The Advertising Disclosure Choice*

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February 22, 2025

ABSTRACT

We investigate why some firms, even those with substantial advertising activity, often do not specify these expenditures in their financial statements. Prior research suggests that this practice could maximize shareholder value by protecting proprietary information. Alternatively, managers might withhold advertising expenditures to obscure performance and manage market expectations. Using a comprehensive sample of US public firms, we find that non-specification of advertising creates significant information friction. Unspecified advertising firms face more advertising-related questions during conference calls than their disclosing peers. Yet, their managers provide limited responses to these questions. Analysts' forecasts for unspecified advertising firms show greater forecast dispersion and more pessimistic estimates than their disclosing peers. Additional tests support the managerial protection hypothesis: CEOs early in their tenure appear more likely to withhold advertising cost details, with this effect most evident in industries characterized by frequent executive turnover. To ensure robustness, we manually collect marketing-related expenses from 10K filings not captured by Compustat's advertising expense measure and find consistent results. Our evidence suggests that managerial career concerns appear to influence advertising disclosure choices.

* We would like to thank Yangyang Chen, Bernhard Ganglmair, Mingyi Hung, Oleg Kiriukhin, Hong Luo, Tim Martens, Maximilian Mueller (DISS discussant), Douglas Skinner (ABFER discussant), Stephen Penman, Joshua Livnat, Ayung Tseng, Petrus Ferreira, Bret Johnson, Luminita Enache, Christina Dargenidou, Siqi Fan, Elvira Sojli, Teng Sun, Wing Wah Tham, Kevin Tseng, Zheng Wang, Yangzhi Wang, Bernard Yeung, and seminar participants at Asian Bureau of Finance and Economic Research (ABFER) Annual Conference, the Disclosure, Information Sharing, and Secrecy (DISS) Workshop, European Accounting Association (EAA) Annual Meeting, Accounting Design Project Virtual Series, City University of Hong Kong, National Central University, National Taiwan University, National Tsing Hua University, National University of Singapore, and the Taiwan Symposium on Innovation Economics and Entrepreneurship, for their comments and suggestions. All remaining errors are ours.

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I. INTRODUCTION

Advertising affects firm value through its impact on competitive position, brand equity, and financial performance (Joshi and Hanssens, 2010). Market participants rely on advertising disclosures to evaluate marketing strategy effectiveness and growth prospects. A substantial body of research documents the economic significance of advertising investments reported in financial statements (Hirschey and Weygandt, 1985; Chan et al., 2001; Moon et al., 2023). The 1994 regulatory overhaul fundamentally transformed corporate disclosure practices regarding advertising expenditures. The SEC's Financial Reporting Release No. 44 (FRR44) eliminated mandatory detailed advertising disclosure requirements based on bright-line rules. While firms welcomed this change, citing burdensome preparation costs, financial analysts argued that reduced transparency would amplify investor uncertainty (Simpson, 2008). This tension between reporting flexibility and information quality remains central to the debate on disclosure quality.

The regulatory change in FRR44 created two distinct reporting approaches, with roughly half of the firms continuing to specify advertising expenditures while others aggregated these costs within broader operating expense categories (Heitzman et al., 2010). We classify these groups as "Disclosed Advertising Firms" and "Unspecified Advertising Firms" throughout our analysis. Our investigation also leverages the Kantar Group database to identify firms that do not disclose substantive advertising expenditures (by choosing to aggregate such costs within broader operating expense categories).

A 2009 FASB/IASB survey revealed a strong analyst preference for detailed expense disclosures. Theoretically, choosing not to disclose certain expenditures could maximize shareholder value by preventing competitors from gaining a strategic advantage and protecting future profits (Dye, 1985; Wagenhofer, 1990; Verrecchia, 2001). Empirical studies support this

view, suggesting that while investors prefer accurate information, they also recognize the benefits of strategic opacity in maintaining a competitive edge (Bernard et al., 2020; Shi et al., 2021; Berger et al., 2024; Song, 2021). Still, one concern is that the reluctance to disclose certain information may stem not only from shareholder interests but also from managerial self-preservation (Berger and Hann, 2007; Amir et al., 2014). Managers may omit specific accounting items from financial statements to maintain an informational advantage, retain decision-making flexibility, or obscure accountability.[1]

How do firms balance the competing priorities of advertising disclosure in their advertising disclosure decisions? Maintaining discretion over advertising expenditures can protect competitive advantage and strengthen brand equity (Liang, 2024). Yet this lack of transparency may reduce value by creating information asymmetries that leave investors struggling to assess firm potential accurately (Aboody and Lev, 2000; Williams, 2015). Our research examines this tension through two theoretical lenses: agency theory suggests that managers may withhold advertising data to manage career risk in the face of high campaign failure rates. In contrast, proprietary cost theory highlights how disclosure could erode competitive advantage through information revelation to rivals.

By analyzing managerial disclosure decisions and their capital market consequences, we examine how firms navigate the trade-off between disclosure and competitive advantage in advertising expenditures. Investors recognize advertising as a crucial growth engine. However, the high failure rate of advertising campaigns (Lodish et al., 1995; Hu et al., 2009) creates significant uncertainty that may incentivize managers, particularly those new to their roles, to be more

[1] FASB's Accounting Standards Update in November 2024 (ASU 2024-03) requires firms to disclose more disaggregated expenditures for SG&A, R&D, and cost of sales (FASB, 2024). This regulatory intervention underscores the conflict between reporting flexibility and information quality in advertising disclosure.

cautious in their disclosures for their job security in industries with high executive turnover. Market valuation analysis reveals preliminary evidence that firms not specifying their advertising spending receive systematically lower valuations − a pattern that appears inconsistent with the strategic opacity argument. This finding helps motivate our central research question: Do firms withhold advertising expenditure information to maximize shareholder value or to protect managerial interests?

Since strategic opacity and managerial interests are not mutually exclusive, we also examine situations where one rationale may have greater interpretive strength. Our empirical approach compares analyst reactions between disclosed and unspecified advertising firms, revealing how transparency choices shape market perceptions and firm value. While proprietary costs are important, the cross-sectional findings indicate a more complex situation where agency conflicts significantly influence disclosure decisions. The analysts' response is clear: analysts persistently probe for advertising information during conference calls with non-disclosing firms, only to be met with conspicuous managerial reticence. This information void appears to breed uncertainty among analysts, who demonstrate wider forecast dispersion and marked pessimism in their EPS predictions in unspecified advertising firms.

The empirical results further indicate that disclosure decisions regarding advertising expenditures are strongly influenced by CEO power. Specifically, firms led by relatively new CEOs tend to withhold such details, pointing to agency costs as a critical component in the disclosure decision. In contrast, firms with more experienced CEOs appear to prioritize strategic secrecy to maintain a competitive edge, aligning with Liang (2024). This pattern highlights a dual motivation in managerial withholding behavior—sometimes aimed at safeguarding shareholder interests but more often serving as a protective mechanism for managers navigating the inherent

uncertainties of advertising outcomes.

Next, we conducted a difference-in-differences analysis using the SEC's Financial Reporting Release No. 44 (FRR44) in 1994, which loosened the requirement for managers to disclose advertising expenditures exceeding 1% of sales. Following this regulatory shift, firms that opted to withhold advertising expenditures saw greater dispersion and lower mean values in analysts' earnings forecasts. Additionally, new CEOs were more likely to adopt this withholding approach after FRR44, reinforcing the link between CEO tenure and disclosure choices.

Investors have alternative ways to access advertising-related information. Institutional investors and analysts, for instance, can rely on advertising spending estimates from the Kantar Group database. If such external sources meet investors' needs sufficiently, then firm-level disclosure may add little value to capital markets. However, Moon et al. (2023) find that while Kantar's estimates help reduce analyst forecast dispersion, direct disclosures from firms provide even greater informational benefits. Moreover, this advantage primarily benefits institutional investors and analysts with the resources to access and interpret such data, putting smaller and retail investors at a disadvantage. Our results indicate that when firms choose to withhold advertising expenditures, information asymmetry increases, reinforcing disparities in market access.

An important insight from our data collection is that while Compustat records advertising expenditures, it overlooks other marketing-related costs, such as promotion, selling, and customer acquisition expenses, that some firms disclose. We manually collected these expenditures from 10-K reports to account for this limitation. Incorporating this data, we find that analysts' forecasts are still more dispersed and less optimistic for firms that withhold all marketing-related expenditures, reinforcing our earlier findings. We conclude that relying solely on Compustat data for advertising

expenditures presents challenges because reported marketing-related costs often fall outside its coverage. To address this limitation and support future research, we provide a public data file integrating 10-K disclosures, offering a more comprehensive view of firms' advertising expenditures.[2]

Our study advances the understanding of corporate disclosure practices on disaggregation in three key ways. First, it reinforces the idea that firms selectively treat certain expenditures as proprietary (Arya et al., 2010). Berger et al. (2024) recently found that Korean firms saw profitability gains after withholding the cost of sales information in financial statements. Our findings indicate that withholding information may not benefit investors, as we observe lower firm valuations and higher analyst uncertainty with unspecified advertising expenditures. These findings suggest that the impact of disclosure decisions on firm performance and valuation depends on the context and the nature of the withheld information. Our results align with Holzman et al. (2021), who highlight that the decision-usefulness of disclosures stems from disaggregating earnings components with distinct characteristics.

Second, our analysis reveals how information intermediaries attempt—yet ultimately fail — to overcome advertising disclosure opacity. Despite analysts' intensive information-gathering efforts, manifested in their persistent conference call inquiries, the uncertainty in their forecasts remains pronounced for unspecified advertising firms. The stark contrast in forecast accuracy between disclosed and unspecified advertising firms underscores a critical insight: the credibility-enhancing role of disaggregated information cannot be fully replicated through intermediary efforts alone. These findings extend prior research on the value of disaggregation in financial reporting (Hopwood et al., 1982; Hirst et al., 2007; Hinson et al., 2022) by documenting how the

[2] The submission package includes a hand-collected dataset on marketing-related expenses.

absence of granular disclosure impedes even sophisticated market participants from effectively reducing information asymmetry.

Finally, we explore the motivations behind managers' withholding decisions. We find that concerns over job security, self-interest, and investor considerations play a role in the choice to withhold advertising expenditures. Our evidence suggests that managerial incentives influence disclosure practices in ways that may not always align with shareholder value. This underscores the importance of disaggregated accounting data in mitigating managerial opportunism (Hirst et al., 2007; Amir et al., 2014; Chen et al., 2015). By examining the discretion of advertising expenditure reporting, our analysis contributes to the broader discussion on disclosure practices, firm valuation, and the interplay between competitive strategy and managerial incentives.

II. HYPOTHESES

Strategic Value of Unspecified Advertising Expenditures

Prior research extensively documents advertising's role in building brand equity and customer loyalty, with significant implications for sales and market share (Srivastava et al., 1999; Thompson et al., 2006). To gain a competitive advantage, firms must carefully allocate their advertising budgets relative to competitors (Joshi and Hanssens, 2010; Kurt and Hulland, 2013). This strategic allocation is especially important for firms with substantial intellectual property or brand capital, where maintaining competitive advantage often involves keeping investment details private (Koh and Reeb, 2015). However, firms must weigh this privacy against the potential benefits of transparency with stakeholders (Verrecchia, 1983). This creates a fundamental tension for managers between protecting competitive strategies and providing shareholders with valuable information (Dedman and Lennox, 2009).

Recent studies show that these proprietary costs motivate firms to protect their advertising

expenditure details, preventing competitors from gaining strategic insights (Simpson, 2008; Bernard et al., 2020; Shi et al., 2021; Liang, 2024). The logic is straightforward: When competitors know a firm's advertising spending, they can deduce its campaign strategies, channel selections, and messaging approaches (Danaher and Dagger, 2013). Firms can better protect their marketing strategies from imitation by keeping advertising expenditures unspecified. This protection, in turn, potentially creates value for shareholders.

However, the story becomes more complex when considering managerial incentives. Research suggests managers sometimes withhold information for self-preservation rather than strategic reasons (Berger and Hann, 2007; Amir et al., 2014). They might keep certain accounting items unspecified to maintain information advantages, preserve flexibility, or reduce accountability. In the context of advertising, this creates a challenging dynamic. While advertising drives firm growth and enhances investor expectations, advertising campaigns often fail to deliver the expected results. Industry surveys report that over 80 percent of advertising campaigns fail to achieve their intended objectives, with high failure rates a common occurrence (Nelson-Feld, 2022; Rashbass, 2024). This uncertainty may discourage managers from detailed reporting, as they would later need to justify potentially disappointing outcomes.

These competing explanations—proprietary costs versus managerial protection—lead to an intriguing empirical question: How do shareholders value firms that keep advertising expenditures unspecified? The answer likely depends on which of these two forces dominates. Figure 1 shows the results from two sets of value regressions, revealing that unspecified advertising firms (especially those in a high-advertising industry) are subject to pricing discounts. Lower firm values in unspecified advertising firms, especially those with substantive or above-average advertising, are inconsistent with proprietary cost explanations for this disclosure choice. These findings

motivate our testable hypotheses on how capital market participants evaluate firms with unspecified accounting expenditures.

Analysts' reactions to unspecified advertising expenditures

Advertising disclosure opacity significantly influences information acquisition in capital markets. While investors demand granular data to assess firm performance and strategic direction (Lev, 1992), information intermediaries respond through multiple channels: independent research, competitive benchmarking, and private information networks (Easley et al., 1998). Yet these intensive information-gathering efforts reveal a critical tension: despite analysts' sophisticated resources and expertise, their ability to substitute for direct disclosure remains constrained. This limitation underscores how disclosure choices create persistent information frictions that shape the quality and distribution of information in financial markets.

Prior literature documents the critical role of financial analysts in providing insights beyond the scope of public financial statements, thereby mitigating information asymmetry and the associated cost of capital (Beyer et al., 2010; Mansi et al., 2011). Their specialized acumen and privileged access to information counterbalance the strategic ambiguity fostered by firms (Klein et al., 2020). Despite the complexity introduced by corporate opacity, analysts' contributions can significantly demystify it and enrich their forecasts with deep knowledge (Mola et al., 2013). Analysts' critical role in information discovery makes understanding how they navigate disclosure opacity paramount.

Analysts employ various tools to overcome information barriers. Conference calls provide a forum for information exchange between managers and analysts (Bushee et al., 2003; Jung et al., 2018). Their interactions with management during earnings calls represent perhaps their most direct opportunity to extract additional information. These structured interactions thus offer a

unique window into both analysts' information-seeking behavior and management's strategic disclosure choices. Firms can strategically communicate important details during these calls while protecting competitive advantages. The presentation and Q&A portions allow for nuanced information sharing that helps reduce investor uncertainty without exposing sensitive operational details (Matsumoto et al., 2011; Skinner, 1997).

Research consistently shows that conference call discussions materially impact capital markets by reducing information gaps (Brown et al., 2004; Gow et al., 2021). These interactive sessions enable management to provide context around corporate strategies and investments that complement formal financial disclosures (Frankel et al., 1999; Soltes, 2014). Our focus on advertising disclosure during these calls builds on this established literature.

Analysts' questioning patterns during conference calls reflect their assessment of what information matters for firm valuation. They strategically probe areas of uncertainty to enhance forecast accuracy and develop more complete firm narratives. If unspecified advertising expenditures create significant uncertainty, we would expect analysts to focus more questions on this topic compared to firms that disclose these costs. This leads to our primary hypothesis about conference call behavior:

H1a: Analysts pose more advertising-related questions to firms that do not specify advertising costs than those that disclose these expenditures.

The management response dynamic is equally important to examine in these conference calls. How executives answer advertising-related questions likely depends on their motivations for non-disclosure. If protecting competitive information drives non-disclosure, we expect managers to provide helpful context while avoiding specific numbers. However, if managers withhold advertising data to obscure their performance, they likely limit all advertising-related information.

This reasoning forms an additional component of our first hypothesis:

H1b: Managers at firms that do not specify advertising costs provide less detailed responses to advertising-related questions than managers at disclosing firms.

An alternative explanation for firms withholding advertising expenditure disclosures is the assumption that such information lacks material relevance to investors, leading to its omission or aggregation with other expenses considered more significant (Heitzman et al., 2010). Similarly, suppose analysts can utilize all information sources, such as Kantar-type data, to neutralize the effects of unspecified advertising. In that case, their forecast accuracy, pessimism, and conference call behavior should be consistent across firms with different levels of spending disclosure.

The accuracy of analysts' forecasts, along with the associated errors and variances, underscores the challenges of evaluating firms operating in an environment of limited transparency (Lee et al., 2013; Duru and Reeb, 2002). Both anecdotal evidence and academic research suggest that analysts cannot eliminate information barriers despite their expertise and may be influenced by heuristic biases. For instance, analysts have expressed frustration over Apple's decision to stop disclosing advertising expenditures (O'Reilly, 2016). Moreover, Hirshleifer et al. (2018) find that the relationship between patent originality and stock returns is more pronounced in firms with higher analyst dispersion, suggesting that even seasoned professionals struggle to assess the value of intangible expenditures. Building on these insights, we develop the second hypothesis regarding analysts' reactions to firms' disclosure decisions:

H2: Analysts have higher forecast dispersion for unspecified advertising firms than disclosed advertising firms.

Research consistently shows that analysts tend to be pessimistic about intangible investments. Chan et al. (2001) find that stock markets systematically underreact to firms' increased spending on R&D and advertising. Similarly, Hsu et al. (2022) demonstrate that analysts often underestimate

the value of new trademarks. This bias is frequently attributed to analysts' constrained information-processing capabilities or skepticism toward intangible investments, particularly those that are complex and difficult to evaluate (Hirshleifer et al., 2018). At the same time, prior studies highlight the significant role of advertising expenditures in shaping firms' market valuations (Hirschey and Weygandt, 1985; Moon et al., 2023). Given this, we expect that the absence of disclosed advertising expenditures leads analysts to discount firms' financial prospects, forming the basis of our third hypothesis.

H3: Analysts are more pessimistic about the performance of unspecified advertising firms than disclosed advertising firms.

Do managers receive private benefits from aggregated advertising?

By maintaining opacity around advertising costs, new CEOs can strategically buffer themselves from market pressures while establishing their leadership, building key relationships, and developing strategic initiatives without excessive external scrutiny (Anderson et al., 2009; Copeland and Dolgoff, 2006). While advertising drives firm growth and investor expectations, its high failure rate creates accountability risks. This unpredictability potentially discourages managers from detailed disclosure, especially unproven ones. Moreover, research shows firms may cut advertising to meet earnings targets (Graham et al., 2005). Non-disclosure of these expenses makes it harder for investors to differentiate between genuine earnings changes and managerial manipulation.

The unproven managers could be particularly cautious, aiming to manage investor expectations conservatively to maintain job security. The high turnover rate among new CEOs and top management further influences this approach. The disclosure of advertising spending could raise investor expectations disproportionately; a risk new CEOs might prefer to avoid as they establish their credibility and stability within the firm.

In the early stages of their tenure, new CEOs are often at the forefront of experimental initiatives that require a buffer from market pressures to focus on long-term strategy over short-term market appeasement (Ferreira and Rezende, 2007; Martin and Davis, 2010). This may extend to avoiding disclosure of high-risk ventures, such as intangible investments, which, if unsuccessful, could be seen as wasteful (Bereskin et al., 2016). The transition period for new CEOs is fraught with heightened scrutiny and expectations. Evidence suggests that a new CEO's ability to improve firm performance is related to their ability to operate without the constraints of immediate market pressures (Daniel, 1992). Keeping advertising expenditures unspecified may provide a tactical buffer that protects new CEOs during this vulnerable period.

A decision by managers to withhold information about advertising expenditures can also be seen as a strategic move. It reflects an attempt to balance the positive perception of advertising as a growth strategy against the risks associated with its unpredictable outcomes and the potential impact on their professional standing and investor expectations. While potentially limiting investor insights, this approach protects managers against the volatile nature of advertising success and its effects on their tenure and the firm's performance. As corporate figureheads, CEOs significantly influence a firm's image and financial standing through their public communications. Their disclosure decisions are also affected by stakeholder pressures and job security concerns (Fee and Hadlock, 2004; Men, 2012). Research suggests that strategic opacity may respond to these career concerns (Oh and Park, 2023), suggesting that new CEOs may choose not to specify advertising expenses as a protective measure. These considerations lead to our fourth hypothesis:

H4: New CEOs are more likely to keep advertising expenditures unspecified.

If aggregated advertising expenditures are immaterial and analysts can accurately infer unspecified advertising costs, new CEOs should derive no private benefits from withholding such

disclosures. As a result, CEO tenure should be comparable between firms that disclose advertising expenditures and those that do not. In this scenario, the preceding hypothesis may not be empirically supported.

Summary of Hypotheses

We examine whether firms withhold advertising expenditure details for strategic reasons or managerial self-interest and how capital markets respond to this opacity. We develop and test four hypotheses by analyzing conference calls, analyst behavior, and CEO tenure. First, we hypothesize that opacity in advertising expenditures leads to increased analyst questioning during conference calls but yields less informative management responses. Second, we predict that analyst forecast dispersion increases when firms withhold advertising information. Third, we expect this information asymmetry to result in greater analyst pessimism toward non-disclosing firms. Fourth, we anticipate new CEOs will strategically maintain opacity around advertising costs during their early tenure.

III. SAMPLE CONSTRUCTION

To construct our sample, we merged data sets from various sources. The base data comes from CRSP/Compustat Merged, which provides financial reports and stock prices for North American companies, supplemented by analyst forecasts from IBES and earnings call transcripts from Capital IQ. Compustat's accounting item XAD is our measure of a company's reported advertising expenditures, which we juxtaposed with Kantar Group's meticulously compiled advertising expenditure dataset, a cornerstone of marketing and finance research for its accuracy and comprehensiveness (e.g., Robinson et al., 2015; Kaniel and Parham, 2017).

Kantar's data covers various advertising opportunities from television to online platforms and is closely aligned with Compustat's XAD categories. The data is widely used in business strategy,

marketing, and finance literature for observed advertising spending. (e.g., Robinson et al., 2015; Kaniel and Parham, 2017; Focke et al., 2020; Liang, 2024). To ensure appropriate integration, we manually matched Kantar's brand-specific data to Compustat's company listings using advanced fuzzy matching techniques, focusing on resolving discrepancies such as name variations and spelling errors. After rigorous testing and a meticulous verification process involving research assistants, we established a high confidence threshold for matching.

Within our sample period of 1995 to 2019, a substantial subset of Compustat firms had corresponding advertising expenditures in the Kantar data. We then sum a firm's expenditures across all brands and outlets per year in the Kantar data. For clarity, we refer to XAD as "reported" advertising expenditures and the advertising expenditures recorded by Kantar as "observed" advertising expenditures. Table 1, Panel A, summarizes the aggregate data on observed advertising expenditures as tracked by the Kantar Group across 42,454 firm-year instances. The average spending in this cohort is documented as $26 million.

Firm-year observations are segmented into three spending groups: unspecified, reported, and immaterial advertising firms. Unspecified advertising firms are firms whose advertising expenditure is missing on Compustat while appearing in Kantar, advertising at least 5% of their pre-tax income (e.g., Choudhary et al. 2019).[3]

The group of reported advertising firms captures firms that report their advertising expenditures in financial statements. The group of immaterial advertising firms consists of firms without reported advertising expenditures that do not have material observed advertising spending from Kantar (i.e., Kantar advertising spending below the 5% pre-tax income threshold). For

[3] In assessing advertising expenditure disclosures, we followed SAB 99's contextual approach to materiality rather than fixed thresholds. While noting the common 5% pre-tax income benchmark in public company audits (Choudhary et al. 2019), we also tested our findings at 10% and 15% thresholds.

analytical clarity, reported and immaterial advertising firms are often combined under the umbrella term of "disclosed advertising firms."

Digging deeper, about half of Compustat's firm-year observations are classified as reported advertising firms, with an average observed expenditure of $43 million, compared to a much higher average reported expenditure of $120 million. The observed advertising expenditures from the Kantar Group are not precisely the same as the specified amounts in Compustat. This discrepancy is likely because Compustat includes a broader range of advertising-related expenses, such as production costs for TV ads or catalog costs. At the same time, Kantar focuses only on advertising expenditures directly linked to attention-grabbing advertising and marketing activities.

Additionally, Kantar only covers observable advertising expenditures in the US market. Kantar's figures tend to be more conservative than Compustat's disclosures, so our approach to identifying unspecified advertising firms and their spending is inherently cautious. Despite the difference, Panel B confirms the strong correlation between observed and reported spending, corroborating the findings of similar studies.

Within this dataset, firms with unspecified advertising expenditures amount to 2,738 firm-year observations or 6.45% of the total. These firms exhibit substantial average observed expenditures on advertising of $49 million. Conversely, firms with immaterial advertising expenditures have significantly lower observed average and median expenditures, at around $3 million.

IV. MAIN ANALYSIS

The magnitude and distribution of unspecified advertising expenditures

Figure IA1 in the Internet Appendix presents our annual aggregation of observed advertising expenditures for companies withholding such information in financial statements. These substantial but unspecified expenditures—ranging from $3 billion to $8 billion annually—

highlight a notable omission in financial disclosures.

In Figure IA2 in the Internet Appendix, firm-year observations are grouped into quintiles based on their *observed* advertising spending, and a visual representation of the average observed spending per quintile is presented with a dashed gray line (referenced to the right vertical axis). In contrast, the prevalence of these firms without specifying their advertising spending in financial statements is presented with bars (referenced to the left vertical axis). A pronounced trend is evident, showing an escalation in the percentage of unspecified advertising firms that correlates with their increasing observed spending. The top quintile, representing the 95^{th} to 99^{th} percentiles, has the highest concentration of such firms, with approximately 18% of these firms spending large amounts of money on advertising but not disclosing it.

Then, Figure 2 contrasts the distributions of observed advertising expenditures (logarithmically transformed) for unspecified advertising firms (marked in yellow) with disclosed advertising firms (marked in green). Many companies choose to disclose even small advertising expenditures. Yet, many opt to keep their large-scale advertising expenditures unspecified, which often run into hundreds of millions of dollars. To illustrate this idea, consider Capital One, whose observed annual advertising expenditures consistently exceeded $400 million from 1999 to 2019, an unspecified amount representing approximately 11% of its pre-tax income. The juxtaposition of unspecified advertising firms and disclosed counterparts in Figure 2 supports the observations in Figure IA1 and confirms that firms with unspecified spending tend to invest significantly in advertising.

Market valuation

Given the extent of unreported advertising expenditures, we first examine the relationship between firms' advertising disclosure choices and stock valuation. This analysis helps examine whether

value maximization considerations drive the decision to withhold advertising expenditure information. To do so, we calculate the average price-to-book equity ratio and Tobin's Q—both commonly used measures of firm value (e.g., Nezlobin et al., 2016)—and present the results in Figure 1. The figure illustrates the average price-to-book and Tobin's Q of unspecified and disclosed advertising firms across several multivariate specifications and shows that unspecified advertising firms trade at lower valuations than comparable disclosed advertising firms. This finding is inconsistent with proprietary cost explanations and motivates our testable hypotheses on how capital market participants evaluate firms with unspecified accounting expenditures. To compare firm valuation across these two groups, we estimate the following multivariate model:

$$Valuation_t = \alpha_1 + \beta_1\ Unspecified\ Advertising_t + \Sigma\ Control_t + Firm\ \&\ Year\ effects + \varepsilon_t, \quad (1)$$

where $Valuation_t$ is $Ln(P/B)_t$ or $Ln(Tobin's\ Q)_t$, control variables follow prior literature (Rao et al. 2004), and continuous variables are winsorized at 1% and 99%. We include firm- and year-fixed effects and cluster standard errors at the firm level. The mean (median) values of *P/B* and *Tobin's Q* are 3.230 (2.135) and 1.821 (1.419), respectively (reported in Table IA1 in the Internet Appendix). $Unspecified\ Advertising_t$ is an indicator variable that equals one if a firm's observed advertising expenditures are over or equal to 5% of pre-tax earnings, where the firm keeps its advertising costs unspecified and zero otherwise. About 6% of firms fall into this category, with a mean of 0.061.

Estimation results from Internet Appendix Table IA2 Panel A show that for P/B_t, the coefficient on $Unspecified\ Advertising_t$ is -0.113 (significant at 1%), indicating these firms have an 11.3% lower price-to-book ratio than disclosed advertising firms. For Tobin's Q, the coefficient is -0.067 (1% significance), implying a 7% lower stock valuation. Panel B examines variations by advertising intensity, splitting firms into high and low groups based on their advertising-to-sales

ratios. The significant effect of *Unspecified Advertising*$_t$ is more substantial in high-intensity firms. Overall, we find that firms with unspecified advertising expenditures tend to have lower valuations, implying the decision not to disclose this expenditure is not directed by value maximization.

Analyses of earnings calls

Next, we focus on financial analysts, who serve as information intermediaries that could lower information asymmetry (Bowen et al., 2002). Although managers exercise discretion and may choose to withhold advertising costs, financial analysts may still obtain that information through other channels, such as actively participating and raising related questions in earnings conference calls. These calls serve as a platform for firms to clarify and contextualize non-disaggregated information, which can influence capital market dynamics (Bushee et al., 2003; Brown et al., 2004).

Their queries reduce information asymmetries, refine the accuracy of market forecasts, and shape the investor narrative about a firm's trajectory (Mayew et al., 2013). There are two possible scenarios: First, suppose financial analysts can effectively assess a firm's advertising expenditures without extra information from managers; such unspecified advertising expenses should not affect the volume or nature of questions during earnings calls. In this case, the immateriality of advertising expenditures to investors is reflected in the limited questioning of related activities on conference calls for firms with unspecified advertising costs. The second scenario is that analysts must ask more questions during these calls to reduce or eliminate information asymmetry related to unspecified advertising spending.

We examine whether and to what extent analysts choose to ask more about unspecified advertising costs. Analysts' questions and executives' answers about advertising-related information in unspecified advertising firms (as opposed to disclosed advertising firms) can reveal knowledge about advertising without giving competitors precise cost information.

Therefore, our first hypothesis, Hypothesis (1), is divided into two parts. In Hypothesis (1a), we predict that analysts will post more advertising-related questions to unspecified than disclosed advertising firms. In Hypothesis (1b), we predict that managers of unspecified firms will provide less detailed responses, all things equal.

We use Python to identify advertising-related words (i.e., marketing, brand, advertising, branding, and promotion) in transcripts of annual earnings conference calls between 2007 and 2019 from Capital IQ.[4] We limit our analyses to the earnings calls held on the same day as the announcement of the annual report because analysts are more likely to pose a question based on financial statements rather than other news.[5] Our analysis relies on 14,754 earnings calls. Table 2 reports the summary statistics of advertising-related words analysts use to ask questions in earnings calls. Table 3 provides the same analysis for executives' answers.

Panel A of Table 2 presents the frequency of all advertising-related words mentioned by analysts in the Q&A section. Among the 14,754 calls, reported advertising firms have 8,337 earnings calls, unspecified advertising firms have 617 earnings calls, and immaterial advertising firms have 5,800 earnings calls. We find that 50.6% of earnings calls of unspecified advertising firms contain advertising-related questions by analysts, which is significantly higher than those of reported advertising firms (45.8%). We find that only 17.1% of earnings calls of immaterial advertising firms contain advertising-related questions from analysts, indicating that disclosure of advertising expenditures is less relevant for this group.

Panel B presents the frequency of each advertising-related word (marketing, brand, advertising,

[4] Sentences we identified include "can you comment on what your marketing strategy is going to be against the IDEXX product?," and "just staying on the marketing side, can you quantify how much you're spending in search marketing this year and if not, can you just give some sense of the magnitude of growth on a year-over-year basis."
[5] Our results do not change when we include earnings calls within 3 days, 10 days, or 15 days after the announcement of annual reports.

branding, and promotion) cast by analysts in the Q&A section. Analysts mention "marketing" and "brand" 1.04 and 1.3 times per call. Then, we examine the ratio of advertising-related words mentioned by analysts in Panel C. Specifically, we calculate the ratio of advertising-related terms mentioned by analysts, defined as the number of advertising-related words mentioned by analysts, to the total number of words spoken by analysts. The results show that, on average, 1.1% and 1.0% of words spoken by analysts are advertising-related for unspecified and reported advertising firms, respectively. Importantly, we find analysts use advertising-related words more often when asking questions of unspecified advertising firms than for disclosed counterparts (both reported and immaterial advertising firms).[6]

Next, we use a linear probability regression with firm-fixed effects to examine whether analysts are likelier to use advertising-related words in their questions to unspecified advertising firms. We estimate the following equation using 11,785 firm-year observations from merging earnings calls data with the Compustat sample:

$$Mentioned\ by\ Analysts_t = \alpha_1 + \beta_1\ Unspecified\ Advertising_t + \Sigma\ Control_t + Firm\ \&\ Year\ effects + \varepsilon_t, \quad (2)$$

where *Mentioned by Analysts*$_t$, including *Mentioned by Analysts (Dummy)* and *Mentioned by Analysts (Ratio)*, refers to whether financial analysts mention advertising-related words and how often they mention them. Specifically, *Mentioned by Analysts*$_t$ *(Dummy)* equals one if an analyst says any advertising-related words such as marketing, brand, advertising, branding, and promotion, and zero otherwise. *Mentioned by Analysts*$_t$ *(Ratio)* is the ratio of the number of advertising-related words mentioned by analysts to the total number of words spoken by analysts. We include year-

[6] Analysts ask companies with immaterial advertising expenditures about their advertising roughly once every 300 words—only one-third as frequently as they question companies with unspecified advertising costs. This lower frequency suggests advertising disclosures are less important for companies with minimal advertising spend.

and firm-fixed effects and cluster the standard errors at the firm level.

In Panel D, the coefficients on *Unspecified Advertising* are positive and significant, and the practical difference between them is substantial. Our interpretation is that analysts request substantially more advertising-related questions in earnings conference calls from firms who choose not to specify advertising expenditures in their financial statements. These results are consistent with analysts' pursuit of additional information, leading us to accept Hypothesis (1a).

Next, in Table 3, we explore whether executives of unspecified advertising firms exhibit a higher tendency to respond to analysts' advertising-related questions or if they provide extra advertising-activity explanations. Panel A shows the frequency of advertising-related words mentioned by executives in earnings calls. About 68%, 71%, and 36% of executives in reported, unspecified, and immaterial advertising firms use advertising-related words in their earnings calls. Executives of unspecified advertising firms have the highest frequency of using advertising-related terms, albeit not statistically significant at the univariate level compared to reported advertising firms. Panel B indicates that the terms "marketing" and "brand" appear most frequently in executives' Q&A transcripts.[7]

When we examine the magnitude of advertising-related words relative to all terms mentioned by executives, Panel C indicates that 0.78% (0.75%) of executives of unspecified advertising firms (reported advertising firms) are advertising-related. The *t*-test shows statistically insignificant differences between the ratio of advertising-related terms mentioned by executives of two types of firms at the univariate level. Panels A and C collectively suggest that executives of unspecified advertising firms do not spend significantly more time answering questions on advertising

[7] Some representative comments or answers about advertising include "The first thing in sales and marketing is that—Mike mentioned this earlier on the call—we've been really focused on spending dollars that we believe are driving profitable business for us," and "we think that we can have much more success in terms of the strategic development of property, marketing plans, product positioning and implementation."

activities from interested analysts.

Again, we employ a linear probability regression model with firm-fixed effects to examine whether executives of unspecified advertising firms are more likely to mention advertising-related activities in the Q&A section of earnings calls. We estimate the following equation using 11,785 firm-year observations from merging earnings calls data with the Compustat sample:

$$\textit{Answered by Executives}_t = \alpha_1 + \beta_1\, \textit{Aggregated-expenditure}_t + \Sigma\, \textit{Control}_t + \textit{Firm \& Year effects} + \varepsilon_t, \quad (3)$$

where *Answered by Executives*$_t$, including *Answered by Executives (Dummy)* and *Answered by Executives (Ratio)*, refers to whether executives mention advertising-related words and how often they mention them. Specifically, *Answered by Executives (Dummy)* equals one if an executive says any advertising-related words such as marketing, brand, advertising, branding, and promotion, and zero otherwise. *Answered by Executives (Ratio)* is the ratio of the number of advertising-related words mentioned by executives to the total number of words spoken by executives. We include year- and firm-fixed effects and cluster the standard errors at the firm level. In Panel D, the coefficient estimates on *Unspecified Advertising* are not statistically significant, indicating that executives of unspecified advertising firms do not reveal more advertising-related information than disclosed counterparts, leading us to accept Hypothesis (1b).

The evidence gathered from Tables 2 and 3 offers three significant implications. First, analysts of unspecified advertising firms consider marketing and promotion information material. Second, compared with disclosed advertising firms, unspecified advertising firms receive more questions about advertising/marketing activities from analysts. Still, executives of such firms are not inclined to discuss such activities more during earnings calls, suggesting that analysts' efforts to collect more information about unspecified advertising costs may be unsuccessful and pointing to potential managerial self-interest. Third, as executives of such firms leave many conference call

participants in the dark by not providing the corresponding information, financial analysts may form a negative interpretation (Hollander et al., 2010), leading to lower market valuation.

Analyst forecasts

Next, we examine whether analysts covering unspecified advertising firms experience greater information uncertainty and have more difficulty reaching a consensus on earnings forecasts. This may result from unanswered questions about earnings per share (EPS). Therefore, to test Hypotheses (2) and (3), we estimate the following regression using all firm-year observations in our sample period:

$$Analyst\ Forecast_t = \alpha_1 + \beta_1 Unspecified\ Advertising_{t-1} + \Sigma Control_t + Firm\ \&\ Year\ effects + \varepsilon_t, \quad (4)$$

where $Analyst\ Forecast_t$ represents analysts' forecast property variables, including $Overestimation\ \#M\ (Mean/Median)_t$ and $Forecast\ Dispersion\ \#M\ (Mean/Median)_t$. *Overestimation #M (Mean/Median)* denotes analysts' overestimation in EPS forecasts, measured as forecasted EPS minus actual EPS each year. Since forecast horizon might affect the magnitude of forecast errors (Gu and Wu, 2003), we construct *Overestimation #M (Mean/Median)* by using the mean or median of overestimation in EPS from forecasts made by analysts in 1, 2, or 3 month(s) before the annual earnings announcements.

For instance, *Overestimation 3M (Mean)* denotes the mean overestimation in EPS of forecasts made by analysts 3 months before the announcement. We then measure the dispersion of analyst forecasts, *Forecast Dispersion #M (Mean/Median)*, as the standard deviation of analyst forecast errors scaled by the absolute value of mean/median forecast errors. We include year- and firm-fixed effects and cluster standard errors at the firm level. Continuous variables are winsorized at 1 percent and 99 percent. $Unspecified\ Advertising_{t-1}$ is an indicator variable, capturing whether the firm was an unspecified advertiser in the prior period. We also incorporate an extensive list of

control variables with distributions like those reported by previous studies (e.g., Gu and Wu, 2003; Lobo et al., 2017).

We estimate Equation (4) using *Forecast Dispersion #M (Mean/Median)* and *Overestimation #M (Mean/Median)* as the dependent variable in Table 4 and Table 5, respectively. In Table 4, for forecast dispersion, the coefficient on *Unspecified Advertising*$_{t-1}$ is positive and significant across different specifications at the 1% level.

Furthermore, analyst forecasts show significantly more agreement when companies disclose their advertising spending in financial reports versus when they withhold this information. For example, in column (2), where the dependent variable is *Forecast Dispersion 2M*$_t$ *(Median)*, the coefficient is 0.051, suggesting that the average standard deviation of forecast errors increases by 5 percent for unspecified advertising firms compared with disclosed advertising firms. Such an increase is economically substantial as it is about 73 percent of the mean of *Forecast Dispersion 2M*$_t$ *(Median)*. These results suggest that analysts' forecasts diverge more when covering firms withholding advertising expenditures, leading us to accept Hypothesis (2).

Next, to test Hypothesis (3), in Table 5, we use overestimation in EPS as the dependent variable to examine if analysts take a pessimistic (optimistic) view of unspecified advertising firms, corresponding to a significantly negative (positive) coefficient on *Unspecified Advertising*$_{t-1}$. The results show that for 1- and 2-month ahead forecasts, the coefficients on *Unspecified Advertising*$_{t-1}$ are negative and significant at the 5% level, suggesting that analysts make more pessimistic forecasts on firms withholding advertising costs. When we use the estimated coefficients in column (2), unspecified advertising firms have an estimated downward forecast error of 0.004, which means that the average difference between forecasted and actual earnings is about -0.4% of the lagged stock price.

Overall, Table 5 suggests that analysts take a more pessimistic view of firms withholding advertising costs. We interpret this pattern as analysts underestimating those firms' future earnings. Our results show that analysts have different perceptions regarding the future profitability of unspecified advertising firms and disclosed ones, leading us to accept Hypothesis (3).

V. AGENCY ISSUES OR PROPRIETARY COSTS

CEO tenure and the disclosure choice

CEOs are subject to high turnover risk. Each year, roughly 9.7% of firms in the Compustat universe replace their CEOs. Hundreds of CEOs only keep their job for 2 to 3 years, with many executives becoming CEOs yearly but only a few surviving in the long run. As discussed in the hypotheses section, new executives have several incentives not to disclose/specify advertising spending and create entry barriers for competitive managerial teams (Koh and Reeb, 2015). Therefore, to test Hypothesis (4), we estimate the following regression:

$$Unspecified\ Advertising_t = \alpha_1 + \beta_1\ Short\ CEO\ Tenure_t + \Sigma\ Control_t + Firm\ \&\ Year\ effects + \varepsilon_t, \quad (5)$$

where $Unspecified\ Advertising_t$ has been defined earlier, *Short CEO Tenure* includes *Short CEO Tenure 3 Years* and *Short CEO Tenure 4 Years*, which are indicator variables that equal one if CEO tenure is less than or equal to 3 and 4 years, respectively, and zero otherwise. Since industry competitiveness, firm accounting performance, and firm characteristics could drive a firm's decision to become an unspecified advertising firm (Simpson 2008), we include the Herfindahl-Hirschman Index (*HHI*), returns on assets (*ROA*), firm size (*Size*), firm age (*Firm Age*), and leverage ratio (*Leverage*) as our control variables.

CEOs exhibit substantial turnover, with many having short stints in the top spot (Jenter and Lewellen, 2021). The estimation results of Equation (5) are presented in Panel A of Table 6. The coefficients on $Short\ CEO\ Tenure\ 4\ Years_t$ and $Short\ CEO\ Tenure\ 3\ Years_t$ are both significantly

positive, suggesting that CEOs with shorter tenure choose not to report material advertising expenditures. Then, in Panel B, we investigate the division within the CEO labor market, specifically focusing on industries where a subset of CEOs is more prone to being replaced. We explore how the dynamics of this segmented market contribute to variations in the decision-making process regarding the concealment of information characterized by high levels of uncertainty. Our findings indicate that CEOs with shorter tenures in industries characterized by high CEO turnover are inclined to keep advertising expenditures unspecified. At the same time, we do not observe a similar pattern among short-tenure CEOs in industries with lower CEO turnover rates. Such results align with existing literature that highlights how CEO job security concerns can lead to a deterioration in the quality of information (Fudenberg and Tirole, 1995; DeFond and Park, 1997; Hazarika et al., 2012). Together, these results lead us to accept Hypothesis (4).

Comparison of agency issues and proprietary costs

We found a potential alignment between managers' decision to withhold advertising expenditure data and the pursuit of self-interest, a concept commonly associated with agency costs. However, a recent study by Liang (2024) presents a different view. Liang found a negative correlation between the intensity of advertising competition and disclosure, suggesting that proprietary costs may significantly influence disclosure practices.

Given these contrasting perspectives, we revisit our initial conclusions, explicitly focusing on advertising competition. Using the fluidity metric developed by Hoberg et al. (2014), we measure the ease with which a firm's competitors can replicate its products, a proxy for advertising market competitiveness. We define a "high fluidity indicator," which indicates a firm's fluidity above the mean. In Panel A of Table 7, we examine the effects of CEO tenure and advertising rivalry on being an unspecified advertising firm. Notably, we also find that both new CEOs and intense

advertising rivalry increase the likelihood that firms keep advertising costs unspecified. As for the economic significance, the coefficients of *Short CEO Tenure 4 Years* and *High Fluidity Indicator* are 0.009 and 0.009, respectively, in column (1), indicating that our agency costs consideration is still economically viable even if we control for proprietary costs.

We further analyze the relationship between agency issues and proprietary costs in Panel B by examining how they function under industries with high and low CEO turnover ratios. For firms in the high CEO turnover group, their likelihood of non-disclosure (i.e., not specifying advertising costs) is significantly related to short CEO tenure. Still, it is unrelated to the High Fluidity Indicator, which supports the agency costs for CEOs who are subject to greater replacement risk. In contrast, for firms in the low CEO turnover group, their likelihood of non-disclosure is significantly related to the High Fluidity Indicator but not to shorter CEO tenure, supporting proprietary cost concerns. Our empirical evidence thus indicates that both proprietary and agency costs significantly influence the disclosure of advertising expenditures, with the impact varying by CEO market position, providing valuable considerations for market participants and regulators alike.

VI. ROBUSTNESS TESTS

Difference-in-differences based on Financial Reporting Release No. 44

Using a difference-in-differences approach, we examine how the SEC's 1994 Financial Reporting Release No. 44 (FRR44) affected advertising expense disclosures. The amendment marked a shift from requiring disclosure of advertising costs exceeding 1% of sales to only requiring disclosure when managers deemed these costs materially significant. Heitzman et al. (2010) documented that approximately two-thirds of firms stopped disclosing advertising expenditures after FRR44—a notable change given the previous upward trend in advertising costs.

Drawing on the Kantar Group's database, we analyze a five-year window around December

1994, focusing on firms that both maintained significant advertising expenditures and ceased reporting within three years of the amendment. When examining analyst forecasts, we observe a significant increase in forecast dispersion and an increase in pessimistic outlooks for firms that switched to aggregation to keep advertising expenditures unspecified (see Internet Appendix Tables IA3 and IA4).[8]

We also examined the influence of CEO tenure on the likelihood of switching to non-disclosure after FRR44 in Internet Appendix Table IA5. The positive, significant coefficients for short CEO tenure suggest that newer CEOs were more inclined to non-disclosure practices following the regulatory change, a finding consistent with our baseline regressions.

Analyses of marketing-related expenditures

While Compustat collects advertising expenditures under item XAD, we observe that firms may disclose marketing-related expenses—such as marketing, promotion, selling, and customer acquisition—that are not captured in Compustat. We manually collected 10-K reports from the EDGAR platform to address this limitation (refer to the Addendum section for detailed information about the manual gathering exercise).

We then construct a new variable, *Unspecified Marketing*, to identify firms that do not disclose any marketing-related expenses. It equals one if a firm has observed Kantar spending of at least 5% of their pre-tax revenues in a year and does not disclose any marketing-related expenses (including advertising expenses) in their 10-K reports and zero otherwise.

By incorporating manually collected data on marketing-related expenses, we enhanced the accuracy of our disclosure measurements. After updating the marketing-related expenses and identifying firms that should have reported material advertising-related expenses but did not, the

[8] All variables are defined in Internet Appendix Table IA1.

mean value of *Unspecified Marketing* is approximately 4%. We reexamine our analyses concerning analyst forecasts, as presented in Internet Appendix Tables IA6 and IA7. Our results remain consistent, underscoring the robustness of our baseline results concerning the items firms choose (not) to disclose. In other words, analysts' forecasting biases still exist even if we manage to gather all disclosed marketing-related expenses.

VII. CONCLUSION

The usefulness of financial reporting in informing investors and facilitating their decision-making processes is well established (FASB, 2018; IASB, 2018), with such usefulness heralded as the primary objective of accounting policy (Dechow et al., 2010). However, the literature on discretionary disclosure has consistently shown that managers' decisions to withhold information are influenced by competitive threats and other proprietary costs (e.g., Verrecchia, 1983). Despite this, empirical research on how the omission of material information affects analyst assessment and investor decisions remains scarce.

Our research contrasts reported with observed advertising expenditures to identify firms with substantial advertising spending that do not specify this expense in their financial reports and assess these practices' economic significance and implications. Using Kantar Group data on advertising spending across media channels and brands, we focus on companies with substantive advertising spending. Many firms choose not to break out these expenditures in their reports, even when they exceed standard materiality thresholds.

An examination of earnings conference call transcripts reveals that analysts are more inclined to inquire about advertising in the context of unspecified advertising firms. In contrast, executives of these firms reciprocate with less advertising-related disclosure in their answers. This imbalance confirms that analysts and investors may be disadvantaged and unable to obtain relevant

information through either financial reports or informal channels. Further tests suggest that such firms are consistently undervalued by stock investors, consistent with analysts' uncertainty and underestimation.

Such firms are also subject to higher forecast dispersion among financial analysts, indicating the increased uncertainty analysts face due to the withholding of material information. In addition, analysts tend to be pessimistic about the future earnings of such firms, underscoring the usefulness of material advertising expenditures that, when omitted, have a significant impact on outside investors.

In addition, our analysis suggests that CEOs with shorter tenures tend to be more inclined to withhold advertising cost information, a tendency we think stems from concerns about their job security. More importantly, we present separate evidence for the agency cost rationale when CEOs face higher replacement risks and for Liang's (2024) proprietary cost rationale when CEOs have better job security. Our analyses thus highlight two different rationales behind the non-disclosure of advertising expenditures.

In further analyses exploiting the regulatory shift embodied in FRR44 and employing a difference-in-differences approach, we continue to observe an increased information asymmetry analysts face in creating forecasts for unspecified advertising firms. Moreover, firms that switch to this non-disclosure practice often have short-tenured CEOs. Our findings suggest that corporate insiders may choose not to disclose advertising expenditures for personal gain.

We recognize that some firms disclose marketing-related expenses—such as promotion, selling, and customer acquisition costs—that are not captured in Compustat. We, therefore, manually collected data from 10-K reports on the EDGAR platform. Even with this broader dataset, we find significant information asymmetries among firms that choose not to specify any

marketing-related expenditures. This finding reinforces our conclusion that disclosure decisions impact transparency across all marketing-related costs.

This research has several implications for regulators, managers, and investors. First, while the SEC has posited that voluntary disclosure of advertising costs could reduce regulatory burdens without depriving investors of critical information, FRR44 acknowledges analysts' concerns that the benefits of such disclosure outweigh the associated costs and that relaxing this mandate could increase investor uncertainty. Our empirical results lend credence to this perspective.

Second, the proprietary cost motive, which suggests that managers avoid full disclosure to avoid competitive pressures (e.g., Verrecchia, 1983; Wagenhofer, 1990), could serve as an excuse for managers to avoid external scrutiny. This is supported by our finding that short-tenured CEOs tend to withhold information about advertising costs.

Finally, our findings are relevant to the latest FASB regulation on disaggregating selling expenses in the income statement. FASB argues that disclosing selling expenses provides decision-useful information for investors. However, research on selling expenses has been limited due to a lack of data (Weiss et al., 1983). Since advertising expenses are closely related to selling expenses and share similar characteristics, our empirical evidence supports FASB's position by confirming that access to detailed selling expense information is essential for investors.

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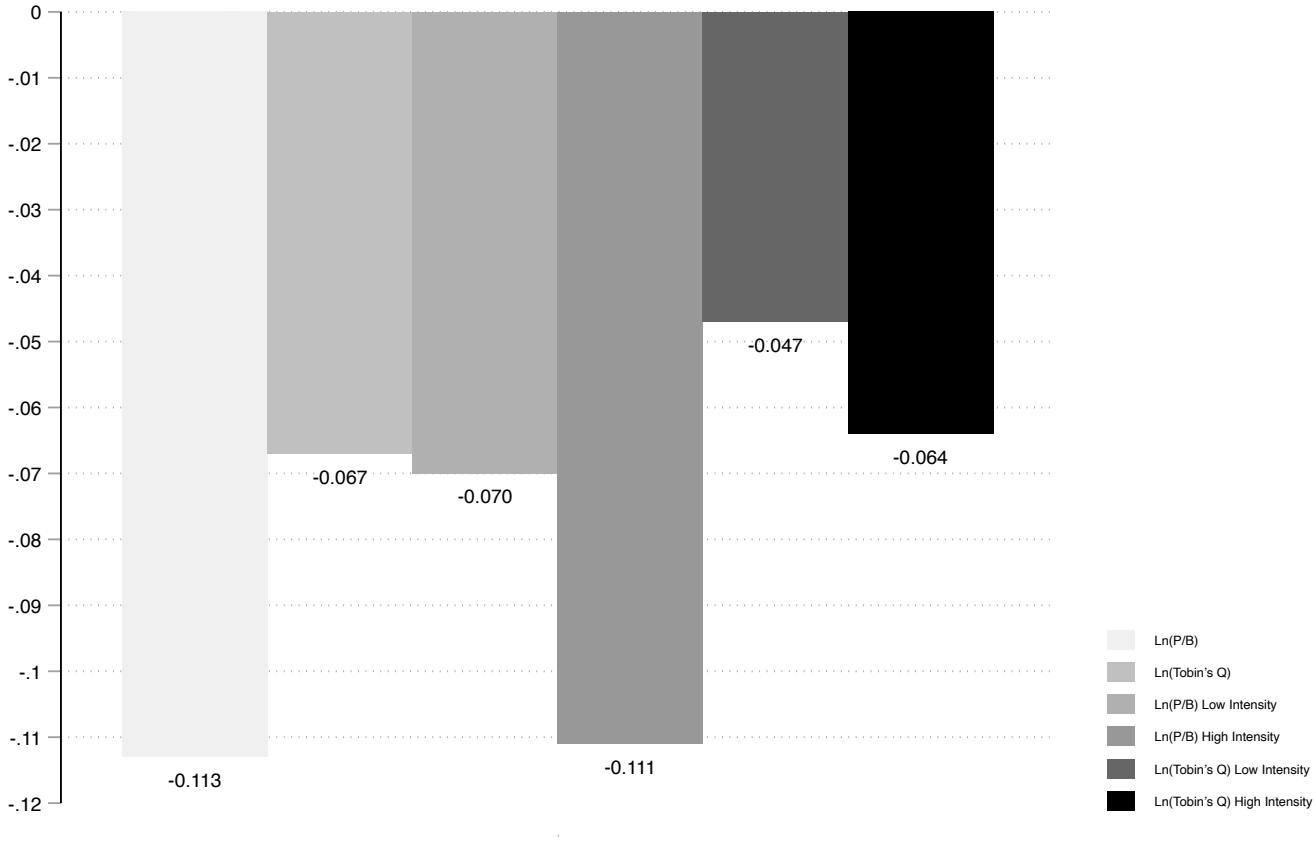
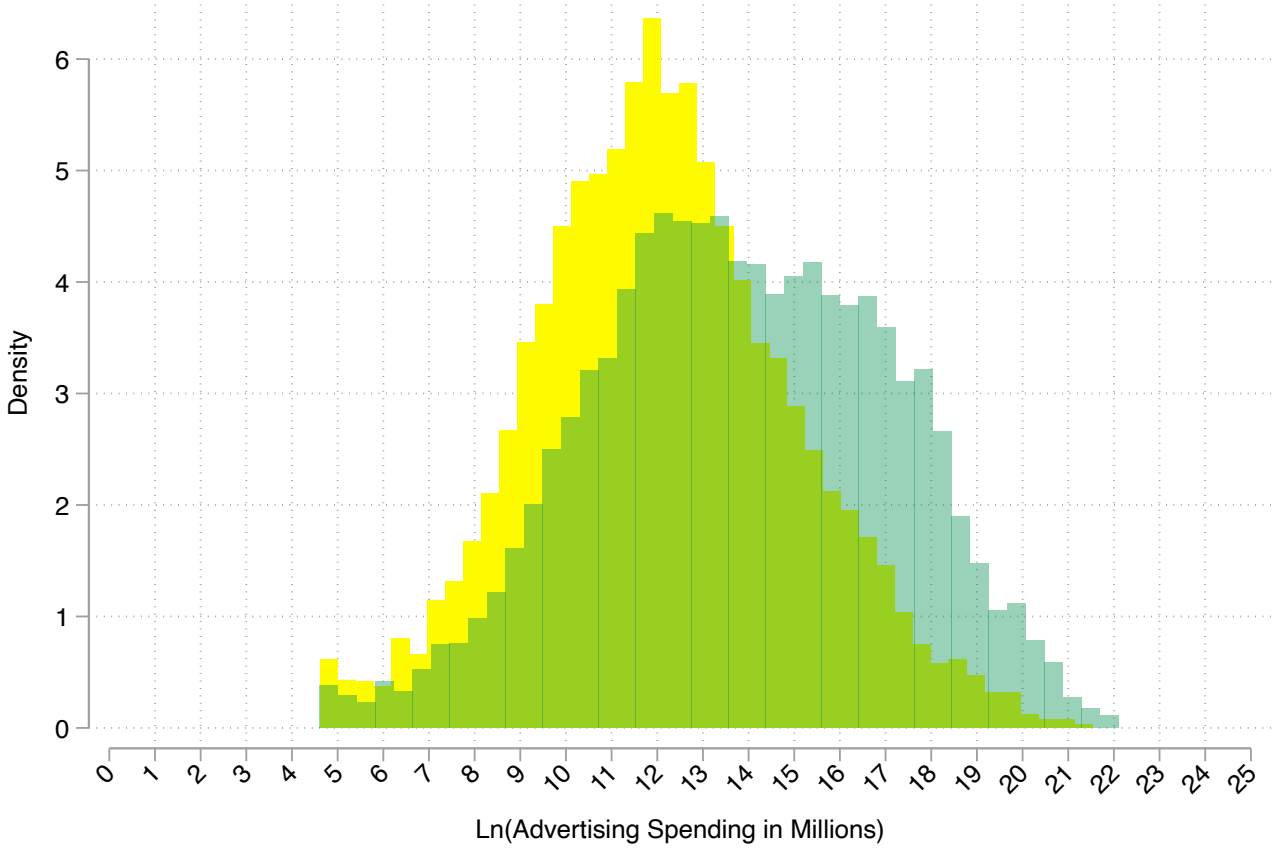
Figure 1: Valuation Decline in Unspecified Advertising Firms



This figure reports how investors value firms in the presence of unrevealed material advertising, graphing the coefficient estimates of the dependent variable of interest from Table IA2 in the Internet Appendix. The variable of interest is Unspecified Advertising$_t$, which equals one if a firm does not disclose any advertising-related expenditures, but its Kantar advertising costs are at least 5% of pre-tax income and zero otherwise. The dependent variables are Ln(P/B), the natural log of the price-to-book equity ratio, and Ln(Tobin's Q), which is the natural log of the sum of the market value of equity and book value of debt divided by total assets. Control variables are described in Internet Appendix Table IA1. In that sense, a negative coefficient indicates that firms with unspecified advertising have a valuation that is # percent lower than those that disclose their advertising. The first two bars from the left use the full sample with valuation information. The remainder of the bars divides the sample by advertising intensity. As some firms and industries are more advertising-intensive than others, we split our sample into two groups (low and high intensity) based on a firm's observed advertising expenditures scaled by its sales.

Figure 2: Comparison Histogram of Disclosed and Unspecified Advertising Firms



This figure plots the density histograms of unspecified advertising (in yellow) firms compared with disclosed advertising firms (in green). We define unspecified advertising firms as firms whose advertising expenditures are not disclosed while appearing in Kantar with advertising of at least 5% of pre-tax income. Disclosed advertising firms include reported and immaterial advertising firms. Before taking its natural log, we provide the raw number of Kantar advertisements observed for each tick on the X-axis.

Table 1: Advertising Expenditures Summary Statistics

Panel A: Summary Statistics

	N	Mean	St. Dev	1st quartile	Median	3rd quartile
For all firms:						
Observed Advertising (Kantar Group)	42,454	26.170	143.599	0.047	0.351	4.058
• Print & Publishing	42,454	7.036	40.678	0.020	0.167	1.371
• Online	42,454	2.942	20.761	0.000	0.000	0.122
• Broadcast	42,454	16.201	98.949	0.000	0.000	0.591
Among reported advertising firms:						
Reported Advertising (Compustat)	21,561	119.654	482.065	1.400	7.313	44.500
Observed Advertising (Kantar Group)	21,561	42.631	189.630	0.098	0.939	11.968
Among unspecified advertising firms:						
Observed Advertising (Kantar Group)	2,738	49.210	157.005	0.600	3.811	23.062
Among immaterial advertising firms:						
Observed Advertising (Kantar Group)	18,155	3.146	29.441	0.021	0.117	0.615

Panel B: Correlation Matrix

	Observed Advertising (from Kantar Group)
Reported Advertising (from Compustat)	0.766***
	(0.000)

Our analysis uses firm-year observations. Panel A presents the summary statistics for these expenditures across media channels. "Observed Advertising" captures the actual annual advertising expenditure of these companies as tracked by Kantar Group, further segmented into the categories of Print & Publishing, Broadcast, and Online. "Reported advertising firms" are firms with disaggregated advertising spending, referring to the publicly disclosed figures in their annual reports and recorded in Compustat, expressed in millions. In contrast, "Unspecified advertising firms" are identified by the absence of such data in Compustat, although Kantar reports that they spend at least 5 percent of their pre-tax revenues on advertising. A third category, "Immaterial advertising firms," includes firms that do not report advertising expenditure that is less than 5 percent of their pre-tax income, according to Kantar. Panel B examines the relationship between advertising expenditures reported in Compustat and those observed by Kantar Group. We use statistical significance tests to understand the strength and reliability of these correlations. A three-star designation (***), indicating a 1% significance level in two-tailed tests, underscores the robustness of our findings.

Table 2: Advertising-related Words Mentioned by Analysts in the Earnings Call

Panel A: The percentage of transcripts that include advertising-related words mentioned by analysts

	(1) Reported advertising	(2) Unspecified advertising	(3) Immaterial advertising	All Obs
Earnings Call Available	8337	617	5800	14754
Questions from Analysts	3821	312	990	5123
% of Transcript	45.83%	50.57%	17.07%	34.72%

Test Statistics: Columns 1 vs 2 (*t*-test: -4.74%; *p*-value: 0.023)
Columns 2 vs 3 (*t*-test: 33.5%; *p*-value: 0.000)

Panel B: Average number of occurrences of each advertising-related word mentioned by analysts in the Q&A section

	Firm Type		
	(1) Reported advertising	(2) Unspecified advertising	(3) Immaterial advertising
Marketing	1.037	1.394	0.818
Brand	1.304	1.042	0.792
Advertising	0.513	0.506	0.213
Branding	0.060	0.032	0.063
Promotion	0.610	0.564	0.207

Panel C: The ratio of advertising-related words mentioned by analysts in the Q&A section

	Firm Type			*t*-test			
	(1) Reported advertising	(2) Unspecified advertising	(3) Immaterial advertising	(1)-(2)	(*p*-value)	(2)-(3)	(*p*-value)
Questions from Analysts	0.99%	1.14%	0.35%	-0.03%	(0.013)	0.43%	(0.000)

Panel D: expenditures and advertising-related words mentioned by analysts

	(1) *Mentioned by Analysts*$_t$	(2) *Mentioned by Analysts*$_t$
Variable	(*Dummy*)	(*Ratio*)
Unspecified Advertising$_t$	0.057*	0.002*
	(1.901)	(1.728)
Size$_t$	0.031	0.000
	(1.276)	(0.137)
MB$_t$	-0.002***	-0.000**
	(-3.163)	(-2.124)
BigN$_t$	0.042	0.000
	(1.210)	(0.044)
ROA$_t$	0.018	-0.001
	(0.282)	(-0.549)
ROA Volatility$_t$	-0.081	0.001
	(-0.835)	(0.188)
Firm Age$_t$	-0.011***	-0.002***

	(-3.102)	(-14.208)
Log(Market Value)$_t$	0.024**	0.000
	(2.217)	(0.672)
Log(Sales)$_t$	0.010	0.001
	(0.266)	(1.103)
Leverage$_t$	0.026	-0.001
	(0.558)	(-0.396)
Loss$_t$	-0.001	-0.000
	(-0.092)	(-0.177)
Sales Growth$_t$	0.047**	0.000
	(2.061)	(0.118)
Log(SG&A)$_t$	-0.038	-0.002
	(-0.982)	(-1.453)
SG&A ratio$_t$	0.152	0.007*
	(1.312)	(1.700)
Constant	0.169	0.027***
	(1.110)	(6.306)
Year FE	Yes	Yes
Firm FE	Yes	Yes
N	11,785	11,785
Adjusted R^2	0.388	0.250

This table presents the advertising-related-word ratio mentioned by analysts in earnings calls. Panel A calculates the frequency with which analysts mention advertising-related words in the calls. Panel B shows the average occurrences for each advertising-related word used. Panel C calculates the ratio of advertising-related words mentioned by analysts. We define the ratio as the number of advertising-related words mentioned by analysts to the total # words spoken by analysts. Panel D presents the results of whether unspecified advertising firms received more questions from analysts using a linear probability model with firm-fixed effects. Our variable of interest is Unspecified Advertising$_t$, which equals one if advertising costs are missing on Compustat but appear in Kantar and over or equal to 5% of pre-tax income and zero otherwise. In column (1), Mentioned by Analysts (Dummy) equals one if analysts mentioned advertising-related words in the Q&A section of the earnings call and zero otherwise. Mentioned by Analysts (Ratio) is the number of advertising-related terms mentioned by analysts to the total number of words spoken by analysts. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses. We find similar results in a multivariate setting.

Table 3: Advertising-related Words Answered by Executives in the Earnings Call

Panel A: The percentage of transcripts that include advertising-related words mentioned by executives

	(1) Reported advertising	(2) Unspecified advertising	(3) Immaterial advertising	All Obs
Earnings Call Available	8337	617	5800	14754
Answered by Executives	5639	435	2087	8161
% of Transcript	67.64%	70.50%	35.98%	55.31%

Test Statistics: Columns 1 vs 2 (*t*-test: -2.86%; *p*-value: 0.142)
Columns 2 vs 3 (*t*-test: 34.52%; *p*-value: 0.000)

Panel B: Average number of occurrences for each advertising-related word mentioned by execs in the Q&A section

	Firm Type		
	(1) Reported advertising	(2) Unspecified advertising	(3) Immaterial advertising
Marketing	1.964	2.547	1.118
Brand	4.000	2.966	1.611
Advertising	0.796	0.837	0.250
Branding	0.086	0.067	0.070
Promotion	0.877	0.986	0.232

Panel C: The ratio of advertising-related words mentioned by executives in the Q&A section

	Firm Type			*t*-test			
	(1) Reported advertising	(2) Unspecified advertising	(3) Immaterial advertising	(1)-(2)	(*p*-value)	(2)-(3)	(*p*-value)
Answered by Executives	0.75%	0.78%	0.37%	-0.15%	(0.5009)	0.77%	(0.000)

Panel D: Unspecified advertising expenditures and advertising-related words mentioned by executives

Variable	(1) *Answered by Executives*$_t$ (*Dummy*)	(2) *Answered by Executives*$_t$ (*Ratio*)
Unspecified Advertising$_t$	0.028	0.001
	(0.879)	(1.524)
Size$_t$	-0.007	-0.000
	(-0.342)	(-0.343)
MB$_t$	-0.000	0.000
	(-0.026)	(0.322)
BigN$_t$	0.080**	-0.000
	(2.241)	(-0.493)
ROA$_t$	-0.016	0.001
	(-0.223)	(0.757)
ROA Volatility$_t$	-0.012	-0.002
	(-0.107)	(-1.316)
Firm Age$_t$	-0.005	0.001***
	(-1.327)	(9.653)

Log(Market Value)$_t$	0.029**	-0.000
	(2.549)	(-0.114)
Log(Sales)$_t$	0.064	0.001
	(1.541)	(0.829)
Leverage$_t$	-0.033	-0.001
	(-0.720)	(-0.730)
Loss$_t$	-0.006	-0.000
	(-0.406)	(-0.358)
Sales Growth$_t$	0.038	0.000
	(1.547)	(0.678)
Log (SG&A)$_t$	-0.061	-0.001
	(-1.512)	(-1.141)
SG&A ratio$_t$	0.280*	0.003
	(1.894)	(1.211)
Constant	0.208	-0.003
	(1.279)	(-1.153)
Year FE	Yes	Yes
Firm FE	Yes	Yes
N	11,785	11,785
Adjusted R^2	0.360	0.157

This table presents how often executives in earnings calls mentioned advertising-related words. In Panel A, we calculate the frequency at which executives mention advertising-related words in earnings calls. Panel B shows the average number of occurrences for each advertising-related word we used. In Panel C, we calculate the ratio of advertising-related words executives mentioned. We define the ratio as the number of advertising-related words mentioned by executives to the total number of words spoken by analysts. Panel D presents the results of whether executives of unspecified-expenditure firms answer more advertising-related questions using a linear probability model with firm fixed effects. Our variable of interest is Unspecified Advertising$_t$, which equals one if advertising costs are missing on Compustat but appear in Kantar and over or equal to 5% of pre-tax income and zero otherwise. In column (1), Mentioned by Executives (Dummy) equals one if executives mentioned advertising-related words in the Q&A section of the earnings call and zero otherwise. Mentioned by Executives (Ratio) is the number of advertising-related words mentioned by executives to the total number of words spoken by executives. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table 4: Analysts Forecast Dispersion and Unspecified Advertising Expenditures

Variable	(1) *Forecast Dispersion 1M$_t$ (Median)*	(2) *Forecast Dispersion 2M$_t$ (Median)*	(3) *Forecast Dispersion 1M$_t$ (Mean)*	(4) *Forecast Dispersion 2M$_t$ (Mean)*
Unspecified Advertising$_{t-1}$	0.045***	0.051***	0.049***	0.046***
	(3.972)	(4.454)	(4.290)	(4.189)
Ln(Advertising Expenditures$_t$)	0.001	-0.000	0.000	0.000
	(0.361)	(-0.125)	(0.082)	(0.017)
Size$_t$	-0.008*	-0.007	-0.008*	-0.009**
	(-1.845)	(-1.577)	(-1.886)	(-2.012)
MB$_t$	-0.000	-0.000	-0.000	-0.000
	(-0.440)	(-0.247)	(-0.095)	(-0.188)
ROA$_t$	-0.054**	-0.055*	-0.054**	-0.053*
	(-2.023)	(-1.857)	(-2.021)	(-1.840)
ROA Volatility$_t$	0.120***	0.145***	0.119***	0.151***
	(2.968)	(3.392)	(3.011)	(3.820)
Leverage$_t$	0.045***	0.054***	0.046***	0.052***
	(3.179)	(3.420)	(3.283)	(3.446)
BigN$_t$	-0.002	0.003	-0.001	-0.001
	(-0.155)	(0.271)	(-0.132)	(-0.138)
Ln(#Analyst)$_t$	-0.025***	-0.027***	-0.027***	-0.027***
	(-6.009)	(-5.539)	(-6.709)	(-5.823)
Firm Age$_t$	-0.005**	-0.004	-0.005**	-0.004
	(-1.970)	(-1.558)	(-1.993)	(-1.624)
Loss$_t$	0.059***	0.056***	0.056***	0.054***
	(7.682)	(6.659)	(7.368)	(6.663)
Constant	0.213***	0.202***	0.215***	0.216***
	(5.055)	(4.347)	(5.352)	(4.967)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	24,533	24,512	24,532	24,512
Adjusted R^2	0.184	0.184	0.194	0.190

This table reports the information uncertainty that analysts face in the presence of material unrevealed advertising expenditures. The dependent variable is Forecast Dispersion #M (Median/Mean) at time t, measured as the standard deviation of analyst forecast errors made # months before a firm's actual announcement of EPS, scaled by the absolute value of median or mean forecast errors. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table 5: Analysts' Overestimation in EPS and Unspecified Advertising Expenditures

Variable	(1) *Overestimate* $1M_t$ *(Median)*	(2) *Overestimate* $2M_t$ *(Median)*	(3) *Overestimate* $1M_t$ *(Mean)*	(4) *Overestimate* $2M_t$ *(Mean)*
Unspecified Advertising$_{t-1}$	-0.004**	-0.004**	-0.004**	-0.004**
	(-2.324)	(-2.480)	(-2.235)	(-2.255)
Ln(Advertising Expenditures$_t$*)*	-0.001	-0.001	-0.000	-0.001
	(-1.045)	(-1.236)	(-0.889)	(-0.978)
Size$_t$	-0.001	-0.001	-0.001	-0.001
	(-0.669)	(-0.561)	(-0.823)	(-0.625)
MB$_t$	-0.000	-0.000	-0.000	-0.000
	(-0.616)	(-0.465)	(-0.610)	(-0.314)
ROA$_t$	-0.007	-0.003	-0.007	-0.003
	(-0.920)	(-0.389)	(-0.924)	(-0.350)
ROA Volatility$_t$	0.029***	0.034***	0.029***	0.035***
	(2.784)	(3.344)	(2.764)	(3.359)
Leverage$_t$	0.018***	0.019***	0.019***	0.020***
	(3.361)	(3.371)	(3.423)	(3.466)
BigN$_t$	0.002	0.003	0.002	0.003
	(0.959)	(1.365)	(0.911)	(1.355)
Log(#Analysts)$_t$	-0.004***	-0.004***	-0.004***	-0.004***
	(-3.908)	(-3.908)	(-3.838)	(-3.777)
Firm Age$_t$	-0.004***	-0.004***	-0.004***	-0.004***
	(-3.791)	(-3.834)	(-4.211)	(-4.065)
Loss$_t$	0.006***	0.006***	0.006***	0.007***
	(3.631)	(3.690)	(3.704)	(3.883)
Constant	0.064***	0.061***	0.066***	0.066***
	(4.387)	(4.308)	(4.824)	(4.506)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	26,695	26,585	26,695	26,585
Adjusted R^2	0.280	0.273	0.279	0.270

This table reports whether analysts make a pessimistic or optimistic forecast when a firm chooses to withhold material advertising expenditures. Our variable of interest is Unspecified Advertising$_t$, which equals one if advertising costs are missing on Compustat but appear in Kantar and over or equal to 5% of pre-tax income and zero otherwise at time t-1. The dependent variable is Forecast Error #M (Median/Mean) at time t. The mean or median forecast errors of analysts' forecast made # months prior to a firm's actual announcement of EPS, scaled by the prior year-end stock price. Forecast errors are defined as analyst forecasts minus actual EPS. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table 6: CEO Tenure and the Disclosure of Advertising Expenditures

Panel A: The impact of CEO job security on the decision to become an unspecified advertising firm

	(1)	(2)
Variable	*Unspecified Advertising$_t$*	
Short CEO Tenure 4 Years$_t$	0.009**	
	(2.562)	
Short CEO Tenure 3 Years$_t$		0.006*
		(1.747)
Firm Age$_t$	0.017*	0.017*
	(1.897)	(1.889)
Size$_t$	-0.009	-0.009
	(-1.554)	(-1.591)
Leverage$_t$	0.024	0.024
	(1.176)	(1.172)
HHI$_t$	-0.026	-0.025
	(-0.380)	(-0.359)
ROA$_t$	-0.012	-0.012
	(-0.609)	(-0.623)
Constant	-0.089	-0.085
	(-0.777)	(-0.740)
Year FE	Yes	Yes
Firm FE	Yes	Yes
N	25,462	25,462
Adjusted R^2	0.411	0.411

Panel B: Subsample analysis of industries with high and low CEO turnover

	(1)	(2)	(3)	(4)
	Unspecified Advertising$_t$			
Variable	High Industry CEO Turnover	Low Industry CEO Turnover	High Industry CEO Turnover	Low Industry CEO Turnover
Short CEO Tenure 4 Years$_t$	0.013***	0.002		
	(3.070)	(0.291)		
Short CEO Tenure 3 Years$_t$			0.010**	-0.001
			(2.336)	(-0.170)
Control Variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	15,748	9,714	15,748	9,714
Adjusted R^2	0.361	0.477	0.360	0.477

Panel A reports whether firms with short CEO tenure are likelier to be unspecified advertising firms. Our variable of interest is Unspecified Advertising$_t$, which equals one if advertising costs are missing on Compustat but appear in Kantar and over or equal to 5% of pre-tax income and zero otherwise. A short CEO Tenure of 4 (3) Years indicates if the tenure is above or below 4 (3) years. Panel B categorizes industries based on Fama-French 12 classification. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. Asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table 7: Relationship Between CEO Tenure and Advertising Rivalry

Panel A: Unspecified advertising and CEO tenure

	(1)	(2)
Variable	*Unspecified Advertising$_t$*	
Short CEO Tenure 4 Years$_t$	0.009***	
	(2.588)	
Short CEO Tenure 3 Years$_t$		0.006*
		(1.771)
High Fluidity Indicator$_t$	0.009*	0.009*
	(1.940)	(1.929)
Constant	Yes	Yes
Control Variables	Yes	Yes
Year FE	Yes	Yes
Firm FE	Yes	Yes
N	25,462	25,462
Adjusted R^2	0.412	0.411

Panel B: Subsample analysis of industries with high CEO turnover and of industries with low CEO turnover

	(1)	(2)	(3)	(4)
	Unspecified Advertising$_t$			
Variable	High Industry CEO Turnover	Low Industry CEO Turnover	High Industry CEO Turnover	Low Industry CEO Turnover
Short CEO Tenure 4 Years$_t$	0.013***	0.002		
	(3.087)	(0.305)		
Short CEO Tenure 3 Years$_t$			0.010**	-0.001
			(2.347)	(-0.150)
High Fluidity Indicator$_t$	0.006	0.014**	0.005	0.014**
	(0.814)	(2.162)	(0.799)	(2.156)
Constant	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	15,748	9,714	15,748	9,714
Adjusted R^2	0.361	0.477	0.360	0.477

This table reexamines the results in Table 7 by adding a High Fluidity Indicator. The high Fluidity Indicator is set to one if a firm's fluidity value exceeds the average fluidity of the sample firms and zero otherwise. We include constant, control variables, firm-fixed effects, and year-fixed effects in all panels. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

ADDENDUM

Marketing-related Expenses Collection Details

We observe that Compustat includes only advertising expenditures, while firms may report other advertising-related expenses, such as marketing, selling, promotion, and customer acquisition costs, in their annual reports. For example, American Express did not specify advertising expenses in its annual reports from 1995 to 2019. Still, it did disclose marketing expenses, making it a disclosed advertising firm rather than an unspecified one. While previous studies, such as Moon et al. (2023) and Liang (2024), focus solely on advertising expenses, it is necessary to include these marketing-related expenses in our analysis.

For this reason, in this Addendum, we provide an overview and definitions of marketing, selling, advertising, and promotion expenses. Marketing expenses, the broadest category, encompass activities related to market research, product development, brand building, and communication with the target audience. Selling expenses focus on activities directly related to selling products or services and maintaining customer relationships. Advertising and promotion expenses are specifically aimed at promoting products or services through various media channels.

Before 1994, FRR44 required firms to disclose advertising expenses if they exceeded 1% of sales. However, after 1994, the disclosure became voluntary, allowing managers to decide whether to report these costs. This change likely explains why Compustat includes only this type of expense. Despite this, advertising expenses remain the most common expense category for evaluating a firm's investment in brand development.

We first identify firms with observed advertising expenditures from Kantar Group but where the "XAD" item in Compustat is missing. Then, we use the CIK number to download the 10-K filings from the EDGAR platform. Item I lists the terms we use for our manual search:

Addendum Item I: Search Terms Used

- *Advertising/Advertising expenses/Advertising costs*
- *Marketing/Marketing expenses/Marketing costs/Marketing and business development/Marketing promotion, rewards, and cardmember services*
- *Selling/Selling expenses/Selling costs*
- *Promotion/Promotion expenses/Promotion costs*
- *Customer acquisition costs*
- *Broadcasting expenses*
- *Sales commissions*

Note: We also collect data using combinations of the terms listed above.

In Item I, we document that 20,893 firm-year observations do not report advertising expenditures in Compustat, but advertising expenditures are observed in the Kantar Group data. Among these firms, approximately 15% (3,044 firms) report other advertising-related expenses. Since the terms used by firms vary significantly—for example, one firm reports "advertising and marketing expenses," while another reports "advertising, consumer, and trade promotion expenses"—we classify these items based on the broadest term used. Specifically, "advertising and marketing expenses" are classified as "marketing-related expenses," and "advertising, consumer, and trade promotion expenses" are classified as "advertising-related expenses." The frequency of the items used by these firms is provided in Item II.

Addendum Item II: Frequency of the item firm used

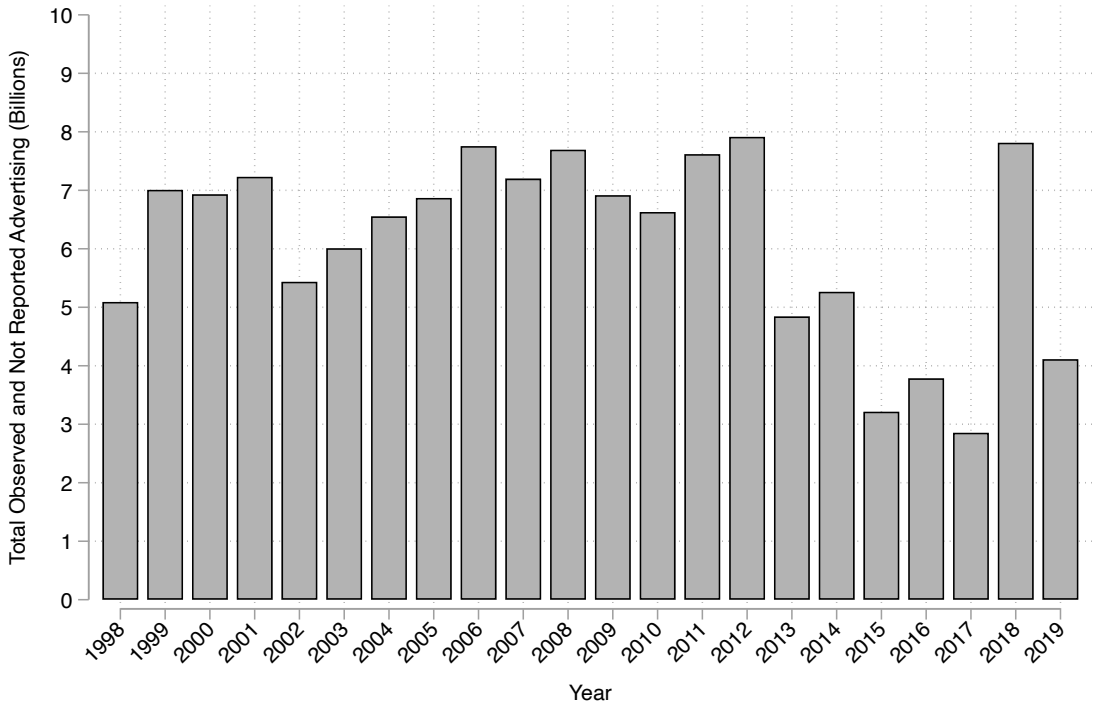
Term Used	Frequency	Ratio
• *Marketing-related expenses*	2,082	65%
• *Selling-related expenses*	731	23%
• *Advertising-related expenses*	340	11%
• *Promotion-related expenses*	36	1%
Total	3,189	100%

Note: Firms may disclose both items simultaneously.

From Item II, we see that about 10% (2,082/20,893) of the firm-year observations report marketing-related expenses, but their Compustat "XAD" data is missing. Notably, 340 firm-year observations report advertising expenses that Compustat does not capture. Additionally, we find that "marketing-related expenses" is the most used term by firms that do not specify advertising expenses.

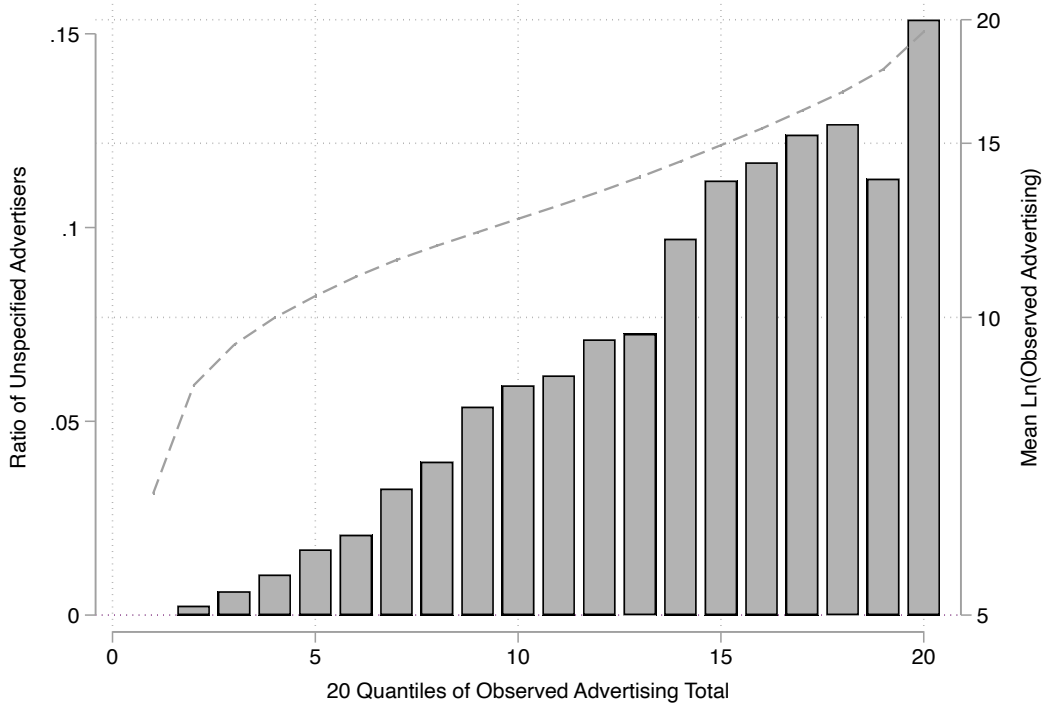
INTERNET APPENDIX

Figure IA1: Material Advertising Expenditures Measured by Kantar and Not Reported



The following table depicts the total yearly advertising spending of unspecified advertising firms in billions as observed by Kantar Group, which began in 1995 due to data availability. Unspecified advertising firms are firms whose advertising expenditure is missing on Compustat while appearing in Kantar, advertising at least 5% of their pre-tax income.

Figure IA2: Ratios of Unspecified Advertising Firms by Observed Advertising Quantiles



This figure shows the ratio of unspecified advertising firms across twenty quantiles of observed advertising, as reported by Kantar Group and sorted by spending amount. The left Y-axis represents the proportion of unspecified advertising firms, while the right Y-axis displays the natural log of the mean observed advertising per quantile. Unspecified advertising firms are defined as firms whose advertising expenditures are not disclosed but appear in Kantar with advertising spending of at least 5% of pre-tax income.

Table IA1: Summary Statistics of Main Tests

Panel A: Firm Valuation Sample

	N	Mean	S.D.	1st quartile	Median	3rd quartile
Dependent Variables:						
P/B	21,604	3.230	3.809	1.377	2.135	3.527
Tobin's Q	22,389	1.821	1.163	1.096	1.419	2.070
Independent Variables:						
Unspecified Advertising	22,389	0.061	0.239	0.000	0.000	0.000
Ln(Advertising Expenditures)	22,389	1.540	2.122	0.000	0.000	2.885
Size	22,389	7.765	2.032	6.417	7.774	9.155
Ln(#Analyst)	22,389	1.685	1.134	0.693	1.946	2.639
Leverage	22,389	0.234	0.193	0.078	0.210	0.345
ROA	22,389	0.036	0.103	0.010	0.040	0.081
ROA Volatility	22,389	0.046	0.063	0.011	0.025	0.055
BigN	22,389	0.848	0.359	1.000	1.000	1.000
Sales Growth	22,389	0.075	0.213	-0.019	0.054	0.136
Intangible Assets	22,389	0.181	0.197	0.018	0.104	0.297
Ln(Cash)	22,389	5.008	2.249	3.618	5.067	6.498

Variable Definitions:

P/B	the price-to-book equity ratio, following Dong et al. (2006; 2012)
Tobin's Q	the sum of the market value of equity and the book value of debt divided by total assets
Sales Growth	the sales in t minus sales in t-1, scaled by sales in t-1
Intangible Assets	the natural log of (1+intangible assets)
Cash	amount of cash and short-term investment

Panel B: Analyst Forecast Sample

	N	Mean	S.D.	1st quartile	Median	3rd quartile
Dependent Variables:						
Forecast Dispersion $1M_t$ (Median)	24,533	0.067	0.196	0.008	0.017	0.044
Forecast Dispersion $2M_t$ (Median)	24,512	0.070	0.208	0.009	0.018	0.045
Forecast Dispersion $1M_t$ (Mean)	24,532	0.067	0.195	0.008	0.017	0.043
Forecast Dispersion $2M_t$ (Mean)	24,506	0.070	0.205	0.009	0.018	0.045
Overestimation $1M_t$ (Median)	26,695	0.009	0.048	-0.002	-0.000	0.005
Overestimation $2M_t$ (Median)	26,585	0.009	0.048	-0.002	-0.000	0.006
Overestimation $1M_t$ (Mean)	26,695	0.009	0.048	-0.002	-0.000	0.005
Overestimation $2M_t$ (Mean)	26,516	0.009	0.048	-0.002	-0.000	0.006
Independent Variables:						
Unspecified Advertising$_{t-1}$	24,533	0.060	0.237	0.000	0.000	0.000
Ln(Advertising Expenditures)$_t$	24,533	1.570	2.080	0.000	0.000	2.996
Size$_t$	24,533	7.772	1.849	6.428	7.671	8.992
MB$_t$	24,533	3.332	4.711	1.439	2.294	3.890
ROA$_t$	24,533	0.035	0.114	0.010	0.042	0.085

ROA Volatility$_t$	24,533	0.053	0.079	0.012	0.027	0.060
Leverage$_t$	24,533	0.232	0.200	0.062	0.204	0.349
BigN$_t$	24,533	0.901	0.299	1.000	1.000	1.000
Ln(#Analyst)$_t$	24,533	2.094	0.755	1.609	2.079	2.708
Firm Age$_t$	24,533	11.764	7.299	6.000	11.000	17.000
Loss$_t$	24,533	0.179	0.383	0.000	0.000	0.000

Variable Definitions:

Forecast Dispersion #M (Median)	the dispersion in analyst forecasts, measured as the standard deviation of analyst forecasts errors made # months prior to a firm's actual announcement of EPS, scaled by the absolute value of median forecast errors
Forecast Dispersion #M (Mean)	the dispersion in analyst forecasts, measured as the standard deviation of analyst forecasts errors made # months prior to a firm's actual announcement of EPS, scaled by the absolute value of mean forecast errors
Overestimation #M (Median)	the mean overestimation in EPS of analysts forecast made # months prior to a firm's actual announcement of EPS, scaled by the prior year-end stock price. Overestimation in EPS is defined as analyst forecast minus actual EPS
Overestimation #M (Mean)	the median overestimation in EPS of analysts forecast made # months prior to a firm's actual announcement of EPS, scaled by the prior year-end stock price. Overestimation in EPS is defined as analyst forecast minus actual EPS
Unspecified Advertising	an indicator which equals one if advertising costs are not reported in Compustat but appear in Kantar and at the meanwhile is over or equal to 5% of pre-tax income, and zero otherwise
Advertising Expenditures	advertising expenditures reported by the firm
Size	the natural log of total assets
MB	the firm's market value of equity is scaled by the book value of equity
ROA	the firm's ROA (net income divided by the average of total assets)
ROA Volatility	the standard deviation of ROA over the 5 years before the current year
BigN	an indicator set to one if the auditor is a BigN auditor and set to zero otherwise
Leverage	book value of long-term debt divided by total assets
#Analyts	the number of analysts following the firm
Firm Age	age of the firm as appears on CRSP
Loss	an indicator set to one if a firm has a net loss and set to zero otherwise

Panel C: Earnings Calls Sample

	N	Mean	S.D.	1st quartile	Median	3rd quartile
Dependent Variables:						
Mentioned by Analysts$_t$ (Dummy)	11,785	0.371	0.483	0.000	0.000	1.000
Mentioned by Analysts$_t$ (Ratio)	11,785	0.008	0.013	0.000	0.000	0.015
Answered by Executives$_t$ (Dummy)	11,785	0.583	0.493	0.000	1.000	1.000
Answered by Executives$_t$ (Ratio)	11,785	0.006	0.010	0.000	0.004	0.010
Independent Variables:						
Unspecified Advertising$_t$	11,785	0.039	0.193	0.000	0.000	0.000
Size$_t$	11,785	7.657	1.881	6.311	7.593	8.916
MB$_t$	11,785	3.462	6.342	1.398	2.420	4.280
BigN$_t$	11,785	0.880	0.325	1.000	1.000	1.000
ROA$_t$	11,785	0.077	0.117	0.033	0.081	0.133
ROA Volatility$_t$	11,785	0.043	0.050	0.014	0.027	0.052

Firm Age	11,785	14.934	7.227	10.000	15.000	20.000
Ln(MV)	11,785	7.707	1.895	6.387	7.678	9.027
Ln(Sales)	11,785	7.430	1.800	6.152	7.398	8.653
Leverage	11,785	0.243	0.219	0.054	0.207	0.364
Loss	11,785	0.235	0.424	0.000	0.000	0.000
Sale Growth	11,785	0.089	0.216	-0.013	0.060	0.151
Ln(SG&A)	11,785	6.001	1.567	4.912	5.888	7.034
SG&A Ratio	11,785	0.374	0.239	0.179	0.327	0.533

Variable Definitions:

Mentioned by Analysts (Dummy)	a dummy variable that is equal to one if an analyst mentions any advertising-related words such as marketing, brand, advertising, branding, and promotion, and zero otherwise
Mentioned by Analysts (Ratio)	the ratio calculated by advertising-related words mentioned by analysts to the total number of words spoken by analysts
Answered by Executives (Dummy)	a dummy variable that is equal to one if an executive mentions any advertising-related words such as marketing, brand, advertising, branding, and promotion, and zero otherwise
Answered by Executives (Ratio)	the ratio of advertising-related words mentioned by executives to the total number of words spoken by executives
MV	market value
Sales	sales
SG&A	selling, general, and administrative expenses
SG&A ratio	The ratio of selling, general, and administrative expenses to the sum of selling, general, and administrative expenses and cost of goods sold

Panel D: CEO Tenure Sample

	N	Mean	S.D.	1st quartile	Median	3rd quartile
Dependent Variables:						
Unspecified Advertising	25,462	0.057	0.233	0.000	0.000	0.000
Independent Variables:						
Short CEO Tenure 4 Years	25,462	0.396	0.489	0.000	0.000	1.000
Short CEO Tenure 3 Years	25,462	0.306	0.461	0.000	0.000	1.000
Firm Age	25,462	12.024	7.232	6.000	11.000	18.000
Size	25,462	7.974	1.752	6.683	7.855	9.149
Leverage	25,462	0.237	0.192	0.075	0.218	0.353
HHI	25,462	0.098	0.072	0.054	0.079	0.111
ROA	25,462	0.044	0.104	0.013	0.047	0.089
High Fluidity Indicator	25,462	0.384	0.486	0.000	0.000	1.000

Variable Definitions:

Short CEO Tenure 4 Years	an indicator variable if CEO tenure is less than 4 years, and zero otherwise
Short CEO Tenure 3 Years	an indicator variable if CEO tenure is less than 3 years, and zero otherwise
HHI	Herfindahl-Hirschman Index is calculated annually based on two-digit SIC codes
High Fluidity Indicator	an indicator taking the value one when a firm's fluidity value exceeds the average fluidity value and zero otherwise. We follow Hoberg et al. (2014) to measure fluidity

Panel E: Analyst Forecast Sample for FRR44 Analyses

	N	Mean	S.D.	1st quartile	Median	3rd quartile
Dependent Variables:						
Forecast Dispersion 1M$_t$ (Median)	6,128	0.091	0.205	0.014	0.030	0.071
Forecast Dispersion 2M$_t$ (Median)	6,064	0.094	0.212	0.016	0.031	0.075
Forecast Dispersion 1M$_t$ (Mean)	6,128	0.090	0.206	0.014	0.030	0.072
Forecast Dispersion 2M$_t$ (Mean)	6,054	0.091	0.200	0.016	0.031	0.075
Overestimation 1M$_t$ (Median)	6,114	0.015	0.024	-0.001	0.004	0.031
Overestimation 2M$_t$ (Median)	6,063	0.016	0.024	-0.001	0.006	0.032
Overestimation 1M$_t$ (Mean)	6,114	0.015	0.023	-0.001	0.005	0.031
Overestimation 2M$_t$ (Mean)	6,063	0.016	0.024	-0.001	0.007	0.032
Independent Variables:						
Unspecified Advertising(FRR44)	6,128	0.197	0.398	0.000	0.000	0.000
Post	6,128	0.576	0.494	0.000	1.000	1.000
Size$_t$	6,128	6.539	1.782	5.201	6.378	7.690
MB$_t$	6,128	2.923	2.427	1.532	2.200	3.414
ROA$_t$	6,128	0.160	0.137	0.091	0.159	0.230
ROA Volatility$_t$	6,128	0.055	0.074	0.015	0.032	0.064
Leverage$_t$	6,128	0.241	0.211	0.069	0.208	0.359
BigN$_t$	6,128	0.896	0.305	1.000	1.000	1.000
Log(#Analyst Following)$_t$	6,128	1.909	0.787	1.386	1.792	2.485
Firm Age$_t$	6,128	19.563	16.106	7.000	14.000	26.000
Loss$_t$	6,128	0.136	0.343	0.000	0.000	0.000

Variable Definition

Unspecified Advertising(FRR44)	an unspecified advertising firm indicator that equals one if a firm does not reveal its' advertising costs post the change of FRR44, and its' observed advertising expenditures are over or equal to 5 percent of pre-tax income and zero otherwise
Post	an indicator variable that equals one if a year is in the post-switching period and zero otherwise

Panel F: CEO Tenure Sample for FRR44 Analyses

	N	Mean	S.D.	1st quartile	Median	3rd quartile
Dependent Variables:						
Unspecified Advertising(FRR44)	957	0.199	0.399	0.000	0.000	0.000
Independent Variables:						
Short CEO Tenure 4 Years$_t$	957	0.498	0.000	0.000	1.000	0.498
Short CEO Tenure 3 Years$_t$	957	0.487	0.000	0.000	1.000	0.487
Firm Age$_t$	957	25.215	18.610	10.000	23.000	32.000
Size$_t$	957	7.161	1.653	5.873	6.977	8.326
Leverage$_t$	957	0.224	0.158	0.100	0.219	0.331
HHI$_t$	957	0.070	0.079	0.028	0.052	0.075
ROA$_t$	957	0.154	0.099	0.099	0.145	0.209

Table IA2: Firm Valuation and Disclosure of Advertising Expenditures

Panel A: Firm Valuation and Advertising Expenditures Disclosure

	(1)	(2)
	Firm Valuation$_t$	
Variable	*Ln(P/B)*$_t$	*Ln(Tobin's Q)*$_t$
Unspecified Advertising$_t$	-0.113***	-0.067***
	(-3.955)	(-4.116)
Constant	2.575***	1.479***
	(16.715)	(17.336)
Controls	Yes	Yes
Year FE	Yes	Yes
Firm FE	Yes	Yes
N	21,604	22,389
Adjusted R^2	0.721	0.783

Panel B: Firm Valuation and Advertising Expenditures Disclosure by Advertising Intensity

	(1)	(2)	(3)	(4)
	Ln(P/B)$_t$		*Ln(Tobin's Q)*$_t$	
	Advertising Intensity		Advertising Intensity	
Variable	Low	High	Low	High
Unspecified Advertising$_t$	-0.070	-0.111***	-0.047*	-0.064***
	(-1.440)	(-3.432)	(-1.802)	(-3.545)
Constant	2.615***	2.648***	1.464***	1.526***
	(12.494)	(12.385)	(12.153)	(13.325)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	11,470	9,758	10,987	10,992
Adjusted R^2	0.726	0.741	0.791	0.797

This table reports how investors value firms in the presence of unrevealed material advertising. Our variable of interest is Unspecified Advertising$_t$, which equals one if advertising costs are missing on Compustat but appear in Kantar and over or equal to 5% of pre-tax income and zero otherwise. Panel A looks at the full sample with valuation information. Panel B divides the sample by advertising intensity. As some firms and industries are more advertising-intensive than others, we split our sample into two groups (low and high intensity) based on a firm's observed advertising expenditures scaled by its sales. The dependent variables in both panels are Log(P/B), the natural log of the price-to-book equity ratio, and Log(Tobin's Q), which is the natural log of the sum of the market value of equity and book value of debt divided by total assets. We list and define the control variables in Table IA1 in the Internet Appendix. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table IA3: Analysts' Forecast Dispersion and Unspecified Advertising Expenditures (FRR44)

Variable	(1) *Forecast Dispersion 1M$_t$ (Median)*	(2) *Forecast Dispersion 2M$_t$ (Median)*	(3) *Forecast Dispersion 1M$_t$ (Mean)*	(4) *Forecast Dispersion 2M$_t$ (Mean)*
Unspecified Advertising(FRR44) × Post	0.018	0.024*	0.020	0.023*
	(1.311)	(1.751)	(1.445)	(1.784)
Post	0.007	-0.006	0.006	-0.005
	(0.645)	(-0.448)	(0.449)	(-0.407)
Size$_t$	-0.035**	-0.055***	-0.031*	-0.029
	(-2.030)	(-2.909)	(-1.752)	(-1.633)
MB$_t$	-0.002	-0.005*	-0.002	-0.004
	(-0.973)	(-1.713)	(-0.735)	(-1.481)
ROA$_t$	-0.346***	-0.372***	-0.379***	-0.340***
	(-6.276)	(-5.755)	(-6.058)	(-5.137)
ROA Volatility$_t$	-0.008	-0.074	-0.038	-0.161
	(-0.081)	(-0.537)	(-0.361)	(-1.222)
Log(#Analyst)$_t$	-0.015	-0.003	-0.019	-0.023**
	(-1.173)	(-0.273)	(-1.544)	(-2.099)
Loss$_t$	0.004	0.008	-0.005	0.007
	(0.251)	(0.495)	(-0.337)	(0.483)
BigN$_t$	0.023	0.022	0.018	0.013
	(1.180)	(0.890)	(1.013)	(0.671)
Leverage$_t$	0.069***	0.078***	0.072***	0.061**
	(2.655)	(2.892)	(2.714)	(2.122)
Firm Age$_t$	0.078**	0.084**	0.082**	0.092**
	(2.251)	(2.366)	(2.232)	(2.289)
Constant	-1.167*	-1.147*	-1.237*	-1.431*
	(-1.736)	(-1.656)	(-1.761)	(-1.845)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	6,128	6,064	6,128	6,054
Adjusted R^2	0.267	0.266	0.271	0.278

This table reports the information uncertainty that analysts face in the presence of material unrevealed advertising expenditures. Our variable of interest is Unspecified Advertising(FRR44), which equals one if a firm does not reveal its' advertising costs post the change of FRR44 and its' observed advertising expenditures are over or equal to 5 percent of pre-tax income and zero otherwise. The dependent variable is Forecast Dispersion #M (Median/Mean), which is measured as the standard deviation of analyst forecast errors made # months before a firm's actual announcement of EPS, scaled by the absolute value of median or mean forecast errors. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table IA4: Analysts' EPS Overestimation and Unspecified Advertising Expenditures (FRR44)

Variables	(1) *Overestimate* $1M_t$*(Median)*	(2) *Overestimate* $2M_t$ *(Median)*	(4) *Overestimate* $1M_t$ *(Mean)*	(5) *Overestimate* $2M_t$ *(Mean)*
Unspecified Advertising(FRR44) × Post	-0.002*	-0.003**	-0.002*	-0.003**
	(-1.657)	(-2.095)	(-1.658)	(-1.997)
Post	0.002	0.001	0.002	0.002
	(1.473)	(1.024)	(1.596)	(1.058)
$Size_t$	-0.004***	-0.004***	-0.004***	-0.004***
	(-2.884)	(-2.794)	(-3.036)	(-2.776)
MB_t	-0.001***	-0.001***	-0.001***	-0.001***
	(-4.630)	(-4.177)	(-4.852)	(-4.331)
ROA_t	-0.013**	-0.015***	-0.013***	-0.017***
	(-2.557)	(-2.741)	(-2.663)	(-3.219)
$ROA\ Volatility_t$	-0.010	-0.016*	-0.008	-0.014
	(-1.198)	(-1.781)	(-0.982)	(-1.620)
$Log(\#Analyst)_t$	0.002	0.001	0.002*	0.001
	(1.642)	(0.807)	(1.943)	(0.949)
$Loss_t$	0.003**	0.003***	0.003**	0.003***
	(2.357)	(2.767)	(2.368)	(2.613)
$BigN_t$	-0.002	-0.002	-0.002	-0.002
	(-0.778)	(-0.706)	(-0.603)	(-0.563)
$Leverage_t$	0.003	0.002	0.003	0.003
	(1.298)	(1.045)	(1.395)	(1.189)
$Firm\ Age_t$	-0.001	-0.000	-0.001	-0.000
	(-0.341)	(-0.103)	(-0.296)	(-0.110)
Constant	0.064	0.054	0.062	0.054
	(1.067)	(0.836)	(1.020)	(0.829)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	6,114	6,063	6,114	6,063
Adjusted R^2	0.439	0.423	0.445	0.421

This table reports the information uncertainty that analysts face in the presence of material unrevealed advertising expenditures. Our variable of interest is Unspecified Advertising(FRR44), which equals one if a firm does not reveal its' advertising costs post the change of FRR44 and its' observed advertising expenditures are over or equal to 5 percent of pre-tax income and zero otherwise. The dependent variable is Forecast Error #M (Median/Mean), the mean or median forecast errors of analysts forecast made # months before a firm's actual announcement of EPS, scaled by the prior year-end stock price. Forecast errors are defined as analyst forecasts minus actual EPS. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table IA5: CEO Tenure and the Disclosure of Advertising Expenditures (FRR44)

	(1)	(2)
Variable	*Unspecified Advertising(FRR44)*	
Short CEO Tenure 4 Years$_t$	0.051**	
	(2.287)	
Short CEO Tenure 3 Years$_t$		0.035
		(1.529)
Firm Age$_t$	-0.000	-0.000
	(-0.245)	(-0.207)
Size$_t$	-0.009	-0.009
	(-0.729)	(-0.711)
Leverage$_t$	0.193	0.199
	(1.487)	(1.519)
HHI$_t$	0.066	0.060
	(0.268)	(0.241)
ROA$_t$	0.392	0.384
	(1.640)	(1.601)
Constant	0.192**	0.200**
	(2.220)	(2.281)
Year FE	Yes	Yes
Industry FE	Yes	Yes
N	957	957
Pseudo R^2	0.219	0.217

This table reports whether firms with short CEO tenure are more likely to be switchers, i.e., turned from reported advertising to unspecified advertising firms post FRR44. Unspecified Advertising(FRR44) equals one if a firm stops revealing its' advertising costs after the change of Financial Reporting Release 44 and its' observed advertising expenditures are over or equal to 5 percent of pre-tax income as well, and zero otherwise. We use the Fama-French 12 industry classification. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. * and ** represent significance at 10 percent and 5 percent, respectively. Standard errors are clustered at the industry level; t-statistics are in parentheses.

Table IA6: Analysts Forecast Dispersion and Disclosure of Marketing-related Expenditures

Variable	(1) *Forecast Dispersion 1M$_t$ (Median)*	(2) *Forecast Dispersion 2M$_t$ (Median)*	(3) *Forecast Dispersion 1M$_t$ (Mean)*	(4) *Forecast Dispersion 2M$_t$ (Mean)*
Unspecified Marketing$_{t-1}$	0.042***	0.044***	0.041***	0.039***
	(3.069)	(3.225)	(3.122)	(2.934)
Ln(Advertising Expenditures Updated$_t$)	-0.000	-0.001	-0.001	-0.001
	(-0.295)	(-0.774)	(-0.695)	(-0.554)
Size$_t$	-0.009*	-0.008*	-0.008*	-0.009**
	(-1.890)	(-1.667)	(-1.896)	(-2.088)
MB$_t$	-0.000	-0.000	-0.000	-0.000
	(-0.373)	(-0.188)	(-0.045)	(-0.144)
ROA$_t$	-0.056**	-0.056*	-0.055**	-0.054*
	(-2.079)	(-1.873)	(-2.084)	(-1.862)
ROA Volatility$_t$	0.119***	0.143***	0.117***	0.149***
	(2.935)	(3.347)	(2.974)	(3.780)
Leverage$_t$	0.047***	0.054***	0.046***	0.052***
	(3.268)	(3.442)	(3.321)	(3.451)
BigN$_t$	-0.001	0.004	-0.001	-0.001
	(-0.093)	(0.342)	(-0.060)	(-0.068)
Log(#Analyst)$_t$	-0.025***	-0.026***	-0.027***	-0.026***
	(-6.066)	(-5.497)	(-6.811)	(-5.811)
Firm Age$_t$	-0.005**	-0.005	-0.005**	-0.004*
	(-2.026)	(-1.620)	(-2.072)	(-1.689)
Loss$_t$	0.059***	0.056***	0.056***	0.054***
	(7.707)	(6.707)	(7.395)	(6.713)
Constant	0.218***	0.209***	0.220***	0.222***
	(5.135)	(4.463)	(5.437)	(5.075)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	24,660	24,635	24,659	24,635
Adjusted R^2	0.185	0.184	0.194	0.190

This table reports the information uncertainty that analysts face in the presence of material unrevealed advertising expenditures. Our variable of interest is Unspecified Marketing$_{t-1}$, which equals one if a firm does not disclose any marketing-related expenditures while its observed Kantar advertising, at the same time, is over or equal to 5% of pre-tax income and zero otherwise at time t-1. The dependent variable is Forecast Dispersion #M (Median/Mean) at time t, measured as the standard deviation of analyst forecasts errors made # months before a firm's actual announcement of EPS, scaled by the absolute value of median or mean forecast errors. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.

Table IA7: Analysts' EPS Overestimation and Disclosure of Marketing-related Expenditures

Variable	(1) *Overestimate* $1M_t$ *(Median)*	(2) *Overestimate* $2M_t$ *(Median)*	(3) *Overestimate* $1M_t$ *(Mean)*	(4) *Overestimate* $2M_t$ *(Mean)*
Unspecified Marketing$_{t-1}$	-0.004**	-0.005***	-0.004**	-0.005***
	(-2.369)	(-2.780)	(-2.307)	(-2.588)
Ln(Advertising Expenditures Updated$_t$*)*	-0.000	-0.001	-0.000	-0.000
	(-0.822)	(-1.108)	(-0.677)	(-0.865)
Size$_t$	-0.001	-0.001	-0.001	-0.001
	(-0.782)	(-0.608)	(-0.932)	(-0.667)
MB_t	-0.000	-0.000	-0.000	-0.000
	(-0.625)	(-0.482)	(-0.620)	(-0.331)
ROA_t	-0.007	-0.003	-0.007	-0.003
	(-0.912)	(-0.393)	(-0.918)	(-0.356)
ROA Volatility$_t$	0.029***	0.034***	0.029***	0.035***
	(2.768)	(3.338)	(2.749)	(3.353)
Leverage$_t$	0.018***	0.019***	0.019***	0.020***
	(3.393)	(3.380)	(3.452)	(3.471)
$BigN_t$	0.002	0.003	0.002	0.003
	(0.924)	(1.334)	(0.877)	(1.326)
Log(#Analysts)$_t$	-0.004***	-0.004***	-0.004***	-0.004***
	(-3.848)	(-3.893)	(-3.ss779)	(-3.765)
Firm Age$_t$	-0.004***	-0.004***	-0.004***	-0.004***
	(-3.783)	(-3.834)	(-4.206)	(-4.067)
$Loss_t$	0.006***	0.006***	0.006***	0.006***
	(3.623)	(3.674)	(3.693)	(3.866)
Constant	0.064***	0.061***	0.066***	0.066***
	(4.416)	(4.320)	(4.860)	(4.521)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	26,847	26,735	26,847	26,735
Adjusted R^2	0.280	0.273	0.279	0.270

This table reports whether analysts make a pessimistic or optimistic forecast when a firm chooses to withhold material advertising expenditures. Our variable of interest is Unspecified Marketing$_{t-1}$, which equals one if a firm does not disclose any marketing-related expenditures but its Kantar advertising costs and, at the same time, is over or equal to 5% of pre-tax income and zero otherwise at time t-1. The dependent variable is Forecast Error #M (Median/Mean) at time t. The mean or median forecast errors of analysts' forecast made # months prior to a firm's actual announcement of EPS, scaled by the prior year-end stock price. Forecast errors are defined as analyst forecasts minus actual EPS. We define the remaining variables in Internet Appendix Table IA1. We winsorized all variables at the 1% and 99% levels. *, **, *** represent significance at 10 percent, 5 percent, and 1 percent, respectively. Standard errors are clustered at the firm level; t-statistics are in parentheses.