	0.0545***	0.0501***	0.0498***
	(2.220)	(4.206)	(3.791)	(4.932)
Cash	0.000382	0.00116**	0.000402	0.00104**
	(0.576)	(2.342)	(0.733)	(2.478)
Leverage	-0.00137**	0.00295***	-0.00119***	0.00258***
	(-2.556)	(6.627)	(-2.926)	(6.953)
Sales Growth	0.000219	-0.000191	0.000212	-0.000169*
	(1.079)	(-1.470)	(1.524)	(-1.663)
Dividend Yield	0.000319	0.000540	-0.000439	0.000600
	(0.267)	(0.449)	(-0.296)	(0.468)
Inst. Ownership	0.000205	-0.000340	-0.000136	-9.40e-05
	(0.627)	(-1.343)	(-0.526)	(-0.460)
Observations	14,647	14,647	18,411	18,411
Adj. R^2	0.327	0.442	0.350	0.449
Firm FE	Yes	Yes	Yes	Yes
Industry-by-Year FE	Yes	Yes	Yes	Yes

Table 6. Finance-Expert CEOs

This table reports regression results investigating whether having a finance-expert CEO predicts firm-level attention to financial markets. The dependent variable is the tf-idf measure of IAFM Equity for Columns (1), (3), and (5), and IAFM Debt for Columns (2), (4) and (6). The main independent variables are the finance-expert CEO indicator. Control variables include end-of-year Tobin's Q, firm size (ln(Assets)), cash holdings, leverage, sales growth, dividend yield, and institutional ownership. I additionally control for the gender, tenure, age, and squared age of the CEO. 3-digit industry-by-year fixed effects are included for Columns (1)-(6), and Columns (5) and (6) additionally include firm effects. All independent variables are lagged by one year. The sample period is 2007-2023. Standard errors are clustered at the 3-digit industry-by-year level. T-statistics are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Dep. Var.: Ln(1+IAFM)	(1)	(2)	(3)	(4)	(5)	(6)
Dimension:	Equity	Debt	Equity	Debt	Equity	Debt
Finance-Expert CEO	0.0878***	0.0385***	0.0875***	0.0417***	0.0565***	0.0331***
	(10.82)	(6.273)	(10.59)	(6.749)	(4.695)	(3.607)
Female CEO			-0.0352**	-0.0330***	-0.00722	-0.0622***
			(-2.264)	(-2.843)	(-0.296)	(-3.360)
CEO Tenure			-5.78e-05	0.00180***	0.000728	0.000549
			(-0.0916)	(3.998)	(0.757)	(0.754)
CEO Age			-0.00116	0.00552	0.00339	0.00589
			(-0.224)	(1.539)	(0.458)	(1.055)
CEO Age Squared			9.84e-06	-4.51e-05	-2.90e-05	-4.97e-05
			(0.218)	(-1.436)	(-0.455)	(-1.022)
Observations	33,453	33,453	33,416	33,416	32,705	32,705
Adj. R^2	0.147	0.276	0.147	0.277	0.382	0.460
Firm FE	No	No	No	No	Yes	Yes
Industry-by-Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 7. Equity and Debt Markets Performance

This table reports regression results investigating whether equity and debt markets performance predict firm-level attention to financial markets. The dependent variable is IAFM Equity for Column (1), and IAFM Debt for Column (2). For Panel A, the main independent variables are the firm-level equity return over the past calendar year and the annualized volatility of daily firm-level return. For Panel B, they are the market-wide equity return over the past calendar year and the annualized volatility of daily market-wide returns. For Panel C, the main independent variables include the annual rate of change and volatility in the 7-year U.S. Treasury yield over the past calendar year. The annual rate of change is the annual change in the yield divided by the previous year end's yield. Annual volatility in yield is the standard deviation of daily rate of change in yield. For Panel D, the main independent variables include the firm-level bond yield and its volatility over the past calendar year. Analysis in Panel D restricts to observations with at least one publicly tradable bond. Control variables include end-of-year Tobin's Q, firm size (log of assets), cash holdings, leverage, sales growth, dividend yield, and institutional ownership. Returns, return volatility, interest rate change, interest rate change volatility, bond yield and bond yield volatility are all expressed in actual number (e.g., 1 unit = 100% change) for easier interpretability, not in percentage form. All explanatory variables are lagged by one year. Firm fixed effects are included across Panels A, B, and C, whereas Panel A additionally includes 3-digit industry-by-year fixed effects. Panel D includes 3-digit industry-by-year fixed effects only. The sample period is 2007-2023. Standard errors are clustered at the 3-digit industry-by-year level. T-statistics are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Dep. Var.: Ln(1+IAFM)	(1)	(2)
Dimension:	Equity	Debt
Panel A: Firm-Level Equity Performance		
Firm-Level 1-Year Equity Return	0.0292***	0.0134*
	(3.214)	(1.771)
Firm-Level Equity Return Volatility	-1.945***	-0.324
	(-3.910)	(-0.826)
Observations	26,851	26,851
Adj. R^2	0.424	0.450
Firm FE	Yes	Yes
Industry-by-Year FE	Yes	Yes
Panel B: Market-Wide Equity Performance		
Market-Wide 1-Year Equity Return	-0.0535***	-0.00135
	(-2.861)	(-0.0840)
Market-Wide Return Volatility	-1.176*	7.811***
	(-1.837)	(10.01)
Observations	39,349	39,349
Adj. R^2	0.401	0.410
Firm FE	Yes	Yes
Industry-by-Year FE	No	No

Dep. Var.: Ln(1+IAFM)	(1)	(2)
Dimension:	Equity	Debt
Panel C: Interest Rate Movements		
Δ in Interest Rate	0.00452	0.0480***
	(0.628)	(7.207)
Volatility(Δ in Interest Rate)	-0.381***	-0.420***
	(-3.728)	(-4.228)
Observations	39,349	39,349
Adj. R^2	0.401	0.406
Firm FE	Yes	Yes
Industry-by-Year FE	No	No
Panel D: Credit Spread		
Bond Yield	-0.915***	1.159***
	(-2.623)	(3.102)
Volatility(Bond Yield)	95.07	64.44
	(0.809)	(0.638)
Observations	6,322	6,322
Adj. R^2	0.160	0.258
Firm FE	No	No
Industry-by-Year FE	Yes	Yes

Table 8. Investment-Price Sensitivity

This table presents regression results examining the effect of IAFM on investment-price sensitivity. The dependent variable is CAPX for Panel A and INVT for Panel B. The main independent variable is the interaction term between log-transformed IAFM measures and year-end Tobin's Q. Columns (1) and (3) use the tf-idf measure of IAFM Equity. Columns (2) and (4) use the tf-idf measure of IAFM Debt. Control variables include end-of-year Tobin's Q, firm size (log of assets), cash holdings, leverage, sales growth, dividend yield, and institutional ownership. 3-digit industry-by-year fixed effects are included for Columns (1)-(4), and Columns (3) and (4) additionally include firm effects. The sample period is 2008-2023. Standard errors are clustered at the 3-digit industry-by-year level. T-statistics are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

	(1)	(2)	(3)	(4)
Proxy for IAFM:	Equity	Debt	Equity	Debt
Panel A: Dep. Var.: CAPX (%)				
Ln(1+IAFM) × Year-End Q	0.0275	0.131***	0.0633***	0.0938***
	(0.968)	(2.964)	(2.891)	(2.670)
Ln(1+IAFM)	-0.275***	-0.528***	-0.164**	-0.307***
	(-3.748)	(-4.616)	(-2.507)	(-3.256)
Year-End Q	0.327***	0.316***	0.343***	0.363***
	(10.54)	(12.95)	(10.45)	(11.20)
Observations	36,754	36,754	35,885	35,885
Adj. R^2	0.409	0.409	0.680	0.680
Firm FE	No	No	Yes	Yes
Industry-by-Year FE	Yes	Yes	Yes	Yes
Panel B: Dep. Var.: INVT (%)				
Ln(1+IAFM) × Year-End Q	0.129**	0.201**	0.247***	0.269**
	(2.034)	(2.121)	(3.624)	(2.455)
Ln(1+IAFM)	-0.422**	-0.438*	-0.456**	-0.832***
	(-2.458)	(-1.693)	(-2.357)	(-2.677)
Year-End Q	0.626***	0.662***	0.838***	0.930***
	(10.03)	(12.09)	(10.38)	(11.23)
Observations	36,785	36,785	35,919	35,919
Adj. R^2	0.162	0.162	0.290	0.289
Firm FE	No	No	Yes	Yes
Industry-by-Year FE	Yes	Yes	Yes	Yes

Table 9. Financing Policies: Whether Tapping External Financing by Source

This table presents regression results examining the effect of IAFM on decisions to tap external financing or not. The dependent variable is whether tapping equity financing (i.e., equal to one if positive net equity issuance and zero otherwise) for Panel A and whether tapping debt financing (i.e., equal to one if positive net debt issuance and zero otherwise) for Panel B. The main independent variable is the interaction term between log-transformed IAFM measures and NFD. Control variables include end-of-year Tobin's Q, firm size (log of assets), cash holdings, leverage, sales growth, dividend yield, and institutional ownership. Across both panels, 3-digit industry-by-year fixed effects are included for Columns (1)-(3), and Columns (4)-(6) additionally include firm effects. All independent variables are lagged by one year. The sample period is 2008-2023. Standard errors are clustered at the 3-digit industry-by-year level. T-statistics are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Panel A: Effect of IAFM on Whether Tapping Equity Financing

Dep. Var.: Net Equity Issue Indicator	(1)	(2)	(3)	(4)	(5)	(6)
Ln(1+IAFM Equity) × NFD	0.0553***		0.0399***	0.0641***		0.0522***
	(3.760)		(2.844)	(4.663)		(3.834)
Ln(1+IAFM Equity)	-0.0448***		-0.0439***	-0.0208***		-0.0208***
	(-10.81)		(-10.56)	(-4.695)		(-4.701)
Ln(1+IAFM Debt) × NFD		0.143***	0.130***		0.116***	0.0976***
		(4.762)	(4.415)		(3.960)	(3.330)
Ln(1+IAFM Debt)		-0.0145***	-0.00527		0.000993	0.00368
		(-2.682)	(-0.984)		(0.166)	(0.613)
NFD	0.333***	0.343***	0.319***	0.204***	0.224***	0.192***
	(14.20)	(16.25)	(13.42)	(10.05)	(11.51)	(9.416)
Observations	33,981	33,981	33,981	33,073	33,073	33,073
Adj. R^2	0.223	0.221	0.224	0.428	0.427	0.428
Firm FE	No	No	No	Yes	Yes	Yes
Industry-by-Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Panel B: Effect of IAFM on Whether Tapping Debt Financing

Dep. Var.: Net Debt Issue Indicator	(1)	(2)	(3)	(4)	(5)	(6)
Ln(1+IAFM Equity) × NFD	0.0906***		0.0383**	0.104***		0.0541**
	(4.492)		(2.034)	(4.657)		(2.534)
Ln(1+IAFM Equity)	0.00774*		0.0101**	0.00221		0.00456
	(1.848)		(2.441)	(0.435)		(0.904)
Ln(1+IAFM Debt) × NFD		0.507***	0.493***		0.487***	0.468***
		(10.62)	(10.37)		(10.27)	(10.11)
Ln(1+IAFM Debt)		-0.00601	-0.00806		-0.00906	-0.00907
		(-1.147)	(-1.528)		(-1.418)	(-1.418)
NFD	0.456***	0.428***	0.404***	0.477***	0.455***	0.422***
	(12.84)	(14.40)	(11.90)	(11.69)	(13.70)	(10.94)
Observations	35,534	35,534	35,534	34,651	34,651	34,651
Adj. R^2	0.191	0.202	0.202	0.261	0.269	0.270
Firm FE	No	No	No	Yes	Yes	Yes
Industry-by-Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 10. Financing Policies: External Financing Intensity by Source, Conditional on Firm-Level Valuation, Equity Market Sentiment, and Interest Rates

This table examines how financial market attention (IAFM) affects firms' choice between equity and debt financing, conditional on market conditions and firm characteristics. The sample includes firm-year observations where firms raised external financing from a single source (either equity or debt only). The dependent variable equals one if the firm issued net equity with non-positive net debt issuance, and zero if the firm issued net debt with non-positive net equity issuance. Panel A tests whether equity market attention interacts with equity market sentiment (Baker and Wurgler (2006) index, orthogonalized to six macroeconomic conditions) and firm valuation level (Tobin's Q) to predict financing choice. Panel B examines whether debt market attention interacts with Treasury yields, while equity market attention interacts with Tobin's Q. The main independent variables are interaction terms between log-transformed IAFM indices, NFD, and the respective market condition variables. Annual changes in Treasury yield are measured using annual changes in the yield divided by the previous year end's yield, and are expressed in real units, instead of percent changes (e.g., 1 unit = 100% change). Control variables include end-of-year Tobin's Q, firm size (log of assets), cash holdings, leverage, sales growth, dividend yield, and institutional ownership. 3-digit industry-by-year fixed effects and firm effects are included. All independent variables are lagged by one year. The sample period is 2008-2023. Standard errors are clustered at the 3-digit industry-by-year level. T-statistics are reported in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Panel A: Choice of Financing Source in Response to Changes in Equity Market Sentiment

Dep. Var.: Equity Issue vs Debt Issue	(1)	(2)
Ln(1+IAFM Equity) × NFD × Δ in Equity Market Sentiment	0.0154**	
	(2.152)	
Ln(1+IAFM Equity) × Δ in Equity Market Sentiment	0.00157	
	(0.630)	
NFD × Δ in Equity Market Sentiment	-0.00474	
	(-0.606)	
Ln(1+IAFM Equity) × NFD × Equity Market Sentiment		0.0990***
		(3.426)
Ln(1+IAFM Equity) × Equity Market Sentiment		-0.00674
		(-0.740)
NFD × Equity Market Sentiment		-0.0472*
		(-1.667)
Ln(1+IAFM Equity) × NFD × Year-End Q	0.0171***	0.0180***
	(3.173)	(3.411)
Ln(1+IAFM Equity) × NFD	-0.0873***	-0.0981***
	(-3.132)	(-3.423)
Ln(1+IAFM Equity) × Year-End Q	-0.000349	-4.63e-05
	(-0.102)	(-0.0136)
NFD × Year-End Q	0.0122***	0.0120***
	(3.757)	(3.641)
Ln(1+IAFM Equity)	-0.0120	-0.0139
	(-1.091)	(-1.278)
NFD	-0.242***	-0.240***
	(-6.792)	(-6.610)
Year-End Q	-0.00211	-0.00236
	(-0.816)	(-0.912)
Observations	14,586	14,586
Adj. R^2	0.579	0.579
Firm FE	Yes	Yes
Industry-by-Year FE	Yes	Yes

Panel B: Choice of Financing Source in Response to Changes in Interest Rates

Dep. Var.: Equity Issue vs Debt Issue	(1)	(2)
Ln(1+IAFM Debt) × NFD × Δ in Interest Rate	0.111*	
	(1.890)	
Ln(1+IAFM Debt) × Δ in Interest Rate	-2.09e-05	
	(-0.00185)	
NFD × Δ in Interest Rate	-0.0365*	
	(-1.880)	
Ln(1+IAFM Debt) × NFD × Interest Rate		4.013
		(0.757)
Ln(1+IAFM Debt) × Interest Rate		0.473
		(0.540)
NFD × Interest Rate		-1.186
		(-0.772)
Ln(1+IAFM Equity) × NFD × Year-End Q	0.0138**	0.0136**
	(2.542)	(2.572)
Ln(1+IAFM Debt) × NFD	-0.313***	-0.390***
	(-6.726)	(-3.149)
Ln(1+IAFM Equity) × NFD	-0.0555**	-0.0516*
	(-1.963)	(-1.847)
Ln(1+IAFM Equity) × Year-End Q	6.24e-05	-1.09e-05
	(0.0184)	(-0.00324)
NFD × Year-End Q	0.0102***	0.0105***
	(3.143)	(3.234)
Ln(1+IAFM Debt)	0.0101	-0.000207
	(1.133)	(-0.00979)
Ln(1+IAFM Equity)	-0.0154	-0.0155
	(-1.442)	(-1.445)
NFD	-0.199***	-0.178***
	(-6.110)	(-4.069)
Year-End Q	-0.00201	-0.00204
	(-0.777)	(-0.787)
Observations	14,586	14,586
Adj. R^2	0.582	0.582
Firm FE	Yes	Yes
Industry-by-Year FE	Yes	Yes