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"Stiff Business Headwinds and Uncharted Economic Waters": The Use of Euphemisms in Earnings Conference Calls

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Received: January 28, 2019 Revised: February 7, 2020; July 28, 2020 Accepted: July 31, 2020 Published Online in Articles in Advance: January 21, 2021 https://doi.org/10.1287/mnsc.2020.3826 Copyright: © 2021 INFORMS	Abstract. This paper studies whether euphemisms obfuscate the content of earnings conference calls and cause investors to underreact. I argue that managers' use of euphemisms can alleviate the impact of bad news and delay the market reaction to adverse information. Using a dictionary of corporate euphemisms, I find that their use by managers—but not by analysts—is negatively associated with both immediate and future abnormal returns, and their frequency moderates the negative market reaction to bad earnings news. Finally, stock underreaction is more pronounced on busy earnings announcement dates, when investor attention is distracted.
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Keywords: conference calls • textual analysis • euphemisms • abnormal returns

1. Introduction

On November 26, 2018, General Motors announced that it was going to *unallocate* some of its car assembly plants, referring to its plan to shut down these facilities. GM's statement caused public outrage, with newspapers calling unallocate "ambiguous," "confusing," and the "worst corporate euphemism ever."¹ Although GM's circumlocution made the news owing partly to its novelty and partly to its coldhearted way of referring to layoffs, regulators have long recognized that companies communicate strategically to influence news stories, analyst reports, and investors' views of company value. An example of a regulatory effort to curb this opportunistic behavior is the Securities and Exchange Commission's (SEC's) A Plain English Handbook, which contains guidelines for companies' verbal disclosures. The handbook calls for avoiding long sentences, superfluous words, jargon, the passive voice, and abstract words (Securities and Exchange Commission 1998). The academic community shares the regulators' concerns, as researchers find increasing evidence that firms' verbal cues can influence investors' reactions to the information reported (e.g., Rutherford 2005, Henry 2008, Larcker and Zakolyukina 2012, Lee 2016). To date, however, corporate euphemisms have received no attention in the accounting and finance literature. This paper attempts to fill this gap by examining the implications of using euphemisms in corporate communicationspecifically, in earnings calls.

Euphemisms are indirect words or phrases that people use to refer to something unpleasant to make it sound more acceptable than it really is (Hornby 2010). In other words, euphemisms have two functions: first, they communicate negative information, and second, they present it in a more favorable light. I argue that in the context of corporate disclosures this dual function places them in a distinct category between a negative tone (Loughran and McDonald 2011) and obfuscatory fog (Li 2008). Less direct than a negative tone, they also differ from the more complex fog in using simple words and phrases that are familiar to native speakers, but nevertheless may have unclear implications.

The incomplete revelation hypothesis (IRH) predicts that managers delivering corporate disclosures have incentives to conceal bad news, because doing so delays the market reaction (Bloomfield 2002). Earnings calls are high-attention events, and managers might benefit from such delay (Bushee et al. 2018). Therefore, I hypothesize that the extent of euphemisms in earnings calls moderates investor reactions to the information content of the calls. I expect to observe investor underreactions only for the managers' use of euphemisms, as studies suggest that they have compensation and reputation incentives tied to their strategic delivery of financial disclosures (Huang et al. 2014, Tama-Sweet 2014, Bushee et al. 2018). I also expect that use of euphemisms is especially effective in softening the market reaction when managers are announcing bad earnings news and on reporting days when investors are distracted.

To measure the use of euphemisms, I constructed a list of terms relevant to earnings calls, using both published dictionaries and a hand-collected, expertvalidated sample. I measured the euphemistic tone of a corporation's earnings calls using three variables. The first, level ($EUPH_{it}$), counts the total number of euphemisms in the transcript of a single call. The second is the change in the number of euphemisms (CH_EUPH_{it}) , calculated as the difference between the number of euphemisms recorded in the current quarter and the average number of euphemisms used in the previous four quarters. Finally, a measure of euphemism variability ($EUPH_VAR_{it}$) counts the number of distinct euphemisms in a call (excluding repetitions). Using a sample of more than 78,000 earnings call transcripts of U.S. companies over the period from March 2002 to December 2016, I find that about 70% of the companies use euphemisms at least once during their earnings calls. Euphemism usage spiked during the global financial crisis in 2008 and is most common in cyclical industries. The use of euphemisms is also associated with firm fundamentals: call participants use more euphemisms when firms have negative earnings surprises, falling earnings, and disappointing stock returns in the fiscal quarter preceding the call.

My measures of euphemism frequency are related to the market reaction at the time of the calls. Firms that use more euphemisms experience significantly negative abnormal returns on the day of the call. This finding suggests that investors interpret euphemisms as a negative signal, which is consistent with the overall definition of euphemisms as words used to refer to unpleasant things. A more important finding, however, is a negative association between euphemisms and future abnormal returns over three months following the call. This effect is significant both economically and statistically and suggests that use of euphemisms mutes investor reaction around the call date and bad news is only gradually absorbed into the stock prices over the next quarter. These findings are robust to firm size, to regression specifications, and to measuring euphemism use as level, change, or variability.

Next, I perform several tests to study the mechanism behind the market reaction to the use of euphemisms. I find that investors underreact only to the euphemisms used in managers' remarks, and not to the ones that occur in analysts' questions, suggesting that only managers use euphemisms strategically during the calls. And these euphemisms do mitigate the impact of bad earnings news: firms that miss earnings targets and use more euphemisms experience a less negative market reaction to their conference calls. This finding suggests that euphemisms tend to soften the blow, especially in periods of underperformance. Finally, I examine whether limited investor attention is associated with the underreaction, since investors might need to make more information-processing effort to understand a less direct message. I find that the negative future returns disappear on less busy announcement days and increase in significance and magnitude as reporting days become more eventful, suggesting that the obfuscatory effect is more pronounced when investor attention is spread thin.

This paper contributes to the literature that examines the value relevance of linguistic features of firm corporate reporting,² and specifically earnings calls.³ Like previous studies showing that corporate verbal disclosures are informative, this study provides evidence that the use of euphemisms in earnings calls signals information to the market. The paper also contributes to the stream of literature that examines the strategic aspect of firms' verbal disclosures.⁴ Research shows that firms use various techniques during earnings calls to promote a more favorable impression of company performance: managers use more complex language (Bushee et al. 2018), give scripted answers to analysts' questions in question and answer (Q&A) sessions (Lee 2016), blame external factors (Zhou 2014), and use more references to general knowledge (Larcker and Zakolyukina 2012). This study provides evidence that firms might also use euphemisms to influence investors' perception of company performance. In this regard, this study adds a new distinct measure to the literature that complements existing proxies for the strategic aspect of corporate communications.

The rest of the paper proceeds as follows. Section 2 defines euphemisms and discusses their properties. Section 3 examines previous research and develops the hypotheses. Section 4 describes the data sources and the construction of the euphemism measure in detail. Section 5 discusses the empirical results. Section 6 describes robustness tests, and Section 7 concludes the paper.

2. Euphemisms

Euphemisms are mild, vague, or periphrastic expressions that refer to something negative and are substitutes for blunt or disagreeable language. Additionally, euphemisms are often metaphors that once meant (or still mean) something else (Holder 2008). For example, the euphemism *open a can of worms* means "to inadvertently create numerous problems while trying to solve one." The metaphor comes from the fisherman's discovery that a can of bait is easy to open but difficult to close. It is also a euphemism because it talks about an unpleasant situation in a mild way that avoids blame. In English, euphemistic expressions belong to a semantic category of fixed expressions or idioms—groups of words that, used together, have a

meaning different from the meaning of the words taken individually in the phrase. Not all fixed expressions are euphemisms. For example, *kill two birds with one stone* and *hit the nail on the head* are idioms but not euphemisms; they mean something different from the sum of their parts, but the message conveyed is not negative.

Linguistic studies categorize euphemisms as one of the language tools that speakers use to promote their ideology, such as the numbers game (excessive use of numbers to sound more credible), hyperbole (an enhanced or exaggerated claim), or irony (saying something and meaning something else) (van Dijk 2003). Allan and Burridge (1991) call euphemisms a type of ideological power language that has always been used to camouflage harsh realities. People use euphemisms to talk about phenomena they find embarrassing (e.g., *restroom* is a euphemism for lavatory, even though no one goes there to rest (Holder 2008)), terrifying (e.g., euphemisms for death include fall asleep, depart, check *out*, and *close your eyes* (Holder 2008)), offensive (e.g., in educational circles drop-outs are classified as *early leavers* and lazy students are renamed *back-rowers* (Rahimi and Sahragard 2006)) or sensitive (e.g., glass *ceiling* means discrimination at work (Holder 2008)). In corporate disclosures, too, euphemisms are likely to be used to refer to something embarrassing (e.g., "we hit some speed bumps" means we failed to meet financial targets), unpleasant (e.g., "we continue to rightsize our business" means we are laying off workers), or difficult to predict and control (e.g., "currency headwinds will remain our main challenge" refers to unfavorable currency movements).

Euphemisms, like all of language, vary over time and across social groups (Fairclough 1995). Halmari (2011) illustrates change over time by tracing the evolution of the name for the (currently titled) American Association on Intellectual and Developmental Disabilities over the previous century. This nonprofit professional organization has had four names. When it was founded in 1876, it was named the American Association of Medical Officers of Institutions for Idiotic and Feebleminded Persons. Later, "idiotic" and "feebleminded" were deemed offensive, and in 1933 the organization was renamed the American Association on Mental Deficiency. In 1987 this title, having become offensive in its turn, was changed to the American Association on Mental Retardation; and in 2006, when "mental retardation" had also ceased to function as a euphemism, that name was replaced by the current title.

Euphemisms also vary with the speaker's background. For example, people who are exposed to sports more frequently use euphemisms that come from literal expressions in athletics (*behind the eight ball* comes from the game of pool, whereas to *throw a* *curve ball* stems from baseball terminology meaning to introduce something unexpected). Speakers may also be accustomed to specific euphemisms used in their country of origin; for example, to *rebase dividends* (meaning to lower dividends) is typical for speakers of British English but unfamiliar to American audiences. Some euphemisms are used regionally within the same country: a summary dismissal or demotion is called a *New York kiss-off* by those living on the west coast but a *California kiss-off* by residents of New England (Holder 2008). My test design allows for such social and temporal variability by controlling for fixed effects and examining not only levels but also changes in the use of euphemisms.

3. Literature and Hypotheses

Conference calls held in conjunction with earnings releases convey important value-relevant information. During the calls, managers have an opportunity to explain quarterly results in a relatively unconstrained manner, provide more color on their expectations, and address callers' questions (Matsumoto et al. 2011). However, studies also show that managers use the language of earnings calls strategically to promote a more favorable impression of company performance. Zhou (2014) shows that executives play a blame game during conference calls by attributing poor performance to external factors, such as weather and the economic environment. Lee (2016) documents that managers cover up underperformance by using scripted answers to analysts' questions (in effect simply repeating portions of the management discussion section of the conference calls). Larcker and Zakolyukina (2012) find that executives use earnings calls to conceal accounting misstatements by using more references to general knowledge, fewer nonextreme positive emotional words, and fewer references to shareholder value. Such biased language may limit the usefulness of earnings calls.

The IRH predicts the effect of obfuscated disclosures on stock prices. Bloomfield (2002) conjectures that an obfuscated form of disclosure increases the cost of information processing and delays the price reaction to the information contained in the biased message. Therefore, managers might intentionally obfuscate corporate disclosures when delivering bad news because this strategy delays the market reaction to the adverse information. Accounting textual analyses support the IRH. Li (2008) shows that firms with lower current earnings tend to hide adverse information by making their Form 10-Ks less readable, and Bushee et al. (2018) show that conference calls of loss firms exhibit higher linguistic complexity and more obfuscation. Researchers also find empirical evidence that concealing negative information leads to market reactions. Kim et al. (2019) find that firms whose managers hide negative information by writing more obfuscated annual disclosures eventually experience higher stock price crashes, whereas Zhou (2014) finds that when managers engage in the blaming game during earnings calls, investors underreact to news of poor performance.

As I noted earlier, euphemisms do deliver bad news, but they obfuscate its extent: hit some speed*bumps* makes company failures sound less damaging and more transitory than announcing that a company is failing to meet specific financial targets. Additionally, investors might need to spend some extra time and effort to research what a manager actually means by speed bumps. Of course, in an efficient market, rational investors correctly price all publicly available information—including the use of euphemisms. Therefore, euphemisms should not matter. They are a part of language, and native speakers are familiar with them. If investors can correctly price the content of the message, I should observe no relation between the use of euphemisms and market returns. Yet experimental studies find that investors are more optimistic when poor operating performance is conveyed in less direct terms (Riley et al. 2014). Following the IRH, I predict that the extent of euphemisms in the earnings call is associated with the magnitude of market reactions.

I expect to observe this association specifically for the euphemisms used by managers. Tama-Sweet (2014) shows that a more positive tone of earnings announcements is positively associated with chief executive officer (CEO) equity sales. Huang et al. (2014) find that companies manage the tone of earnings press releases strategically before major corporate transactions, such as seasoned equity offerings and mergers or acquisitions. I do not expect to see a moderated market reaction to analysts' euphemistic tone, because they are focused on acquiring value-relevant information during the calls and are unlikely to have incentives to obfuscate (Mayew 2008, Matsumoto et al. 2011). Hence, I predict that the use of euphemisms by managers alone is associated with the magnitude of market reactions.

Kothari et al. (2009) suggest that career and compensation concerns can motivate managers to withhold or delay bad news, and Graham et al. (2005) point out that they may need more time to study it or, perhaps, may hope that it will be offset by positive information in the future. I predict that the use of euphemisms moderates the market reaction to the delivery of bad news.

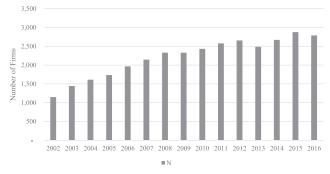
Attention is a scarce resource, and when individuals process multiple sources of information, their performance may suffer (Hirshleifer and Teoh 2003, Hirshleifer et al. 2009). If euphemisms indeed confuse investors, this obfuscation should be more pronounced when multiple companies are disclosing their quarterly results and investors are busy processing earnings news and do not have time to decipher euphemistic messages. Thus, I expect a more delayed market reaction to the use of euphemisms on busy earnings announcement days when investor attention is limited.

4. Sample Selection and Measures of Euphemism Usage

4.1. Sample Selection

This study uses a comprehensive set of conference call transcripts provided by Thomson Reuters. Its Street Events database covers 275,361 full-text conference call transcripts from 7,007 U.S. and international firms during 2002–2016. The database maintains a history of transcripts for various corporate meetings: earnings conference calls, shareholder meetings, sales updates, analyst meetings, and guidance conference calls. It includes date, unique company identifiers, and verbatim transcripts of the meetings. To construct the sample I follow Chen et al. (2018). First, I exclude transcripts of international companies (60,445) and those with missing names (20,574), and then transcripts of events other than earnings conference calls (73,643). Restricting the sample to earnings conference calls that occur within one day of or on the same day as the earnings release eliminates another group of transcripts (22,263). Finally, I match firms in the Thomson Reuters database with identifiers in The Center for Research in Security Prices (CRSP), Institutional Brokers' Estimate System (I/B/E/S), and Compustat Point-In-Time databases.⁵ The sample is limited to firms that have analyst following in I/B/E/S and positive book value of equity. The final sample includes 78,115 earnings conference calls for 3,183 unique U.S. firms during 2002-2016. Figure 1 shows that the sample increases over the years: it includes about 1,200 firms in 2002 and grows to over 2,500 in 2011–2016.⁶





Notes. The figure plots the number of firms over the sample period (N). The sample consists of all U.S. firms in Thompson Reuter's conference calls database for the years 2002–2016 that hold earnings conference calls within one day or on the same day as the earnings release.

4.2. The Euphemism Dictionary

The initial list of euphemisms is based on the words classified as business or commerce euphemisms in two published dictionaries: the *Dictionary of Euphe*misms and Other Doubletalk (Rawson 1995) and the Oxford Dictionary of Euphemisms (Holder 2008). It is important to note that not all euphemisms collected in the dictionaries remain so in the context of earnings conference calls. For example, Holder (2008) identifies the phrase "home equity loan" as a business euphemism that in effect means a second mortgage. However, if a financial services company is reporting growth in its portfolio of home equity loans, it is not using this expression to make its disclosures sound more palatable. Therefore, I examine each euphemism together with its definition and the usage examples in the dictionaries to make sure it fits the definition of a euphemism in the context of earnings calls.

In addition, I examine 100 randomly selected conference call transcripts and expand the list with euphemisms that are omitted from the published dictionaries. To address the concern that a hand-collected word list can be confounded by the researcher's subjectivity, I verified my selection by consulting 12 investment professionals who read financial disclosures (such as earning releases, conference call transcripts, 10-Ks, and Form 10-Qs) as part of their work. They were shown the definition of euphemism and passages from conference call transcripts that contained euphemisms and were asked to indicate euphemisms in each passage. Only words or phrases that they marked as euphemisms were included in the list used for testing.

Finally, I examined the list of euphemisms for any potential overlaps with Loughran and McDonald's (2011) measure of tone and the fog index to ensure that it captures a distinct phenomenon. Loughran and McDonald's dictionary does not have a separate category for euphemisms; however, their list of negative words includes some euphemisms. I excluded the following euphemisms that are already included in this list: challenging, confusion, misstep, nonperforming, correction, disappointing, stoppage, anomaly, irregularity, questionable. The fog index measures text complexity by counting the number of words per sentence and the percent of complex words (words with three and more syllables, excluding common suffixes such as "es," "ed," and "ing"). Since my euphemism measure is independent of sentence length, I checked my dictionary only for complex words. I identified several euphemistic expressions that have words with three or more syllables. Examples include adjustment (in the euphemistic phrase adjustment period), conservative, compression, evaporate, situation (in *fluid situation*). Since my euphemism measure is not a

function of sentence length and contains few complex words, I concluded that my list does not have significant overlap with the fog index. The final list of euphemisms is presented in Appendix A.

I used textual analysis software developed by Amenity Analytics Inc.⁷ to create natural language processing rules that extract instances of euphemisms from the conference call transcripts. Appendix B describes Amenity features that allow the creation of rules that capture instances of compound euphemistic phrases in the text of earnings calls. The first example shows that the rules recognize a grammatical relationship in a sentence (syntax tagging). In this case *tight* is a euphemism that is used to describe profit margins that are decreasing, and the rule ensures that the software will capture exactly this relationship: the word "margin" defined by an auxiliary verb (A1) "be" and a predicate (PRD) "tight." The second example shows that the software rules capture negation (a polarity feature). For example, if a manager says that they "didn't fall out of bed," Amenity software will count this phrase as an instance of a euphemistic phrase with negation and reverse the default negative sentiment to a positive one. This feature allows me to calculate the euphemism score more precisely by subtracting negated euphemisms from the overall euphemism score.⁸ Another useful feature is Amenity's capacity to create semantic rows; this allowed me to capture only those instances in which a word acts as a euphemism. For example, *soft* is a euphemism in soft sales, soft quarter, and soft demand, but not in soft pretzel or soft drinks. The semantic row feature in Amenity allows me to add all possible variations of a euphemistic phrase in one rule. Some additional features of Amenity include punctuation and part-of-speech tagging capacity.⁹

Appendix C shows some examples of euphemisms captured by the software and illustrates how the software assigns polarity to these extracts (euphemisms are underlined and bolded). In the first example, Amenity assigns a negative polarity to the euphemism *headwinds* because by definition euphemisms refer to something unpleasant and are assigned a negative sentiment. However, in the second example, the polarity is switched to positive because the euphemism *price pressure* appears after the negative particle "not." In addition to capturing direct negation with "not" or "no," Amenity has a list of verbs that imply negation. For example, in the third example the presence of the verb "offset" changes the polarity of the euphemism *price pressure*.

Using the chosen rules, the software parses the conference call corpus using its batch process, which calculates how many times euphemisms occur in each transcript. Figure 2(a) shows the most frequent euphemisms in the transcripts, and Figure 2(b) lists

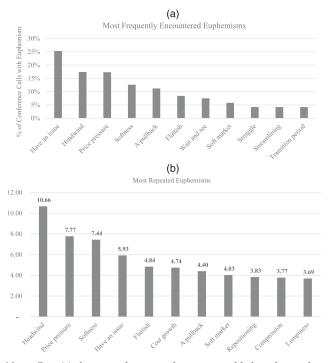


Figure 2. Most Frequently Used Euphemisms

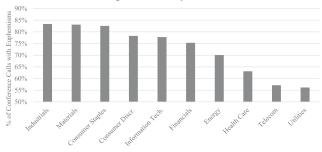
Notes. Part (a) shows euphemisms that are most likely to be used at least once in a transcript, and (b) shows the most frequently repeated euphemisms.

euphemisms that are most likely to be repeated within a call. The euphemisms *have an issue* and *headwind* are most likely to occur: 25% of all transcripts mention having an issue and 17% of calls talk about headwinds at least once. The euphemisms most frequently repeated within a transcript are *headwinds* (repeated on average 11 times per transcript) and *price pressure* (repeated eight times on average).

4.3. Euphemism Measures

I use three statistics to measure the extent of euphemisms in the earnings calls. The first measure $(EUPH_{it})$ is the total number of euphemisms with negative polarity less the total number with positive polarity. To understand the properties of the euphemism measure, its correlation with established textual measures of readability—the fog index (Li 2008) and plain English measure (Loughran and McDonald 2014)-is examined. The measure $EUPH_{it}$ is positively associated with the fog index and negatively associated with the plain English measure, indicating that the language of calls with more euphemisms is less clear, has longer sentences, uses passive voice, and contains more technical jargon. I also examine how euphemism levels vary across sectors. Figure 3 shows that euphemisms are most popular in the cyclical industries, such as materials, industrials, and consumer products, where managers need strong verbal skills to explain the

Figure 3. Uses of Euphemisms by Sector

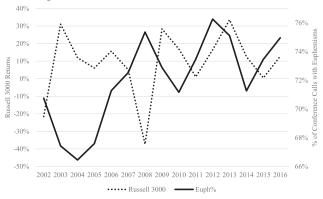


perennial ups and downs. In contrast, companies in less volatile sectors, such as utilities and telecommunication, tend to use fewer euphemisms. Finally, I explore the temporal variation of the euphemism level and its correlation with stock market fluctuations over the years. Figure 4 plots the percentage of calls with at least one euphemism and the contemporaneous stock market returns on the Russell 3000 index for the years in the sample. Stock market performance is negatively associated with euphemism usage across time: the use of euphemisms increases during economic downturns, as is clearly visible in 2008 during the global financial crisis.

My second measure of euphemism usage is change in euphemism level (*CH_EUPH*_{jt}). Following the approach to textual measures by Feldman et al. (2010), I calculate change as the difference between the euphemism measure in the current quarter and the average euphemism measure over the previous four quarters. Using the change measure addresses two concerns: that nonfinancial disclosures do not vary significantly from period to period, as managers tend to modify them only slightly, and that word choice may be specific to an industry or company (Feldman et al. 2010, Davis et al. 2012).

Finally, for robustness tests, I also calculate a measure of euphemism variability $(EUPH_VAR_{jt})$. It counts the number of distinct euphemisms in a call, since a

Figure 4. Russell 3000 Returns and Proportion of Calls with Euphemisms



call participant's tendency to repeat certain euphemisms may bias the $EUPH_{jt}$ measure for a particular call. The $EUPH_VAR_{jt}$ measure counts only distinct euphemisms (e.g., if *headwinds* occurs 10 times during a call, it is counted once in the $EUPH_VAR_{it}$ score).

5. Empirical Results

5.1. Descriptive Statistics

Table 1 presents the descriptive statistics of the sample. On average, call participants use around two to three euphemisms per transcript (the mean and median $EUPH_{it}$ are 2.50 and 2.00, respectively). But they tend to use twice as many euphemisms in the Q&A section of the call as in the more scripted introductory section: mean (median) $EUPH_QA_{it}$ is 1.64 (1.00) versus 0.86 (0.00) for $EUPH_INTRO_{jt}$. (This is not surprising, given the colloquial nature of euphemisms.) The standard deviation of $EUPH_{it}$ is substantial at 2.93; its frequencies are skewed by outliers. The top quartile of conference calls has more than three euphemisms per call (and some calls within this group contain upward of 30 euphemisms per call). Likewise, quarterly changes in euphemism usage (CH_EUPH_{it}) vary substantially: the standard deviation is 2.64. The changes in euphemism usage are similarly higher in the more spontaneous section of the calls: the mean and the standard deviation for CH_EUPH_QA_{it} are 0.06 and 2.09, respectively, versus 0.04 and 1.39 for CH_EUPH_INTRO_{it}. Euphemism variability is lower (the mean of EUPH_ VAR_{jt} is 1.85), since this measure does not count repetitions within a transcript.

Because of the requirement that firms have analyst coverage in I/B/E/S, the sample is biased toward larger firms: the mean (median) market value ($SIZE_{jt}$) is \$5.9 billion (\$1.4 billion). Overall, earnings calls have a positive sentiment ($TONE_{jt}$) as measured by the Loughran and McDonald dictionary. The number of negative words starts to exceed the number of positive words only in the lowest quartile (P25 is at 0.036). The overall tone of optimism is consistent with findings that managers are likely to choose earnings calls to promote firm performance because such calls carry lower litigation risk and regulatory restrictions than do other forms of corporate communication.

Table 2 reports the Spearman correlations of the euphemism measures with firm characteristics. There is a significant negative correlation between the euphemism measures and the overall tone of the call $(TONE_{it})$, with correlation coefficients ranging from -0.01 for the euphemism levels (EUPH_{it}, EUPH_INTRO_{it}, and $EUPH_QA_{jt}$) to -0.04 for the changes (CH_EUPH_{jt} , $CH_EUPH_INTRO_{it}$, and $CH_EUPH_QA_{it}$). All euphemism measures are also negatively correlated with tone change (CH_TONE_{it}; correlation coefficients range between -0.07 and -0.13), indicating that when the overall tone of conference calls becomes more pessimistic, call participants tend to use euphemisms more frequently. Firms with negative earnings surprises (SUE_{it}) tend to use more euphemisms, as is evidenced by significant correlation coefficients ranging between -0.02 and -0.05 for different euphemism measures. Firms that have more euphemisms

 Table 1. Descriptive Statistics

Variables	Ν	Mean	Std Dev	P1	P25	Median	P75	P99
EUPH _{it}	78,115	2.504	2.927	-1.000	0.000	2.000	4.000	13.000
EUPH_INTRO _{it}	78,115	0.864	1.537	-1.000	0.000	0.000	1.000	7.000
EUPH_QA _{it}	78,115	1.640	2.119	-1.000	0.000	1.000	2.000	9.000
EUPH_VAR _{it}	78,115	1.855	1.673	0.000	1.000	2.000	3.000	7.000
CH_EUPH _{it}	72,403	0.101	2.638	-6.000	-1.333	0.000	1.250	8.333
CH_EUPH_INTRO _{it}	72,403	0.040	1.397	-3.500	-0.500	0.000	0.500	4.667
CH_EUPH_QA _{it}	72,403	0.061	2.090	-4.750	-1.000	0.000	1.000	6.667
CH_EUPH_VAR _{it}	72,403	0.049	1.577	-3.330	-1.000	0.000	1.000	4.250
TONE _{it}	78,115	0.175	0.21	-0.349	0.036	0.187	0.325	0.604
CH_TONE _{it}	72,403	0.003	0.159	-0.395	-0.097	0.007	0.106	0.374
LENGTH _{it}	78,115	7,119.755	2,350.126	2,343.000	5,432.000	7,138.000	8,670.000	12,937.000
SUE _{jt}	78,115	0.005	0.014	-0.089	0.000	0.000	0.002	0.050
EPS_GROWTH _{it}	78,115	0.255	3.637	-9.736	-0.506	0.026	0.409	19.000
RET _{it}	78,115	-0.029	0.251	-0.500	-0.143	0.004	0.115	0.662
BM _{it}	78,115	0.569	0.451	0.036	0.272	0.459	0.735	2.721
FIRM_AGE _{jt}	78,115	44.422	42.102	5.000	13.000	28.000	65.000	174.000
STD_FORECAST _{jt}	78,115	0.044	0.072	0.010	0.010	0.019	0.044	0.490
AF _{it}	78,115	0.016	0.209	-1.300	0.024	0.050	0.071	0.400
SEG_NUM _{it}	78,115	2.338	1.775	1.000	1.000	1.000	3.000	8.000
ASSETS _{it}	78,115	8,581.551	23,010.721	39.237	478.213	1,666.218	5,641.797	163,429.000
SIZE _{it}	78,115	5,945.848	14,356.049	45.362	499.838	1,425.190	4,339.191	102,609.000
XRET_PRELIM _{jt}	78,115	0.003	0.087	-0.241	-0.037	0.002	0.043	0.243
XRET_DRIFT _{jt}	78,115	0.006	0.202	-0.479	-0.091	0.000	0.092	0.623

Notes. P1 refers to the 1st percentile, P25 to the 25th percentile, P75 to the 75th percentile, and P99 to the 99th percentile. See Appendix D for variable definitions.

	Variables	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18
1	$EUPH_{it}$	1.00																	
2	EUPH_INTRO _{it}	0.61	1.00																
с	EUPH_QA _{it}	0.82	0.23	1.00															
4	CH_EUPH _{it}	0.57	0.34	0.55	1.00														
IJ	CH_EUPH_INTRO _{jt}	0.31	0.59	0.05	0.55	1.00													
9	CH_EUPH_QA _#	0.48	0.04	0.65	0.83	0.10	1.00												
	TONE _{it}	-0.01	-0.01	-0.01	-0.04	-0.03	-0.04	1.00											
8	CH_TONE _{jt}	-0.09	-0.07	-0.08	-0.13	-0.10	-0.09	0.51	1.00										
6	LENGTH _{it}	0.35	0.19	0.36	0.09	0.02	0.08	0.06	-0.04	1.00									
10	SUE _{jt}	-0.04	-0.04	-0.02	-0.05	-0.05	-0.03	0.14	0.17	-0.02	1.00								
11	EPS_GROWTH _{jt}	-0.02	-0.04	0.00	0.03	0.02	0.03	0.10	-0.01	0.02	0.03	1.00							
12	RET_{jt}	-0.01	-0.03	0.01	-0.08	-0.06	-0.06	0.16	0.19	0.07	0.17	0.04	1.00						
13	BM_{jt}	0.00	0.05	-0.03	-0.01	-0.01	-0.01	-0.26	-0.04	-0.14	-0.02	-0.16	-0.21	1.00					
14	STD_FORECAST _{it}	0.03	0.03	0.03	-0.01	0.00	-0.01	-0.15	-0.02	0.10	0.01	-0.07	-0.03	0.14	1.00				
15	AF_{jt}	0.15	0.11	0.13	0.02	0.02	0.01	-0.06	-0.07	0.07	0.07	0.03	0.00	0.23	0.11	1.00			
16	$SIZE_{it}$	0.21	0.12	0.21	0.02	0.00	0.01	0.09	-0.01	0.45	-0.02	0.10	0.15	-0.30	0.17	0.19	1.00		
17	XRET_PRELIM _{jt}	-0.07	-0.06	-0.06	-0.08	-0.06	-0.06	0.16	0.19	-0.02	0.35	0.03	0.28	-0.10	-0.03	0.01	0.00	1.00	
18	$XRET_DRIFT_{jt}$	-0.01	-0.01	0.00	-0.01	-0.02	-0.01	0.03	0.04	0.00	0.02	0.01	0.06	0.00	-0.03	0.00	0.01	0.03	1.00

in their transcripts also are larger (positive correlation with $SIZE_{jt}$), have longer calls (positive correlation with $LENGTH_{jt}$), and have negative returns in the three months preceding the call (negative correlation with RET_{jt}). Finally, there is a significant negative correlation between all euphemism measures and the market reaction immediately after the call (the correlation coefficient with $XRET_PRELIM_{jt}$ ranges from -0.06 to -0.08) and in the three-month period after the call (the correlation coefficient with $XRET_PRELIM_{jt}$ ranges from -0.06 to -0.01 to -0.02).

5.2. Market Reaction to the Use of Euphemisms in Earnings Calls

Using the sample of quarterly earnings transcripts, I examine the market reaction to euphemisms in the three days around the call date as well as in the 90 days following the call. The measure for abnormal stock returns is the characteristic-adjusted excess return computed using the method of Daniel et al. (1997).¹⁰ To test my first prediction I use the following regression models:¹¹

$$\begin{split} XRET_PRELIM_{j,t} &= \beta_1 EUPH_{jt} + \beta_2 TONE_{jt} \\ &+ \beta_3 Log(LENGTH)_{jt} + \beta_4 SUE_{jt} \\ &+ \beta_5 EPS_GROWTH_{jt} \\ &+ \beta_6 Log(Assets)_{jt} + \beta_7 BM_{jt} \\ &+ \beta_8 STD_EARN_{jt} \\ &+ \beta_9 STD_FORECAST_{jt} \\ &+ \beta_{10} RET_{jt} \\ &+ \beta_{11} Log(FIRM_AGE)_{jt} \\ &+ \beta_{12} Log(SEG_NUM)_{jt} + \beta_{13} AF_{jt} \\ &+ f_{jt} + \varepsilon_{jt} \,, \end{split}$$

(1)

and

$$\begin{aligned} XRET_DRIFT_{j,t} &= \beta_1 EUPH_{jt} + \beta_2 TONE_{jt} \\ &+ \beta_3 Log(LENGTH)_{jt} + \beta_4 SUE_{jt} \\ &+ \beta_5 XRET_PRELIM_{jt} \\ &+ \beta_6 EPS_GROWTH_{jt} \\ &+ \beta_7 Log(Assets)_{jt} + \beta_8 BM_{jt} \\ &+ \beta_9 STD_EARN_{jt} \\ &+ \beta_{10} STD_FORECAST_{jt} + \beta_{11} RET_{jt} \\ &+ \beta_{12} Log(FIRM_AGE)_{jt} \\ &+ \beta_{13} Log(SEG_NUM)_{jt} + \beta_{14} AF_{jt} \\ &+ f_{jt} + \varepsilon_{jt} \,. \end{aligned}$$

$$(2)$$

Short-window excess returns (*XRET_PRELIM_{j,t}*) are calculated for the three-day window [-1, +1] around the call date (day 0). Abnormal drift returns (*XRET_DRIFT_{j,t}*) are calculated for a window that begins two days after the call and lasts through the preliminary earnings announcement for the subsequent quarter (or 90 days if the date of the preliminary announcement

is unavailable). Since euphemisms deliver unpleasant information, I expect to see a negative coefficient on $EUPH_{jt}$ in regression (1). However, if euphemisms also moderate the extent of bad news, I predict that the $EUPH_{jt}$ coefficient will remain negative in regression (2). This would indicate that investors initially underreact to the use of euphemisms in the calls and only subsequently correct their pricing decisions.

As in other studies, the regressions control for other quantitative and qualitative information that is available to investors around the earnings announcement date and is associated with the market reaction to the call (Huang et al. 2014, Brockman et al. 2015, Lee 2016). Qualitative information in the transcript is captured with TONE_{it} (measured using the Loughran and McDonald 2011 dictionary) and $Log(LENGTH)_{it}$. Controls for operating performance are SUE_{it} (the difference between the actual earnings reported per I/B/E/S and the median earnings preliminary estimate during the 90-day window before the earnings release,¹² divided by the standard deviation of analyst forecasts during the same 90-day period), EPS_ *GROWTH_{it}* (earnings before extraordinary items in the quarter minus the earnings in the same quarter in the previous year, divided by the absolute value of earnings in the same quarter in the previous year), and RET_{it} (the buy-and-hold monthly returns for three months preceding a conference call). I use two proxies for the uncertainty of firm operations: STD_ *EARN*_{it}, the standard deviation of firm earnings over the last five years, and STD_FORECAST_{it}, the standard deviation of analysts' earnings forecasts for the quarter that are outstanding the day before the quarter's earnings are announced. Measures of firm age (Log $(FIRM_AGE)_{it}$) and book-to-market ratio (BM_{it}) control for company growth opportunities. The number of business segments $(Log(SEG_NUM)_{it})$ and total assets (Log(Assets)_{it}) proxy for the firm's operating complexity. The model also includes the analyst consensus forecast (AF_{it}) for one-year-ahead earnings per share, scaled by the stock price at the end of the fiscal quarter to control for the assessment of future firm performance. The measures of euphemism usage and call tone are normalized between -0.5 and 0.5,¹³ whereas the remaining variables are winsorized at 1 and 99%. Finally, the model includes firm fixed effects to control for firm disclosure styles and year-quarter fixed effects to control for the intertemporal variation of euphemisms (the standard errors are clustered by firm and year-quarter).

Column (1) of Panel A in Table 3 presents the results of estimating the relation between the level of euphemisms and the immediate market reaction to the earnings call (regression (1)). The coefficient on $EUPH_{jt}$ is -0.0092 and is significant at the 1% level (*t*-statistic = -10.12). This result suggests that investors interpret

Table 3. Investor Reactions to Euphemism Usage

Panel A: Imme	ediate abnorma	l market retur	ns
	Dependent v	variable = XRE	T_PRELIM _{jt}
Variables	(1)	(2)	(3)
EUPH _{jt}	-0.0092*** (-10.12)		
EUPH_INTRO _{jt}		-0.0078*** (-6.23)	
EUPH_QA _{jt}			-0.0074*** (-9.61)
TONE _{jt}	0.0272***	0.0277***	0.0275***
	(16.57)	(17.01)	(16.79)
$Log (LENGTH_{jt})$	-0.0037***	-0.0058***	-0.0040***
	(-2.73)	(-4.25)	(-2.82)
SUE_{jt}	0.0781***	0.0781***	0.0782***
	(29.13)	(29.09)	(29.13)
EPS_GROWTH _{jt}	-0.0001	-0.0001	-0.0001
	(-0.56)	(-0.54)	(-0.52)
$Log (ASSETS_{jt})$	-0.0050*** (-4.36)	-0.0053***	-0.0052^{***} (-4.51)
BM_{jt}	-0.0151***	-0.0148***	-0.0152***
	(-5.69)	(-5.59)	(-5.79)
STD_EARN _{jt}	-0.0003	-0.0003	-0.0003
	(-0.14)	(-0.14)	(-0.12)
STD_FORECAST _{jt}	0.0293***	0.0300***	0.0294***
	(3.55)	(3.61)	(3.56)
RET _{jt}	0.1065***	0.1070**	0.1068***
	(16.95)	(16.97)	(16.95)
$Log (FIRM_AGE_{jt})$	-0.0047***	-0.0048**	-0.0048***
	(-3.09)	(-3.11)	(-3.10)
$Log(SEG_NUM_{jt})$	0.0001 (0.06)	0.0001 (0.05)	0.0001 (0.09)
AF_{jt}	-0.0310***	-0.0311***	-0.0310***
	(-3.56)	(-3.58)	(-3.57)
Number of observations	78,115	78,115	78,115
Firm fixed effects	Yes	Yes	Yes
Quarter fixed effects	Yes	Yes	Yes
R^2	19,70%	19.63%	19,67%

Panel B: Subsequent abnormal market returns

	Dependent	variable = XR	ET_DRIFT_{jt}
Variables	(1)	(2)	(3)
EUPH _{jt}	-0.0069*** (-2.63)		
EUPH_INTRO _{jt}		-0.0072** (-2.07)	
EUPH_QA _{jt}			-0.0025 (-1.20)
TONE _{jt}	0.0086** (2.29)	0.0089** (2.36)	0.0092** (2.42)
$Log (LENGTH_{jt})$	-0.0091** (-2.21)	-0.0105*** (-2.68)	-0.0103** (-2.51)
SUE_{jt}	0.0011 (0.42)	0.0011 (0.40)	0.0012 (0.45)
XRET_PRELIM _{jt}	0.0014 (0.35)	0.0016 (0.39)	0.0016 (0.41)

Та	ble	e 3.	(Continued)
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Panel B: Subse	Panel B: Subsequent abnormal market returns				
	Dependent	variable = XR	ET_DRIFT_{jt}		
Variables	(1)	(2)	(3)		
EPS_GROWTH _{jt}	0.0003 (1.27)	0.0003 (1.28)	0.0003 (1.29)		
$Log (ASSETS_{jt})$	-0.0582*** (-10.04)	-0.0583*** (-10.06)	-0.0584^{***} (-10.07)		
BM_{jt}	0.0490***	0.0492***	0.0490***		
STD_EARN _{jt}	0.0068 (0.59)	0.0068 (0.59)	0.0068 (0.59)		
STD_FORECAST _{jt}	-0.0732*** (-3.38)	-0.0727*** (-3.36)	-0.0729*** (-3.37)		
RET_{jt}	0.0319*** (3.37)	0.0322*** (3.38)	0.0323*** (3.41)		
$Log (FIRM_AGE_{jt})$	-0.0036 (-0.63)	-0.0036 (-0.63)	-0.0036 (-0.63)		
$Log(SEG_NUM_{jt})$	0.0056**	0.0055**	0.0056** (2.24)		
AF_{jt}	-0.0304 (-1.62)	-0.0304 (-1.62)	-0.0305 (-1.63)		
Number of observations	78,115	78,115	78,115		
Firm fixed effects	Yes	Yes	Yes		
Quarter fixed effects R^2	Yes 1.62%	Yes 1.61%	Yes 1.61%		

Notes. This table reports the panel regression results for the relation between cumulative abnormal returns at and following the conference call date and three euphemism measures: $EUPH_{jt}$ (the total number of euphemisms used in the call), $EUPH_{INTRO_{jt}}$ (the number of euphemisms used in the call), $EUPH_{INTRO_{jt}}$ (the number of euphemisms used in the Q&A section). The dependent variables are the buy-and-hold returns adjusted for size, book-tomarket ratio, and momentum for the interval [-1, +1] surrounding the conference call date in panel A (*XRET_PRELIM_{jt}*) and for the interval from two days after the call date through the subsequent quarter's preliminary earnings announcement in panel B (*XRET_DRIFT_{jt}*). See Appendix D for variable definitions. Standard errors are clustered by firm and time (year-quarter) following Petersen (2009) and Gow et al. (2010). Robust *t*-statistics are reported in parentheses.

p < 0.05; ***p < 0.01.

euphemisms as a negative signal, in accord with the definition of euphemisms. Regarding economic significance, the coefficient indicates that, relative to firms in the bottom quartile of the euphemism measure (calls with no euphemisms), firms in the top quartile (calls with more than four euphemisms) have 23.0% lower abnormal returns at the earnings call date, relative to the median of the magnitude of *XRET_PRELIM_{jt}* (-0.0092/0.040 = -0.230).¹⁴ The control variables suggest that firms with more positive tone and higher earnings surprises have higher immediate abnormal returns, in accord with previous research. Firms with lengthy calls and larger, older, and lower-growth firms also have lower returns.

Matsumoto et al. (2011) report that though both parts of conference calls offer incremental information

to market participants, the more spontaneous discussion section seems to be more informative than the more scripted presentation section. Accordingly, I split the transcripts in the sample into presentation and Q&A components and calculate euphemism scores separately for each section. Columns (2) and (3) in Table 3 report the results of regression (1), replacing $EUPH_{it}$ with EUPH_INTRO_{it} (the euphemism score for the presentation section) and $EUPH_QA_{it}$ (the euphemism score for the discussion section), respectively. A negative and significant relation appears between EUPH_INTRO_{it} and XRET_PRELIM_{j,t}, as well as between EUPH_QA_{it} and XRET_PRELIM_{i,t}. Both the magnitude of the coefficients (-0.0078 for EUPH_INTRO_{it} and -0.0074 for EUPH_QA_{it}) and the level of statistical significance (the 1% level) seem to suggest that euphemisms in the presentation and the discussion sections have similar effects on investors in the threeday window around the call.

Next, to test whether this immediate response constitutes an underreaction, I examine the association between euphemisms and future abnormal returns. Column (1) of Panel B in Table 3 presents the results of estimating regression (2) and reports a negative and significant coefficient on $EUPH_{jt}$ of -0.0069 (*t*-statistic = -2.63). This suggests that investors do underreact at first, and seems to support my prediction that they later correct their initial response. With respect to economic significance, conference calls in the top quartile of $EUPH_{jt}$ have 7.6% lower future abnormal returns than do firms in the bottom quartile, relative to the median of the magnitude of $XRET_DRIFT_{j,t}$ (-0.0069/0.091 = -0.076).

In columns (2) and (3), I test which call component is responsible for the investor underreaction. Although both $EUPH_INTRO_{jt}$ and $EUPH_QA_{jt}$ are negatively correlated with $XRET_DRIFT_{j,t}$, the correlation is significant only for the presentation section (the coefficient estimate for $EUPH_INTRO_{jt}$ is -0.0072 with *t*-statistic = -2.07, versus -0.0025 for $EUPH_QA_{jt}$ with *t*-statistic = -1.20), indicating that the prepared remarks seem to be the main source of investor underreaction.

5.3. Market Reaction to Changes in the Use of Euphemisms in Earnings Calls

The second set of regressions investigates whether changes in the use of euphemisms are also reflected in immediate and delayed market returns. Previous studies have found that changes in the tone of corporate disclosures may be important (Feldman et al. 2010, Davis et al. 2012). Cross-sectional comparisons of tone levels may be biased by the characteristics of the call participants: people with certain professional backgrounds, such as politics and law, are more likely to use euphemisms (Lutz 1996); and a participant who is not a native English speaker may use fewer euphemisms altogether, not being fully aware of their cultural meaning (Damen 1984, Plancic and Zanchi 2009). To mitigate concern about such bias, I conduct an additional analysis measuring euphemism as the change in euphemism level. Following Feldman et al. (2010), I calculate the change in euphemism (CH_EUPH_{jt}) as the difference between the euphemism measure in the current quarter and the average euphemism measure in the previous four quarters. Regressions (3) and (4) replace $EUPH_{jt}$ (the main independent variable in regressions (1) and (2)) with: CH_EUPH_{jt}

$$\begin{aligned} XRET_PRELIM_{j,t} &= \beta_1 CH_EUPH_{jt} + \beta_2 CH_TONE_{jt} \\ &+ \beta_3 Log(LENGTH)_{jt} + \beta_4 SUE_{jt} \\ &+ \beta_5 EPS_GROWTH_{jt} \\ &+ \beta_6 Log(Assets)_{jt} + \beta_7 BM_{jt} \\ &+ \beta_8 STD_EARN_{jt} \\ &+ \beta_9 STD_FORECAST_{jt} + \beta_{10} RET_{jt} \\ &+ \beta_{11} Log(FIRM_AGE)_{jt} \\ &+ \beta_{12} Log(SEG_NUM)_{jt} + \beta_{13} AF_{jt} \\ &+ f_{jt} + \varepsilon_{jt}. \end{aligned}$$
(3)

$$\begin{aligned} XRET_DRIFT_{j,t} &= \beta_1 CH_EUPH_{jt} + \beta_2 CH_TONE_{jt} \\ &+ \beta_3 Log(LENGTH)_{jt} + \beta_4 SUE_{jt} \\ &+ \beta_5 XRET_PRELIM_{jt} \\ &+ \beta_6 EPS_GROWTH_{jt} \\ &+ \beta_7 Log(Assets)_{jt} + \beta_8 BM_{jt} \\ &+ \beta_9 STD_EARN_{jt} \\ &+ \beta_{10} STD_FORECAST_{jt} + \beta_{11} RET_{jt} \\ &+ \beta_{12} Log(FIRM_AGE)_{jt} \\ &+ \beta_{13} Log(SEG_NUM)_{jt} + \beta_{14} AF_{jt} \\ &+ f_{jt} + \varepsilon_{jt}. \end{aligned}$$

$$(4)$$

I expect the coefficient on CH_EUPH_{it} to be negative for regression (3), as more euphemisms might indicate worsening financial results. If the increasing levels of euphemisms succeed in mitigating investor reaction, the regression coefficient on CH_EUPH_{it} should remain negative in regression (4) as well. Controls and model specifications are similar to those used in models (1) and (2), except for the $TONE_{it}$ variables. Following Feldman et al. (2010), I calculate the change in the overall tone of a conference call (CH_TONE_{it}) and use this variable in place of the level signal $(TONE_{it})$. The change in tone is the difference between the tone sentiment signal in a company's conference call and the mean sentiment signal in the company's conference calls held within the previous four quarters.

Table 4 presents the results for immediate (Panel A) and future (Panel B) abnormal market returns.

Table 4. Investor Reaction to Changes in Euphemism U	Jsage
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Panel A: Imme	ediate abnormal	market return	ns
	Dependent va	ariable = XRE	T_PRELIM _{jt}
Variables	(1)	(2)	(3)
CH_EUPH _{jt}	-0.0072*** (-10.53)		
CH_EUPH_INTRO _{jt}		-0.0050^{***} (-5.84)	
CH_EUPH_QA _{jt}		(0.01)	-0.0059*** (-8.25)
CH_TONE _{jt}	0.02405*** (19.56)	0.0244*** (19.72)	0.0243*** (19.64)
$Log (LENGTH_{jt})$	-0.0051*** (-3.57)	-0.0063*** (-4.37)	-0.0054*** (-3.72)
SUE _{jt}	0.0783*** (28.55)	0.0784*** (28.63)	0.0785*** (28.53)
EPS_GROWTH _{jt}	0.0001 (0.33)	0.0001 (0.29)	0.0001 (0.34)
$Log (ASSETS_{jt})$	-0.0062*** (-4.53)	-0.0061*** (-4.51)	-0.0062*** (-4.57)
BM_{jt}	-0.0177*** (-6.83)	-0.0177*** (-6.78)	-0.0177*** (-6.80)
STD_EARN_{jt}	-0.0032 (-1.01)	-0.0033 (-1.05)	-0.0031 (-1.01)
$STD_FORECAST_{jt}$	0.0268*** (3.03)	0.0273*** (3.09)	0.0270*** (3.07)
RET_{jt}	0.1096*** (16.25)	0.1100** (16.26)	0.1099** (16.30)
$Log (FIRM_AGE_{jt})$	-0.0038** (-2.21)	-0.0038** (-2.23)	-0.0038** (-2.21)
$Log(SEG_NUM_{jt})$	0.0009 (0.89)	0.0009 (0.91)	0.0009 (0.89)
AF_{jt}	-0.0293*** (-3.25)	-0.0293*** (-3.25)	-0.0294*** (-3.28)
Number of observations Firm fixed effects Quarter fixed effects R^2	72,403 Yes Yes 20.68%	72,403 Yes Yes 20.63%	72,403 Yes Yes 20.65%

Panel B: Subsequent abnormal market returns

	Dependent variable = $XRET_DRIFT_{jt}$			
Variables	(1)	(2)	(3)	
CH_EUPH _{jt}	-0.0042** (-2.20)			
CH_EUPH_INTRO _{jt}		-0.0028* (-1.80)		
CH_EUPH_QA _{jt}			-0.0030 (-1.64)	
CH_TONE _{jt}	0.0129*** (3.80)	0.0131*** (3.80)	0.0130*** (3.85)	
$Log (LENGTH_{jt})$	-0.0069* (-1.67)	-0.0076* (-1.88)	-0.0072* (-1.74)	
SUE_{jt}	-0.0011 (-0.40)	-0.0011 (-0.40)	-0.0011 (-0.38)	
XRET_PRELIM _{jt}	0.0002 (0.04)	0.0003 (0.07)	0.0002 (0.07)	

Та	b	е	4.	(Continued)
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Panel B: Subsec	Panel B: Subsequent abnormal market returns				
	Dependent	variable = XR	ET_DRIFT _{jt}		
Variables	(1)	(2)	(3)		
EPS_GROWTH _{jt}	0.0004	0.0004	0.0004		
	(1.49)	(1.49)	(1.50)		
$Log (ASSETS_{jt})$	-0.0589***	-0.0588***	-0.0589***		
	(-9.56)	(-9.64)	(-9.56)		
BM_{jt}	0.0507***	0.0507***	0.0507***		
	(6.26)	(6.25)	(6.25)		
STD_EARN _{jt}	0.0107	0.0107	0.0107		
	(0.65)	(0.65)	(0.65)		
STD_FORECAST _{jt}	-0.0706***	-0.0703***	-0.0704***		
	(-3.25)	(-3.24)	(-3.24)		
RET_{jt}	0.0327***	0.0329***	0.0329***		
	(3.31)	(3.33)	(3.33)		
$Log (FIRM_AGE_{jt})$	-0.0055	-0.0056	-0.0055		
	(-0.90)	(-0.90)	(-0.90)		
$Log(SEG_NUM_{jt})$	0.0067**	0.0067**	0.0067**		
	(2.62)	(2.62)	(2.62)		
AF_{jt}	-0.0353*	-0.0353*	-0.0354*		
	(-1.72)	(-1.72)	(-1.73)		
Number of observations	72,403	72,403	72,403		
Firm fixed effects	Yes	Yes	Yes		
Quarter fixed effects R^2	Yes	Yes	Yes		
	1.65%	1.64%	1.65%		

Notes. This table reports the panel regression results for the rela-tion between cumulative abnormal returns at and following the conference call date and three euphemism change measures: CH_EUPH_{jt} is the change in the total number of euphemisms used in the call, $CH_EUPH_INTRO_{jt}$ is the change in the number of euphemisms used in the presentation section, and $CH_EUPH_QA_{jt}$ is the number of euphemisms used in the presentation section. The dependent variables are the buy-and-hold returns adjusted for size, book-to-market ratio, and momentum for the interval [-1, +1] surrounding the conference call date in panel A (*XRET_PRELIM_{jt}*) and for the interval from two days after the call date through the subsequent quarter's preliminary earnings announcement in panel B (*XRET_DRIFT_{jt}*). See Appendix D for variable definitions. Standard errors are clustered by firm and time (year-quarter) following Petersen (2009) and Gow et al. (2010). Robust *t*-statistics are reported in parentheses.

p < 0.1, p < 0.05; p < 0.05

Column (1) of Panel A reports that the coefficient on CH_EUPH_{it} is negative (-0.0072) and significant at the 1% level (*t*-statistic = -10.53). This estimate suggests that firm calls in the top quartile of the CH_EUPH_{it} measure (the highest increase in the number of euphemisms compared with the average of the previous four quarters) earn 18.0% lower returns than firms in the bottom quartile, relative to the median of the magnitude of $XRET_PRELIM_{j,t}$ (-0.0072/0.040 = -0.180). This result is consistent with the results for euphemism level in the previous section and suggests that investors view an increase in the number of euphemisms as a negative signal. Columns (2) and (3) confirm the previous findings that investors dislike euphemisms in both the introductory and the Q&A sections of the calls: coefficient estimates are negative

and similar in magnitude and statistical significance for both *CH_EUPH_INTRO*_{*jt*} and *CH_EUPH_QA*_{*jt*}.

Panel B of Table 4 reports a negative and significant (at the 5% level) relation between CH_EUPH_{it} and *XRET_DRIFT*_{*i,t*}. The coefficient estimate is -0.0042, suggesting that firms in the top quartile of CH_EUPH_{it} (the highest increase in the number of euphemisms compared with the average of the previous four quarters) have 4.62% lower returns compared with the firms in the bottom quartile relative to the median of the magnitude of XRET_DRIFT_{i,t} (-0.0042/0.091 =-0.046). This result further confirms that the market returns at the call date do not fully incorporate the negative information delivered with euphemisms. Columns (2) and (3) present the results for the two sections of conference calls and confirm the findings from Table 3. The coefficient estimates for both sections are negative (-0.0028 and -0.0030 for CH_EUPH_ *INTRO*_{*it*} and *CH_EUPH_QA*_{*it*}, respectively), but only the coefficient for the presentation section is significant. In sum, the results in Tables 3 and 4 suggest that while investors interpret euphemisms as a negative signal, they underreact to the extent of the bad news, so that significant abnormal returns persist during the three months following the call as the market corrects this mispricing.

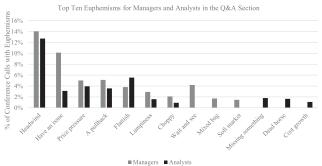
5.4. Market Reaction to the Use of Euphemisms by Managers vs. Analysts

In my second prediction, I argue that managers use euphemisms to dampen the effect of negative information, whereas analysts might use them simply to sound polite or to curry favor with managers. Although the findings in Tables 3 and 4 provide preliminary evidence that managers' use of euphemisms in the prepared introductory remarks results in stronger negative drift returns, these results are further validated by comparing managers' use of euphemisms to that of analysts in the Q&A section of the call. For the tests in this section, I used conference call transcripts from Capital IQ, as this database separates the call remarks by speaker, section, and order of the comments. I quantify the euphemism measure separately for analyst questions (EUPH_QA_ANALYST_{it}) and managerial responses (EUPH_QA_MGMT_{jt}),¹⁵ match the scores to the Thomson Reuters sample, and explore the relationship between abnormal market returns and the euphemism measures.¹⁶ Summary statistics indicate that about 65% (35%) of all euphemisms in the Q&A section are spoken by managers (analysts), and the mean euphemism count for managers is twice than for analysts: 1.26 versus 0.71.17 The euphemism scores for both managers and analysts are negatively and significantly associated with $TONE_{it}$ (-0.02 for $EUPH_QA_ANALYST_{it}$ and -0.03 for $EUPH_QA_$ $MGMT_{it}$), SUE_{it} (-0.02 for both $EUPH_QA_ANALYST_{it}$ and $EUPH_QA_MGMT_{jt}$), and $XRET_PRELIM_{jt}$, (-0.04 for $EUPH_QA_ANALYST_{jt}$ and -0.05 for $EUPH_QA_MGMT_{jt}$), confirming that euphemisms signal bad news. The correlation with subsequent drift returns ($XRET_DRIFT_{jt}$), however, reveals different pictures for the two groups of call participants. It is positive for analysts (0.01) and negative for managers (-0.01), again suggesting that market participants might be underreacting specifically to euphemisms used by managers.

Figure 5 compares the euphemisms most popular among managers to the ones used by analysts. Both managers and analysts talk about headwinds, price pressure, pullback, and lumpiness. However, some euphemisms are popular only with managers (*wait and see*, *mixed bag*) and some only with analysts (*missing something, beat a dead horse*), indicating that euphemisms may serve different communication purposes for these two groups.

Panel A of Table 5 reports the results from regressions of abnormal stock returns separately on the managers' euphemism use (EUPH_QA_MGMT_{jt}) and on the analysts' use (EUPH_QA_ANALYST_{it}); the same controls and model specifications are used as in regressions (1) and (2). Columns (1) and (2) report negative and statistically significant (at the 1% level) coefficients for the effects of both managers' and analysts' use of euphemisms on immediate market returns $(XRET_PRELIM_{j,t})$. This result is consistent with the previous tests and suggests that euphemisms signal bad news to investors no matter who uses them. The effect on future abnormal returns is a different matter: columns (3) and (4) indicate that only euphemism usage by managers elicits significant investor underreaction. The coefficient estimate on EUPH QA $MGMT_{it}$ is negative and significant (at the 5% level) whereas the coefficient for $EUPH_QA_ANALYST_{it}$ is close to zero and statistically insignificant. The coefficient estimate for EUPH_QA_MGMT_{it} suggests that firm calls in the top quartile of this measure (the highest level of managers' euphemism usage), earn 6.0% lower returns than firms in the bottom quartile relative

Figure 5. Most Popular Euphemisms for Managers and Analysts in the Q&A Section



to the median of the magnitude of $XRET_DRIFT_{j,t}$ (-0.0050/0.083 = -0.059).

Next, I examine whether the results are robust to using changes in euphemism use (normalized between -0.5 and 0.5) as an alternative measure that disregards the managers and analysts' normal levels of euphemisms. I reestimate regressions (3) and (4), replacing CH_EUPH_{it} with $CH_EUPH_QA_MGMT_{it}$ and CH_EUPH_QA_ANALYST_{it}. Panel B of Table 5 presents the results. When XRET_PRELIM_{i,t} is the dependent variable (columns (1) and (2)), the coefficients on both CH_EUPH_QA_MGMT_{it} and CH_EUPH_QA_ ANALYST_{it} are negative and statistically significant at the 1% level. This result supports the results in panel A and suggests that investors react negatively when either managers or analysts increase their use of euphemisms in the Q&A section of conference calls. In columns (3) and (4), when $XRET_DRIFT_{i,t}$ is the dependent variable, only the coefficient on CH_EUPH_QA_ *MGMT_{it}* has a marginally significant negative association with future abnormal returns, again in accord with the results in panel A. In sum, the use of euphemisms by both managers and analysts conveys bad news to investors, but only managers seem to be using euphemisms strategically.

5.5. "Softening the Blow" with Euphemisms

The negative relation between euphemism measures and future abnormal stock returns documented in Tables 3–5 suggest that companies tend to use euphemisms to lessen the impact of bad news, which in turn results in the observed investor underreaction. To provide further evidence on whether firms are using euphemisms strategically to explain poor performance, an additional analysis is conducted. If firms indeed use euphemisms to do damage control, I expect to see a reduction in the negative market reaction for calls that use more euphemisms when discussing company failure to meet earnings targets. To test this prediction, I calculate a measure of euphemism use by managers ($EUPH_MGMT_{j,t}$) that sums the number of euphemisms in the prepared management remarks and in the managerial responses in the Q&A section. I then multiply this measure by an indicator variable $(NEG_SUE_{i,t})$ that equals 1 if a company reports a negative earnings surprise and zero otherwise. I reestimate regressions (1) and (2) replacing SUE_{it} with NEG_SUE_{it} and adding the interaction term (EUPH_MGMT_{i,t}*NEG. $SUE_{i,t}$). This interaction term should be positive if euphemisms do indeed mitigate the extent of investors' reaction to bad news.

Table 6 presents the results. In the first column, where $XRET_PRELIM_{j,t}$ is the dependent variable, the coefficient on $EUPH_MGMT_{j,t}$ is negative and significant at the 1% level, in accord with the previous results. The indicator variable for negative earnings

	Panel A: E	uphemism levels			
	Dependent variable				
Variables	XRET_P	RELIM _{jt}	XRET_	DRIFT _{jt}	
	(1)	(2)	(3)	(4)	
EUPH_QA_MGMT _{jt}	-0.0037*** (-3.36)		-0.0050** (-2.08)		
EUPH_QA_ANALYST _{jt}		-0.0059*** (-5.00)		-0.0004 (-0.09)	
$TONE_{jt}$	0.0249*** (12.03)	0.0253*** (12.60)	0.0063 (1.32)	0.0061 (1.30)	
$Log (LENGTH_{jt})$	-0.0073*** (-3.20)	-0.0077*** (-3.31)	-0.0057 (-0.84)	-0.0067 (-1.01)	
SUE _{jt}	0.0758*** (24.30)	0.0757*** (24.42)	-0.0062 (-1.60)	-0.0062 (-1.58)	
XRET_PRELIM _{jt}			-0.0098* (-1.82)	-0.0094* (-1.78)	
EPS_GROWTH _{jt}	-0.0002 (1.19)	-0.0002 (1.12)	0.0003 (0.85)	0.0003 (0.86)	
$Log (ASSETS_{jt})$	-0.0077** (-2.39)	-0.0076** (-2.33)	-0.0691*** (-6.44)	-0.0706*** (-6.58)	
BM_{jt}	-0.0189*** (-5.11)	-0.0192*** (-5.28)	0.1067*** (6.83)	0.1060***	
STD_EARN _{jt}	-0.0047 (-0.72)	-0.0041 (-0.64)	0.0232 (1.04)	0.0212 (0.97)	
STD_FORECAST _{jt}	0.0203 (1.69)	0.0214* (1.85)	-0.0576* (-2.03)	-0.0569* (-1.96)	
RET_{jt}	0.1410*** (18.81)	0.1404*** (18.82)	0.0429** (2.55)	0.0430** (2.54)	
$Log (FIRM_AGE_{jt})$	-0.0051 (-1.13)	-0.0042 (-0.92)	-0.0152 (-0.85)	-0.0159 (-0.88)	
$Log(SEG_NUM_{jt})$	0.0003 (0.29)	0.0003 (0.28)	0.0017 (0.46)	0.0017 (0.46)	
AF_{jt}	-0.0527** (-2.67)	-0.0506** (-2.47)	-0.0200 (-0.59)	-0.0183 (-0.53)	
Number of observations	34,710	34,710	34,710	34,710	
Firm fixed effects	Yes	Yes	Yes	Yes	
Quarter fixed effects R^2	Yes 24.45%	Yes 24.37%	Yes 2.79%	Yes 2.77%	

Table 5. Euphemisms in the Q&A Section of Earnings Calls

Panel B: Euphemism changes

	Dependent variable				
	XRET_PRELIM _{jt}		$XRET_DRIFT_{jt}$		
Variables	(1)	(2)	(3)	(4)	
CH_EUPH_QA_MGMT _{jt}	-0.0042*** (-3.35)		-0.0031 (-1.62)		
$CH_EUPH_QA_ANALYST_{jt}$		-0.0035*** (-3.61)		-0.0020 (-0.63)	
CH_TONE_{jt}	0.0212*** (13.46)	0.0214*** (13.64)	0.0111** (2.80)	0.0104** (2.56)	
$Log (LENGTH_{jt})$	-0.0082*** (-3.54)	-0.0089*** (-3.80)	-0.0033 (-0.48)	-0.0025 (-0.39)	
SUE _{jt}	0.0746*** (24.26)	0.0747*** (24.42)	-0.0081** (-2.17)	-0.0078** (-2.08)	

Table 5.	(Continued)
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	Panel B: Eupl	nemism changes				
		Dependent variable				
	XRET_F	PRELIM _{jt}	XRET_	XRET_DRIFT _{jt}		
Variables	(1)	(2)	(3)	(4)		
XRET_PRELIM _{jt}			-0.0116** (-2.05)	-0.0114** (-2.07)		
EPS_GROWTH _{jt}	0.0003	0.0002	0.0005	0.0005		
	(1.55)	(1.43)	(1.37)	(1.42)		
$Log (ASSETS_{jt})$	-0.0076**	-0.0073**	-0.0730***	-0.0741***		
	(-2.35)	(-2.17)	(-5.83)	(-5.91)		
BM_{jt}	-0.0209***	-0.0208***	0.1185***	0.1183***		
	(-4.77)	(-4.92)	(7.62)	(7.42)		
STD_EARN _{jt}	-0.0118	-0.0100	0.0238	0.0197		
	(0.96)	(-0.78)	(0.82)	(0.70)		
$STD_FORECAST_{jt}$	0.0247*	0.0261**	-0.0552*	-0.0540*		
	(1.96)	(2.17)	(-2.00)	(-1.94)		
RET_{jt}	0.1502***	0.1492***	0.0420**	0.0416**		
	(17.86)	(17.73)	(2.12)	(2.16)		
$Log (FIRM_AGE_{jt})$	-0.0041	-0.0026	-0.0076	-0.0081		
	(-0.89)	(-0.57)	(-0.36)	(-0.39)		
$Log(SEG_NUM_{jt})$	0.0008	0.0007	0.0016	0.0018		
	(0.67)	(0.56)	(0.51)	(0.53)		
AF_{jt}	-0.0381**	-0.0353*	-0.0161	-0.0015		
	(-2.20)	(-1.91)	(-0.43)	(-0.30)		
Number of observations	30,892	30,892	30,892	30,892		
Firm fixed effects	Yes	Yes	Yes	Yes		
Quarter fixed effects R^2	Yes	Yes	Yes	Yes		
	26.28%	26.14%	3.07%	3.05%		

Notes. This table reports the panel regression results for the relation between cumulative abnormal returns at and following the conference call date and the euphemism measures for the Q&A section. In panel A, the independent variables of interest are $EUPH_QA_MGMT_{jt}$ (the total number of euphemisms used by the manager) and $EUPH_QA_ANALYST_{jt}$ (the number of euphemisms used by analysts). In panel B, the independent variables of interest are $CH_EUPH_QA_MGMT_{jt}$ (the change in total number of euphemisms used by managers) and $CH_EUPH_QA_ANALYST_{jt}$ (the change in the number of euphemisms used by managers) and $CH_EUPH_QA_ANALYST_{jt}$ (the change in the number of euphemisms used by analysts). See Appendix D for variable definitions. Standard errors are clustered by firm and time (year-quarter) following Petersen (2009) and Gow et al. (2010). Robust *t*-statistics are reported in parentheses. *p < 0.1, **p < 0.05; ***p < 0.01.

surprises ($NEG_SUE_{i,t}$) is also negative and significant, in accord with previous research. However, the coefficient on the interaction term $(EUPH_MGMT_{i,t})$ * $NEG_SUE_{i,t}$) is positive (0.0015) and significant (at the 1% level), indicating that euphemisms moderate the negative market reaction to bad earnings news. The coefficient estimate indicates that firms with negative earnings surprises that are in the top quartile of euphemism use earn 3.7% higher returns than firms in the bottom quartile, relative to the median of the magnitude of $XRET_PRELIM_{i,t}$ (0.0015/0.040 = 0.037). In the second column, where future abnormal returns are used as a dependent variable, I observe a similar but less pronounced pattern. The coefficients on EUPH_ $MGMT_{i,t}$ and $NEG_SUE_{i,t}$ are negative (but significant only for the euphemism measure and only at the 10% level), whereas the coefficient on the interaction term is positive and not significant. In general, the results

in this section provide some evidence that managers' use of euphemisms mitigates the effect of bad earnings news, as is evidenced by less negative stock returns for firms that employ euphemisms on their calls when they deliver disappointing results.

5.6. Investor Attention to the Use of Euphemisms

The final set of empirical results explores the mechanism behind the investor underreaction. During earnings season, some days have up to 270 conference calls, whereas other days are less busy. Since euphemisms are unstructured data and therefore demand a higher level of processing effort (Huang et al. 2018), investors should have more difficulty processing the information content of euphemistic calls on busier days.

To test this prediction, I examine the pattern of immediate and drift abnormal returns to portfolios sorted by busyness. First, for each call date I calculate

Table 6. "Softening the Blow" with Euphemisms

	Dependent variable		
Variables	XRET_PRELIM _{jt}	$XRET_DRIFT_{jt}$	
EUPH_MGMT _{jt}	-0.0101*** (-5.56)	-0.0060* (-1.91)	
NEG_SUE _{jt}	-0.0150*** (-16.30)	-0.0051 (-1.21)	
EUPH_MGMT _{jt} * NEG_SUE _{jt}	0.0015*** (2.92)	0.0020 (0.13)	
<i>TONE_{jt}</i>	0.0363*** (16.83)	0.0043 (0.89)	
$Log (LENGTH_{jt})$	-0.0097** (-4.03)	-0.0056 (-0.84)	
EPS_GROWTH _{jt}	0.0002 (0.99)	0.0003 (0.77)	
XRET_PRELIM _{jt}		-0.0126** (2.24)	
$Log (ASSETS_{jt})$	-0.0075** (-2.14)	-0.0690*** (-6.47)	
BM_{jt}	-0.0199*** (-4.57)	0.1072*** (6.85)	
STD_EARN _{jt}	-0.0053 (0.92)	0.0236 (1.05)	
STD_FORECAST _{jt}	0.0261** (2.12)	-0.0574** (-2.02)	
RET_{jt}	0.1605*** (19.48)	0.0417** (2.49)	
$Log (FIRM_AGE_{jt})$	-0.0058 (-1.24)	-0.0152 (-0.84)	
$Log(SEG_NUM_{jt})$	0.0011 (0.91)	0.0016 (0.45)	
<i>AF_{jt}</i>	-0.0535** (-2.83)	-0.0183 (-0.54)	
Number of observations Firm/quarter fixed effects R^2	34,710 Yes/yes 17.51%	34,710 Yes/yes 2.79%	

Notes. This table reports the panel regression results for the relations between cumulative abnormal returns and the management euphemism measure ($EUPH_MGMT_{jt}$), an indicator for negative earnings news (NEG_SUE_{jt}), and their interaction. See Appendix D for variable definitions. Standard errors are clustered by firm and time. Robust *t*-statistics are reported in parentheses.

p < 0.1, p < 0.05; p < 0.05; p < 0.01.

how many earnings calls occur on that date (*BUSY*). I then sort all firm transcripts for a given quarter into four groups based on this busyness measure, with *BUSY1* being calls on the least busy dates and *BUSY4* calls on the busiest ones, and reestimate regressions (1) and (2) for each quartile.¹⁸

Table 7 presents the results. In Panel A, where the dependent variable is the immediate market reaction, the $EUPH_{j,t}$ coefficient loads negatively and significantly across all groups, ranging from -0.0079 for BUSY1 (the least busy days) to -0.0103 for BUSY4 (the busiest days). The difference in the coefficients between the top and bottom quartiles is not statistically

significant (*F*-statistic = 0.95). This result seems to indicate that investors are interpreting euphemisms as equally negative signals on both the busiest and the quietest days.

However, the pattern is different in panel B, where the dependent variable is the future abnormal returns (*XRET_DRIFT*_{*j*,*t*}). The coefficient on *EUPH*_{*j*,*t*} is insignificant for firms that hold their calls on the slower reporting days (*BUSY1* and *BUSY2*), suggesting that on those days investors are correctly pricing euphemisms. On the other hand, in columns *BUSY3* and *BUSY4*, the coefficients on *EUPH*_{*j*,*t*} are negative (-0.0137for *BUSY3* and -0.0118 for *BUSY4*) and statistically significant, as is the difference between them (*F-statistic* = 3.95). It appears that using euphemisms in earnings calls on busier reporting days does delay investor reaction.

6. Robustness Tests

In this section, I consider whether my results are driven by the regression specification, the sample selection, or the euphemism measure construct. First, I reperform the main tests for market reactions using Fama-MacBeth style regressions (Fama and MacBeth 1973) for both levels and changes of the euphemism measure ($EUPH_{j,t}$ and $CH_EUPH_{j,t}$). Table 8 presents the results for immediate (columns (1) and (2)) and future (columns (3) and (4)) abnormal stock returns. The results confirm the previous findings that euphemisms are negatively associated with abnormal returns both around and after the conference call date. The coefficients on $EUPH_{i,t}$ and $CH_EUPH_{i,t}$ remain negative and statistically significant for immediate and future returns and are similar in magnitude to the coefficients observed in the panel regression specifications.

The relationship between $EUPH_{i,t}$ and returns might also change with firm size. To alleviate the concern that the results are driven by a well-documented size anomaly (Fama and French 1993), I reperform the tests on a subsample of conference calls that excludes companies with market capitalization less than \$500 million. Table 9 reports the results. The association between the measures of euphemism usage ($EUPH_{i,t}$ in column (1) and $CH_EUPH_{j,t}$ in column (2)) and immediate excess stock returns remains at the same level of statistical significance (1%) and magnitude as the results reported for the full sample in Tables 3 and 4. The association also holds when future abnormal returns are the dependent variable (columns (3) and (4)). In sum, the association between the measure of euphemism usage and excess stock returns seems robust to the size anomaly.

In my main tests, I use the total count of euphemisms to capture the extent of euphemism usage. To ensure that the results are robust to the choice of

]	Panel A: Immediate	abnormal market	returns	
Variables	Dependent variable = $XRET_PRELIM_{jt}$			
vanables	BUSY1	BUSY 2	BUSY 3	BUSY 4
EUPH _{jt}	-0.0079***	-0.0098***	-0.0091***	-0.0103***
	(-3.75)	(-5.36)	(-5.14)	(-5.29)
<i>TONE</i> _{jt}	0.0254*** (9.75)	0.0299*** (10.74)	0.0267*** (9.82)	0.0247*** (8.28)
$Log (LENGTH_{jt})$	0.0010 (0.34)	-0.0021 (-0.77)	-0.0088*** (-3.27)	-0.0077*** (-2.83)
SUE_{jt}	0.0864***	0.0757*** (18.78)	0.0755***	0.0788*** (21.43)
EPS_GROWTH _{jt}	-0.0002 (-0.95)	-0.0001 (-0.34)	0.0002 (1.09)	0.0001 (0.57)
$Log (ASSETS_{jt})$	-0.0056* (-1.91)	-0.0049* (-1.88)	-0.0023 (-1.17)	-0.0062*** (-3.56)
BM_{jt}	-0.0166*** (-3.19)	-0.0114** (-2.37)	-0.0125*** (-3.59)	-0.0200*** (-4.36)
STD_EARN _{jt}	0.0002	-0.0035 (-0.99)	0.0061*** (3.28)	-0.0165* (-1.92)
STD_FORECAST _{jt}	0.0438* (1.76)	0.0393*** (3.03)	0.0286** (2.57)	0.0142 (1.29)
RET_{jt}	0.1207*** (15.94)	0.1043*** (14.26)	0.1196*** (13.83)	0.0892***
$Log (FIRM_AGE_{jt})$	-0.0068 (-1.66)	-0.0015 (-0.48)	-0.0142*** (-3.33)	0.0016 (0.63)
$Log(SEG_NUM_{jt})$	0.0012 (0.45)	-0.0023 (-0.91)	-0.0003 (-0.15)	0.0012 (0.54)
AF_{jt}	-0.0288** (-2.41)	-0.0347* (-1.93)	-0.0361*** (-3.33)	-0.0345*** (-4.24)
$EUPH_{it}$ (Busy1-4)	0.0024	<i>F</i> -statistic	0.95	
Number of observations	19,629	19,412	19,959	19,115
Firm fixed effects	Yes	Yes	Yes	Yes
Quarter fixed effects R^2	Yes 21.54%	Yes 19.92%	Yes 20.53%	Yes 18.75%

Table 7. Limited Investor Attention to the Use of Euphemisms
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Panel B: Subsequent abnormal market returns

Variables		Dependent variable = $XRET_DRIFT_{jt}$				
	BUSY1	BUSY 2	BUSY 3	BUSY 4		
EUPH _{jt}	0.0021	-0.0034	-0.0137***	-0.0118**		
	(0.38)	(-0.70)	(-2.97)	(-2.21)		
<i>TONE_{jt}</i>	0.0053	0.0083	0.0071	0.0161**		
	(0.75)	(1.23)	(0.83)	(2.56)		
Log (LENGTH _{jt})	-0.0078	-0.0139**	-0.0053	-0.0030		
	(-0.90)	(-2.20)	(-0.72)	(-0.42)		
SUE _{jt}	-0.0096	0.0066	0.0049	0.0041		
	(-1.60)	(0.97)	(0.86)	(0.55)		
XRET_PRELIM _{jt}	-0.0058	0.0073	-0.0008	-0.0025		
	(-0.80)	(1.00)	(-0.16)	(-0.38)		
EPS_GROWTH _{jt}	0.0009	0.0006	0.0000	-0.0001		
	(1.16)	(0.88)	(0.05)	(-0.22)		
$Log (ASSETS_{jt})$	-0.0668***	-0.0509***	-0.0586***	-0.0624***		
	(-6.60)	(-5.85)	(-6.89)	(-7.23)		
BM _{jt}	0.0513***	0.0388***	0.0506***	0.0733***		
	(4.43)	(2.88)	(2.71)	(7.07)		

]	Panel B: Subsequen	t abnormal market	returns		
Variables	Dependent variable = $XRET_DRIFT_{jt}$				
	BUSY1	BUSY 2	BUSY 3	BUSY 4	
STD_EARN _{jt}	-0.0374*	-0.0020	0.0128	0.0543*	
	(-1.78)	(-0.13)	(1.54)	(1.85)	
STD_FORECAST _{jt}	-0.0888**	-0.0125	-0.0374	-0.1052**	
	(-2.18)	(-0.40)	(-0.78)	(-2.36)	
RET_{jt}	0.0350**	0.0254*	0.0287*	0.0339**	
	(2.15)	(1.68)	(1.86)	(2.34)	
$Log (FIRM_AGE_{jt})$	-0.0127	-0.0264**	0.0049	0.0118	
	(-1.23)	(-2.17)	(0.30)	(1.11)	
$Log(SEG_NUM_{jt})$	0.0098*	-0.0008	0.0000	0.0115**	
	(1.78)	(-0.13)	(0.00)	(2.32)	
AF_{jt}	-0.0592*	-0.0138	-0.0335	-0.0418	
	(-1.89)	(-0.38)	(-0.81)	(-1.32)	
$EUPH_{jt}$ (Busy1-4) Number of observations Firm fixed effects Quarter fixed effects R^2	0.0139* 19,629 Yes Yes 1.82%	F-Statistic 19,412 Yes Yes 1.47%	3.95 19,959 Yes Yes 1.71%	19,115 Yes Yes 2.15%	

Table 7. (Continued)

Notes. The table reports results of the panel regression of the abnormal returns on euphemism usage for the four groups of calls formed by ranking each transcript quarterly based on the number of earnings calls that take place on the call date (*BUSY1–BUSY4*). Standard errors are clustered by firm and time following Petersen (2009) and Gow et al. (2010). Robust *t*-statistics are reported in parentheses. *p < 0.1, **p < 0.05; ***p < 0.01.

explanatory variable, I repeat the tests using two alternative measures: $EUPH_VAR_{j,t}$, which captures the number of distinct euphemisms in each call, and $CH_ EUPH_VAR_{j,t}$, which captures change in this number from the average for the previous four quarters. Columns (1) and (3) of Table 10 show the results of the baseline regression using the level of euphemism variability. The coefficient on $EUPH_VAR_{j,t}$ is negative and significant both for immediate and for delayed market returns, with controls for earnings surprises, tone, and firm fundamentals. Columns (2) and (4) show the effect of change in euphemism variability during a given call (versus the previous four-quarter average) on immediate and future abnormal returns, respectively. The results continue to support the earlier conclusion that euphemisms are negatively associated with these returns.

Table 8. Robustness Test: Fama-MacBeth Regressions of Excess Returns on the Euphemism Signal

Variables		Dependent variable				
	XRET_F	XRET_PRELIM _{jt}		$XRET_DRIFT_{jt}$		
	(1)	(2)	(3)	(4)		
EUPH _{jt}	-0.0106*** (-9.08)		-0.0100*** (-4.05)			
CH_EUPH _{jt}		-0.0085*** (-10.14)		-0.0060** (-2.50)		
<i>TONE_{jt}</i>	0.0237*** (17.68)		0.0091*** (3.41)			
CH_TONE _{jt}		0.0279*** (20.38)		0.0152*** (4.39)		
$Log (LENGTH_{jt})$	-0.0063*** (-5.63)	-0.0065*** (-5.38)	0.0012 (0.41)	0.0005 (0.16)		
SUE _{jt}	0.0752*** (31.22)	0.0752*** (30.51)	0.0019 (0.59)	0.0008 (0.27)		
$XRET_PRELIM_{jt}$			0.0044 (1.36)	0.0024 (0.75)		

Table 8. (Continued)

	Dependent variable			
	XRET_F	PRELIM _{jt}	XRET	DRIFT _{jt}
Variables	(1)	(2)	(3)	(4)
EPS_GROWTH _{jt}	0.0000	0.0001	0.0003	0.0004*
	(0.19)	(0.72)	(1.54)	(1.77)
$Log (ASSETS_{jt})$	-0.0006*	-0.0008**	0.0003	0.0000
	(-1.75)	(-2.39)	(0.43)	(-0.03)
BM_{jt}	-0.0115***	-0.0144***	0.0073	0.0062
	(-7.27)	(-8.92)	(1.50)	(1.12)
STD_EARN _{jt}	-0.0082*	-0.0097*	0.0175	0.0224
	(-1.87)	(-1.91)	(0.93)	(1.04)
STD_FORECAST _{jt}	0.0200**	0.0179**	-0.0566**	-0.0638***
	(2.52)	(2.21)	(-2.51)	(-2.86)
RET_{jt}	0.0808***	0.0828***	0.0202**	0.0252***
	(17.66)	(18.78)	(2.71)	(2.88)
$Log (FIRM_AGE_{jt})$	-0.0028***	-0.0030***	-0.0003	-0.0003
	(-6.58)	(-5.98)	(-0.35)	(-0.35)
$Log(SEG_NUM_{jt})$	-0.0007	-0.0009	0.0019	0.0010
	(-0.84)	(-0.92)	(0.98)	(0.48)
AF_{jt}	-0.0104***	-0.0110***	0.0066	0.001917
	(-4.08)	(-3.70)	(0.76)	(0.17)
Number of observations	78,115	72,403	78,115	72,403
Number of regressions	54	52	54	52
Quarter fixed effects <i>R</i> ²	Yes	Yes	Yes	Yes
	23.70%	24.34%	1.12%	1.22%

Notes. The table presents the results of Fama-McBeth style regression of the excess immediate (columns (1) and (2)) and subsequent (columns (3) and (4)) buy-and-hold returns on the measures of euphemism level $(EUPH_{jt})$ and change (CH_EUPH_{jt}) . See Appendix D for variable definitions. The coefficients are averages from quarterly cross-sectional regressions; these are time-series means with *t*-statistics (in parentheses) corresponding to the standard error of the mean.

p < 0.1, p < 0.05; p < 0.01.

Variables	Dependent variable				
	XRET_P	XRET_PRELIM _{jt}		$XRET_DRIFT_{jt}$	
	(1)	(2)	(3)	(4)	
EUPH _{jt}	-0.0079*** (-8.37)		-0.0055*** (-2.57)		
CH_EUPH _{jt}		-0.0060*** (-7.51)		-0.0042** (-2.11)	
$TONE_{jt}$	0.0232*** (17.25)		0.0032 (0.77)		
CH_TONE_{jt}	· · · ·	0.0195*** (15.64)		0.0030 (0.89)	
Log (LENGTH _{jt})	-0.0024* (-1.73)	-0.0032** (-2.39)	-0.0029 (-0.76)	-0.0016 (-0.39)	
SUE _{jt}	0.0712*** (28.49)	0.0712*** (28.23)	-0.0033 (-1.06)	-0.0044 (-1.45)	
XRET_PRELIM _{jt}			-0.0105** (-2.18)	-0.0104** (-2.04)	
EPS_GROWTH _{jt}	-0.0001 (-0.34)	0.0000 (-0.29)	0.0004 (1.30)	0.0003 (0.99)	

Table 9. Robustness Tests: Firms with Market Cap Greater Than \$500 Million

	Dependent variable			
	XRET_P	PRELIM _{jt}	XRET_	DRIFT _{jt}
Variables	(1)	(2)	(3)	(4)
$Log (ASSETS_{jt})$	-0.0011	-0.0021	-0.0535***	-0.0550***
	(-0.92)	(-1.55)	(-9.00)	(-8.93)
BM_{jt}	-0.0144***	-0.0156***	0.0692***	0.0692***
	(-4.90)	(-5.55)	(4.76)	(4.68)
STD_EARN _{jt}	-0.0068	-0.0052	0.0343*	0.0440**
	(-1.09)	(-0.81)	(1.86)	(2.27)
STD_FORECAST _{jt}	0.0185**	0.0139*	-0.0771***	-0.0760***
	(2.51)	(1.77)	(-3.84)	(-3.99)
RET_{jt}	0.1401***	0.1433***	0.0499***	0.0478***
	(22.49)	(21.54)	(4.06)	(3.85)
$Log (FIRM_AGE_{jt})$	-0.0012	-0.0014	0.0058	0.0059
	(-0.65)	(-0.68)	(1.08)	(0.94)
$Log(SEG_NUM_{jt})$	-0.0003	0.0007	0.0028	0.0036
	(-0.29)	(0.74)	(0.88)	(1.16)
AF_{jt}	-0.0012	0.0027	-0.0432**	-0.0489*
	(-0.18)	(0.37)	(-2.29)	(-1.99)
Number of observations	54,451	51,792	54,451	51,792
Firm fixed effects	Yes	Yes	Yes	Yes
Quarter fixed effects	Yes	Yes	Yes	Yes
R^2	22.57%	23.11%	1.85%	1.85%

Table 9. (Continued)

Notes. This table reports the results of the panel regression of the excess buy-and-hold immediate and subsequent returns on the euphemism signals and other control variables for a sample that excludes firms with market capitalization less than \$500 million. See Appendix D for variable definitions. Standard errors are clustered by firm and time (year-quarter) following Petersen (2009) and Gow et al. (2010). Robust *t*-statistics are reported in parentheses.

*p < 0.1, **p < 0.05; ***p < 0.01.

Table 10. Robustness Tests: Alternative Measure	e of Euphemism Usage
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	Dependent variable			
	XRET_P.	RELIM _{jt}	XRET_I	ORIFT _{jt}
Variables	(1)	(2)	(3)	(4)
EUPH_VAR _{jt}	-0.0100*** (-10.39)		-0.0049^{*} (-1.80)	
CH_EUPH_VAR _{jt}		-0.0068*** (-8.42)		-0.0027 (-1.27)
<i>TONE_{jt}</i>	0.0271*** (16.66)		0.0089** (2.34)	
CH_TONE _{jt}		0.0241*** (19.53)		0.0130*** (3.87)
$Log (LENGTH_{jt})$	-0.0033** (-2.44)	-0.0049*** (-3.54)	-0.0096** (-2.26)	-0.0072* (-1.73)
SUE _{jt}	0.0781*** (29.13)	0.0784*** (28.60)	0.0012 (0.43)	-0.0010 (-0.40)
$XRET_PRELIM_{jt}$			0.0015 (0.38)	0.0002 (0.07)
EPS_GROWTH _{jt}	-0.0001 (-0.55)	0.0000 (0.32)	0.0003 (1.29)	0.0004 (1.50)
$Log (ASSETS_{jt})$	-0.0051*** (-4.37)	-0.0063*** (-4.64)	-0.0583*** (-10.06)	-0.0588*** (-9.65)

Table 10.	(Continued)
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	Dependent variable			
	XRET_P	RELIM _{jt}	XRET_I	ORIFT _{jt}
Variables	(1)	(2)	(3)	(4)
BM _{jt}	-0.0150***	-0.0178***	0.0491***	0.0507***
	(-5.64)	(-6.83)	(6.10)	(6.26)
STD_EARN _{jt}	-0.0003	-0.0034	0.0068	0.0107
	(-0.12)	(-1.10)	(0.59)	(0.65)
STD_FORECAST _{jt}	0.0293***	0.0268***	-0.0730***	-0.0704***
	(3.54)	(3.03)	(-3.37)	(-3.24)
RET_{jt}	0.1065***	0.1096***	0.0321***	0.0328***
	(17.00)	(16.34)	(3.39)	(3.34)
$Log (FIRM_AGE_{jt})$	-0.0048***	-0.0038**	-0.0036	-0.0055
	(-3.10)	(-2.21)	(-0.63)	(-0.90)
$Log(SEG_NUM_{jt})$	0.0000	0.0008	0.0056**	0.0066**
	(0.02)	(0.82)	(2.22)	(2.61)
AF_{jt}	-0.0308***	-0.0293***	-0.0304	-0.0353*
	(-3.54)	(-3.25)	(-1.62)	(-1.72)
Number of observations	78,115	72,403	78,115	72,403
Firm fixed effects	Yes	Yes	Yes	Yes
Quarter fixed effects	Yes	Yes	Yes	Yes
R^2	19.71%	20.68%	1.61%	1.65%

Notes. The table reports results of the panel regression of the excess buy-and-hold returns around the conference call dates on the variability of euphemism use $(EUPH_VAR_{it})$ and the change in variability $(CH_EUPH_VAR_{it})$, as alternative measures of euphemism use. See Appendix D for variable definitions. Standard errors are clustered by firm and time (year-quarter) following Petersen (2009) and Gow et al. (2010). Robust *t*-statistics are reported in parentheses.

p < 0.1, p < 0.05; p < 0.01.

7. Conclusion

Prior accounting literature has documented that managers use verbal cues opportunistically to obfuscate the extent of bad news. At the same time, a body of linguistic literature has looked into euphemisms, which are periphrastic words and phrases that indirectly refer to something negative and are used by language speakers to soften the blow from an unpleasant message. Although accounting and finance researchers have documented various communication techniques used by managers to muddle their message to investors, to the best of my knowledge no prior study has investigated the use of euphemisms in corporate communication. This study uses the earnings conference call setting to test the role of euphemisms in corporate communication. I argue that managers can mitigate the extent of bad news and lead investors to adopt a more optimistic outlook by using euphemisms.

A list of corporate euphemisms is created and used in a linguistic algorithm to identify them in a large sample of earnings calls (more than 78,000). It is shown that euphemism usage is negatively associated with immediate and future abnormal stock returns, suggesting that investors view euphemisms as a negative signal, but do not fully incorporate them into their pricing decisions at the time of the call. It is also found that the euphemisms can mitigate the market reaction to negative earnings surprises and that euphemism mispricing is specific to the managers' linguistic cues and especially pronounced on busy reporting days. Taken together, the evidence suggests that managers may be using euphemisms strategically to mitigate the market impact of poor earnings news.

These findings are of interest to corporate executives, analysts, and investors who participate in earnings conference calls and/or use call information to make decisions. Financial regulators may also want to develop guidance on the use of euphemisms in corporate communications so firms and investors will be more aware of the effects these words and phrases have on equity valuation. Finally, this paper shares the list of corporate euphemisms with the academic community for further research. One important avenue of exploration is the relation between euphemisms and overall tone. Future work can potentially explore how euphemisms are used as substitutes for negative words or instead of additional explanations to modify the tone of financial disclosures.

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Appendix A. List of Euphemisms Used in the Study

А	
_	Adjustment period
В	Back-end loaded Bear the brunt Be behind Behind the curve Behind the eight ball Be impacted (as in <i>heavily/directly/dramatically/materially/significantly/substantially impacted</i>) Belly up Big question mark Bizarre decision Bleak Bloodbath Brakes (as in <i>put the brakes on/step on the brakes/apply the brakes</i>)
-	Bump in the road
C	Catch by surprise Cautious outlook Choppy Close its doors Compression (as in <i>margin/occupancy/price/rate compression</i>)
	Conservative (as in <i>conservative position/approach/posture/stance/view/guidance/forecast/outlook</i>) Contract (as in <i>volume/margin contract</i>) Cost growth Creative accounting Creep (as in <i>cost/capacity/expense creep</i>) Curve ball Cut numbers
D	
	Dead horse (as in <i>beat a dead horse</i>) Disconnect Dog and pony show Downtime (as in <i>see/experience downtime</i>)
Ε	Evaporated (as in <i>advantage/profits/revenue/sales evaporated</i>) Expense growth
F	Fall apart Falloff Fall off a cliff Fall out of bed Flatten (as in <i>revenue/earnings/income/outlook/profits/revenues/sales/volume is/are flattening</i>) Flattish Fluid situation
G	Gap in the road Get dinged

Appendix A. (Continued)

Н	
	Hang-up
	Have an issue
	Have hands tied
	Headwind
	Heartburn
	Hiccup
	Hole (as in <i>to be in the hole</i>)
Ι	
	In the hot seat
	In the red
	In uncharted waters
	Inventory adjustment
К	
	Keep up at night
L	
L	Leave money on the table
	Level off (as in <i>pricing levelled off</i>)
	Limited/low/less/suboptimal/impacted visibility
	Lumpiness
М	Lunpites
111	Material event
	Missing something
	Misunderstanding
	Mixed bag
	Mixed bag Mixed results
	Moderating/moderate growth
	Muted growth/expectations
Ν	Witted growin/ expectations
1	Nightmare (as in legal/business/credit/earnings/income/personnel/revenue nightmare)
	Not out of the woods
	Not where we need to be
0	Not where we need to be
0	Off (as in margin/earning/guidance/performance/production/profit/profitability/revenue/sales/volume is/are off)
	Open a can of worms Out of whack
Р	
1	Pear-shaped (as in <i>go/be pear-shaped</i>)
	Pressure (as in <i>pricing/margin/price pressure</i>)
	Price hike
	Pullback
R	1 undek
K	Rebase dividends
	Repositioning
	Reshaping
S	Rightsize
5	Sensitive nature
	Shrinking (as in <i>shrinking margins/profit/revenue/sales/business</i>)
	Slip (as in performance/earning/expectation/growth/income/profit/profitability/quality/result/return/revenue/sale slipped)
	Soft (as in soft year/month/quarter/circumstances/environment/market/demand/sales/orders)
	Soft (as in softening rate/price/environment)
	Softenss
	Soul searching
	Speed bump Sticking point
	Sticking point
	Strategic review
	Streamlining
Т	Struggle
1	Take a hwathar
	Take a breather Take a haircut
	Take a hit

Appendix A. (Continued)

	Tempered view/outlook
	Throw in the towel
	Tick down
	Tight (as in <i>margins are tight</i>)
	Tough patch
	Tough slog
	Traction (as in see minimal/no traction)
	Transition/transitional (as in <i>transition period/phase/year</i>)
	Trim (as in <i>trim expectations/forecast/guidance/outlook</i>)
	Trip up
	Troublesome
ſ	
	Under water
	Unusual (as in unusual year/month/quarter/circumstances/development/environment/events/market/situation)
V	
	Wait and see
	Wake-up call
	Wild card

Appendix B. Examples of Amenity Rules

Table B.1 exhibits some examples of Amenity rules to capture instances of euphemisms in the corpus of conference call transcripts. The rules show some features of

Amenity software that helped me create rules that can capture euphemisms and euphemistic phrases, accounting for punctuation, semantic rows, and grammatical structure of sentences.

 Table B.1. Examples of Amenity Rules

Amenity features	Amenity rule	Conference call extract captured by the rule
Identifies phrases by recognizing grammatical relationships	<pre>(0: Lemma = tight PRD->1) + (1: Lemma = be A1 <- 2) + (2: Lemma = margin) => {AddProp(1. SENTIMENT = NEG); AddProp(1. NOMERGE = true); AddProp(1. EVENT = Euph_margintight); AddLink(1. SentWord -> 0); AddLink(1. SentWord -> 2);}</pre>	PHH Corporation, November 11, 2005, Terence W. Edwards, CEO: " <u>Margins are</u> very, very <u>tight</u> by historical standards. And I would tell you now that we're into the month of October they're tighter still."
Identifies negations	<pre>(0: Lemma = bed pobj -> 1) + (1: Lemma = of prep -> 2) + (2: Lemma = out DIR -> 3) + (3: Lemma = fall) => {AddProp (3. SENTIMENT = NEG); AddProp(3. EVENT = Euph_falloutofbed); AddLink(3. SentWord -> 0); AddLink(3. SentWord -> 1); AddLink(3. SentWord -> 2);}</pre>	Walgreen, June 22, 2010, Greg Wasson, CEO: "When we removed Duane Reade and in light of the 5.9% new store growth, our SG&A trend is pretty consistent with where we've been over the last two or three years. We certainly <u>didn't fall out of bed</u> . We certainly know that there's opportunity, we're going to keep pushing. The goal I have, I've given this team is make sure that that two year stack yea"
Has tagging capacity	<pre>(0: Lemma = ball pobj -> 1 det <- 2 nummod <- 3) + (1: Lemma = behind) + (2: Lemma = the) + (3: NERTag = CARDINAL) => {AddProp(1. SENTIMENT = NEG); AddProp(1. NOMERGE = true); AddProp(1. EVENT = Euphemism_behindball); AddLink(1. SentWord -> 0); AddLink(1. SentWord -> 2); AddLink(1. SentWord -> 3);}</pre>	United States Steel Corp, June 26, 2011, John Surma, CEO: "In the first quarter we had a disruption at our industrial gas supplier at our Great Lakes Works and that got us sort of <u>behind the eight ball</u> on inventory coverage. So we didn't have as many tons available in the spot market in the second quarter as we might have liked."

Table B.1. (Continued)

Amenity features	Amenity rule	Conference call extract captured by the rule
Allows creation of semantic rows	<pre>(0: Lemma = soft amod -> 1) + (1: Lemma = (market April August December demand environment February January July June March May month November October orders Q1 Q2 Q3 Q4 quarter sales September year)) => {AddProp(1. SENTIMENT = NEG); AddProp(1. NOMERGE = true); AddProp(1. EVENT = Euphemism_softmarket); AddLink(1. SentWord -> 0);}</pre>	Carlisle Companies, July 19, 2005, Richmond McKinnish, CEO: "What was really disappointing to us was the earnings. We had several significant actions, which reduced our earnings in the quarter. The first was a layoff at our Pennsylvania tire plant, where we recognized the <u>soft demand</u> in lawn and garden."
Accounts for punctuation, compound words	<pre>(0: Lemma =_punct -> 1) + (1: Lemma = up det <- 2 compound <- 3) + (2: Lemma = the) + (3: Lemma = hang) => {AddProp(1. SENTIMENT = NEG); AddProp(1. NOMERGE = true); AddProp(1. EVENT = Euphemism_hangup); AddLink(1. SentWord -> 0); AddLink(1. SentWord -> 2); AddLink(1. SentWord -> 3);}</pre>	St. Jude Medical, July 19, 2006, Bruce Nudell, Sanford Bernstein, analyst: "Good morning, Dan. Two questions. One is, we did a little survey work, and it was certainly inadequate to sample the waterfront. But it suggested that the issue in referral may be even below the cardiologist's level, affecting better preserved patients who are seemingly doing well, you know, not routinely managed by cardiologists. Just your thought about where <u>the hang-up</u> in the referral chain might be."

Appendix C. Examples of Sentences with Euphemisms

Table C.1 includes extracts with some most frequently used euphemisms from the conference call transcripts. Amenity software captures these instances and assigns polarity to each case. Euphemisms have a negative sentiment because they are used to present unpleasant reality in a more positive light. Therefore, negative sentiment is assigned to all euphemism rules in Amenity. However, Amenity software will identify negation in the sentence structure and might change the polarity for some cases from negative to positive. Most examples in the table have negative polarity. The second example shows how euphemisms can be classified as having a positive polarity, and the third example shows examples of euphemisms with both positive and negative polarity within the same conference call paragraph.

Table C.1. Examples of the Most Frequently Used Euphemisms from the Conference Call Transcripts

Company/call date	Examples	Polarity
TriQuint Semiconductor Inc.July 27, 2011	Ralph Quinsey, CEO: "With <u>cloudier near-term visibility</u> and <u>some headwinds</u> , we are forecasting flat revenue in Q3, but I anticipate returning to strong sequential growth in Q4."	NEG
Micron Technology December 22, 2005	Tim Luke, Lehman Brothers, analyst: "That makes sense. Any color just with respect to pricing and how that may play out in terms of gross margin outlook?" Steve Appleton, Micron Technology, CEO: "Very difficult to project what's going to happen with respect to pricing. If you paid attention to some of the news that's been out in the public on spot market pricing in the dynamic random access memory (DRAM) area just in the past week or so, it appears to have stabilized at a level that's much lower than we would have hoped for. But it appears to have stabilized. Our contract renegotiations that occurred midmonth with our big OEMs [original equipment manufacturers] resulted in flat pricing. So it appears that we're through the storm, anyway, on the strong price reductions that we have seen in the DRAM area. And on the NOT-AND (NAND) flash area, there's really not much price pressure at all. Prices are relatively stable. In the CMOS [complementary metal-oxide-semiconductor] image sensor area, we are kind of in a sole-source situation with virtually all of our customers. So there's not a lot of commodity-type price pressure there, either."	POS

Table C.1. (Continued)

Company/call date	Examples	Polarity
Lennox International April 26, 2011	Bob Hau, chief financial officer (CFO): "We now expect commodity headwind of \$45 million to \$50 million for the full year, weighted more to the first half of the year. We also expect to fully offset this commodity headwind on a full year basis through pricing actions we've taken."	NEG/POS
Brooks Automation February 1, 2005	Bob Woodbury, CFO: "Our inventories are still somewhat stalled. We have an 18, \$19 million amount sitting in deferred. I would like to get that more than half of that value reduced the course of this year. We did have as I alluded to on the call, we had some timing issues just because of the literally the holidays, where we had almost \$5 million in cash land January 3 in our lock boxes; again all held by holidays. Days sales owed (DSO's) we're still trying to drive back into a 60-day normalized value. Again, take 10 off of the inventories. Again we ate into payables a little bit this quarter, but the focus on balance sheet with operating profitability is somewhat of a daily mantra here."	NEG
Polo Ralph Lauren February 4, 2009	Roger Farah, chief operating officer (COO): "The proactive measures we've taken to scale back inventory levels across channels to manage our expenses, and to execute our day-to-day operations with a high level of precision and agility have helped to mitigate the dramatic <u>pullback</u> in consumer spending that occurred during the quarter."	NEG
Halliburton Company February 20, 2003	Douglas Foshee, CFO: "Now I want to give you a little more detail by segment on our operating results. In the Energy Services Group, quarterly revenues were \$1.7 billion, a 10% decrease year-over-year and a 2% increase sequentially. The year- over-year revenue decrease is attributable to the decline in U.S. activity, <u>pricing</u> <u>pressures</u> , and importantly, our contribution of Halliburton subsidy assets to SubSea 7."	NEG
Union Pacific Corp. July 21, 2011	Scott Group, Wolfe Trahan Co, analyst: "And just the last question is on intermodal, I understand that the contract loss, but if I look at your volumes, they are <u>flattish</u> . Your western competitor's up 10. I'm guessing there's more than just a contract loss driving that spread and any additional color you can give would be great on why you're seeing kind of <u>flattish</u> intermodal volumes, particularly on the domestic side given the strength we're seeing from JP Hunt and Hub."	NEG
Syntel, Inc. November 7, 2009	David Mackey, senior vice president (SVP) finance: "As we have been pretty consistent in saying over the last year we certainly expected a lot of these <u>headwinds</u> to come back on the cost side of our business when the demand environment started to improve. So things like wage increases, utilization levels, and as you mentioned before, the currency, these will all create <u>headwinds</u> . In terms of the magnitude, we are going to have to <u>wait and see</u> exactly what that means."	NEG
Dentsply International July 27, 2005	Bill Jellison, CFO: "However, these positives were offset in the quarter by lower precious metal sales and the unleveraged start-up costs of our new anesthetic facility. Rates are expected to only improve slightly the by the end of 2005 due to the negative impact of the precious metal product mix, primarily the result of the <u>soft</u> German dental <u>market</u> and the higher unleveraged start-up costs for the anesthetic facility."	NEG
CNA Financial Corp July 28, 2005	 Scott Frost, HSBC, analyst: "Yes, I think I may have <u>missed something here</u>, and I apologize if I have. But you're saying the corporate and other non-core, the results were largely driven by the tax settlement. Excluding those results you would've shown a fairly significant deterioration. And I'm not sure I understand—and again, I apologize if <u>I've missed it here</u>—what drove that deterioration. Is that the right way to look at that?" Stephen W. Lilienthal, CEO: "No, I don't think it is. You there are two things in the corporate results. One is the tax settlement, which is a 115 good guy. And the other is the commutation of the reinsurance, which is a \$36 million the other way. So, if you take those two things out, you'll see relatively, you know, consistent numbers." Scott Frost: "So, 115 less 35, that's around what, I mean" Stephen W. Lilienthal: "79." Scott Frost: "OK. So, excluding that, your net income would have been 2 vs. 58 in 2004, right?" Stephen W. Lilienthal: "Yes. And there were a lot of investment gains in 2004, which accounts for the majority of the difference." Scott Frost: "OK. All right. So that's the main driver is lower investment gains. OK. Thank you." 	NEG

Table C.1. (Continued)

Company/call date	Examples	Polarity
PCTEL April 29, 2005	Marty Singer, CEO: "The <u>lumpiness</u> in 2004 with RFS (type of product) was largely due to an error that I made, and that was being unrealistically bullish about our opportunities in the third quarter for government sales, and secondly, we had <u>lumpiness</u> because after we introduced Clarify, we had an algorithm glitch in the first quarter of 2004 that led to some significant delays in rolling out that product in a in a strong way. And so there was a real hiccup in the Clarify rollout."	NEG
LMI Aerospace November 8, 2010	Ed Dickinson, CFO: "Good morning everybody and thanks for joining the call today. As Ron said, the third quarter was a bit of a transitional quarter in both segments, and as we prepare ourselves for expected growth with new work and both and production rates as well. I will go through the financial results and try to explain a few of the unusual items during the quarter. <u>Sales</u> for the quarter <u>were light</u> , as we generated \$52.3 million in the quarter, down from \$58.7 million	NEG
Marriott International October 6, 2005	the prior year and down sequentially from \$55.6 million." Bill Crow, Raymond James, analyst: "Right. Finally on the syn fuel, <u>not to beat a</u> <u>dead horse</u> , but is there any way that it could be dilutive to the \$3 to \$3.10 range next year, or you think you can manage it so that you're not surprised by the end of year fuel price spike or something that would eliminate your profits to date?"	NEG

Appendix D. Variable Definitions

EUPH _{jt}	The total number of euphemisms with negative polarity less the total number of euphemisms with positive polarity in the conference call. For regression analysis, $EUPH_{jt}$ is normalized between -0.5 and 0.5 by ranking it into quartiles (zero to three) by fiscal quarter, dividing the rank by 3, and subtracting 0.5.
EUPH_INTRO _{jt}	The total number of euphemisms with negative polarity less the total number of euphemisms with positive polarity in the presentation/introduction portion of the conference call. For regression analysis, $EUPH_{-}INTRO_{it}$ is normalized between -0.5 and 0.5, as with $EUPH_{it}$.
EUPH_QA _{jt}	The total number of euphemisms with negative polarity less the total number of euphemisms with positive polarity in the Q&A/discussion portion of the conference call. For regression analysis, $EUPH_QA_{jt}$ is normalized between -0.5 and 0.5, as with $EUPH_{it}$.
EUPH_QA_MGMT _{jt}	The total number of euphemisms with negative polarity less the total number of euphemisms with positive polarity used by managers in the Q&A/discussion portion of the conference call. For regression analysis, the variable is normalized between -0.5 and 0.5, as with <i>EUPH</i> _{it} .
EUPH_QA_ANALYST _{jt}	The total number of euphemisms with negative polarity less the total number of euphemisms with positive polarity used by analysts in the Q&A/discussion portion of the conference call. For regression analysis, the variable is normalized between -0.5 and 0.5 , as with $EUPH_{it}$.
EUPH_MGMT _{jt}	The total number of euphemisms with negative polarity less the total number of euphemisms with positive polarity used by managers in both sections of the conference call (introduction and Q&A). For regression analysis, the variable is normalized between -0.5 and 0.5 , as with $EUPH_{it}$.
EUPH_VAR _{jt}	The number of distinct euphemisms in a conference call. For regression analysis, $EUPH_VAR_{ji}$ is normalized between -0.5 and 0.5, as with $EUPH_{ji}$.
CH_EUPH _{jt}	The difference between the $EUPH_{jt}$ in a company's conference call and the mean $EUPH_{jt}$ in the company's conference calls held within the preceding four quarters. For regression analysis, $CH_{-}EUPH_{jt}$ is normalized between -0.5 and 0.5 , as with $EUPH_{it}$.
CH_EUPH_INTRO _{jt}	The difference between the EUPH_INTRO in a company's conference call and the mean EUPH_INTRO in the company's conference calls held within the preceding four quarters. For regression analysis, CH_EUPH_INTRO _{it} is normalized between -0.5 and 0.5, as with EUPH _{it} .
CH_EUPH_QA _{jt}	The difference between the $EUPH_QA_{jt}$ in a company's conference call and the mean $EUPH_QA_{jt}$ in the company's conference calls held within the preceding four quarters. For regression analysis, $CH_EUPH_QA_{jt}$ is normalized between -0.5 and 0.5 , as with $EUPH_{jt}$.
CH_EUPH_QA_MGMT _{jt}	The difference between the $EUPH_QA_MGMT_{jt}$ in a company's conference call and the mean $EUPH_QA_MGMT_{jt}$ in the company's conference calls held within the preceding four quarters. For regression analysis, the variable is normalized between -0.5 and 0.5 , as with $EUPH_{jt}$.
CH_EUPH_QA_ANALYST _{jt}	The difference between the $EUPH_QA_ANALYST_{jt}$ in a company's conference call and the mean $EUPH_QA_ANALYST_{jt}$ in the company's conference calls held within the preceding four quarters. For regression analysis, the variable is normalized between -0.5 and 0.5 , as with $EUPH_{jt}$.
CH_EUPH_VAR _{jt}	The difference between the $EUPH_VAR_{jt}$ in a company's conference call and the mean $EUPH_VAR_{jt}$ in the company's conference calls held within the preceding four quarters. For regression analysis, $CH_EUPH_VAR_{jt}$ is normalized between -0.5 and 0.5, as with $EUPH_{jt}$.

Appendix D. (Continued)

TONE _{jt}	A measure of sentiment based on the number of positive minus the number of negative words in a conference call, scaled by the sum of the positive and the negative words. The list of positive and negative words is based on Loughran and McDonald's dictionary. For regression analysis, $TONE_{jt}$ is normalized between –0.5 and 0.5 by ranking it into deciles (0 to 9) for each fiscal quarter, dividing the rank by 9, and subtracting 0.5.
CH_TONE _{jt}	The difference between the $TONE_{jt}$ in a company's conference call and the mean $TONE_{jt}$ in the company's conference calls held within the preceding 370 calendar days. For regression analysis, CH_TONE_{jt} is normalized between -0.5 and 0.5 by ranking it into deciles (0 to 9) for each fiscal quarter, dividing the rank by 9, and subtracting 0.5.
LENGTH _{it}	The number of words in a conference call.
SUE _{jt}	The difference between the actual earnings reported according to I/B/E/S and the median earnings preliminary estimate during the 90-day window preceding the earnings release, divided by the standard deviation of analyst forecasts during the same 90-day period. For regression analysis, <i>SUE</i> _{jt} is normalized between -0.5 and 0.5 by ranking it into deciles (0 to 9) for each fiscal quarter, dividing the rank by 9, and subtracting 0.5.
EPS_GROWTH_{jt}	Earnings before extraordinary items in the quarter minus the earnings in the same quarter in the previous year, divided by the earnings in the same quarter in the previous year.
RET _{it}	The buy-and-hold monthly returns for three months preceding a conference call.
BM _{it}	Shareholder's equity divided by pre-earnings announcement market value.
FIRM_AGE _{it}	The number of years since a firm was first listed in the CRSP database.
STD_FORECAST _{jt}	The standard deviation of analysts' earnings forecasts for the quarter that are outstanding the day before the quarter's earnings are announced.
STD_EARN _{jt}	The standard deviation of firm earnings scaled by lagged total assets over the last five years, with at least three years of data required.
AF_{jt}	Analyst consensus forecast for one-year-ahead earnings per share divided by the stock price at the fiscal quarter end.
SEG_NUM _{it}	The number of business segments.
SIZE _{jt}	The market value of equity at the fiscal quarter end.
ASSETS _{it}	Total assets at the earnings announcement date.
XRET_PRELIM _{jt}	The buy-and-hold return on a stock minus the average return on a portfolio of stocks matched in size, book-to- market ratio, and momentum in the interval $[-1, +1]$, where day 0 is the conference call date.
XRET_DRIFT _{jt}	The buy-and-hold return on a stock minus the average return on a portfolio of stocks matched in size, book-to- market ratio, and momentum from two days after the conference call date through the subsequent quarter's preliminary earnings announcement.

Endnotes

¹CBS News, "Worst Corporate Euphemism Ever? GM's 'Unallocated' Factories a Contender," November 27, 2018, https://www .cbsnews.com/news/worst-corporate-euphemism-ever-gms-unallocated -factories-a-contender/.

² Researchers show value relevance of verbal cues in the context of earnings press releases (Henry 2008, Demers and Vega 2010, Davis et al. 2012), Forms 10-Q and 10-K (Feldman et al. 2010, Loughran and McDonald 2011), board chairs' letters (Abrahamson and Amir 1996, Smith and Taffler 2000), auditor reports (Uang et al. 2006), and loan agreements (Bozanic et al. 2018).

³ Examples include Bushee et al. (2003), Price et al. (2012), Brockman et al. (2015), Druz et al. (2015), Chen et al. (2016).

⁴Studies explicitly examine the promotional aspect of verbal communication in letters to shareholders (Hildebrandt and Snyder 1981, Rutherford 2005), board chairs' statements (Clatworthy and Jones 2006), 10-K reports (Li 2008, Loughran and McDonald 2011), shareholder meetings (Li and Yermack 2016), and conference calls (Larcker and Zakolyukina 2012, Cohen et al. 2020).

⁵ The Charter Oak Compustat Add-On Database reports preliminary, unrestated, first-reported earnings filed with the SEC. This eliminates the discontinuities that result from subsequent restatements and provides a more accurate picture of what fundamentals the firm disclosed to investors at a particular point in time.

⁶ Although this increase is due partly to the data provider expanding its coverage, it mainly reflects the effects of Regulation Fair Disclosure mandating companies to disseminate publicly any material information disclosed to analysts (Mayew 2008). ⁷ The software was licensed from the vendor through a paid subscription. There are no beneficial agreements between the author and Amenity.

⁸As a robustness check, I reperform tests with a measure of euphemism use that ignores the polarity feature. The results remain qualitatively unchanged.

⁹ Amenity tags each word according to its word class (for example, noun, adjective, verb, or adverb). Like syntax tagging and semantic rows, this feature allows for a more nuanced approach to capturing instances of euphemisms. The word "disconnect" is a good example. Depending on the context, it can be a verb (a call operator saying, "You may now disconnect") or a noun and a euphemism (an analyst noting, "I see a little bit of a disconnect in your explanation"). For the purpose of this study, Amenity was programmed to extract only instances when "disconnect" is a noun.

¹⁰ It is the buy-and-hold return on a security minus the capitalizationweighted average buy-and-hold return on a portfolio of firms with similar size (three groups), book-to-market ratio (three groups), and 11-month momentum (three groups).

¹¹See Appendix D for detailed definitions of the regression variables.

¹² Only the most recent forecast of each analyst is used to calculate the median and standard deviation.

 13 I follow the accepted practice in accounting of scaling textual variables, normalizing euphemism (tone) measures between -0.5 and 0.5 by ranking them into quartiles (deciles) from 0 to 3 (9) by fiscal quarter, dividing the rank by 3 (9), and subtracting 0.5 (Feldman et al. 2010, Lee 2016, Bushee et al. 2018).

¹⁴I follow the method of interpreting economic significance in Lee (2016).

¹⁵ Analysts might be repeating euphemisms used by managers. To ensure that these repetitions are not captured, I calculate an alternative euphemism score that removes a scored euphemism from an analyst's score if it is the same euphemism used by a manager in an immediately preceding remark. The results remain qualitatively unchanged when this alternative score is used.

¹⁶ The Capital IQ database provides earnings call transcripts separately for managers and analysts starting from 2009, reducing the data set for this section of tests.

¹⁷ The summary statistics for the Q&A sections are not tabulated.

¹⁸ Because investors might be following a certain industry and not every firm in the market, as a robustness check, I also calculate a busyness measure that considers how many calls happen in the same industry on the same day. The estimated regression coefficients remain qualitatively similar in sign and significance.

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