

Mergers under the Microscope: Analysing Conference Call Transcripts

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Abstract: About half of all merger deals between public US acquirers and targets involve a conference call within two days of the deal announcement, in order to communicate information to both acquirer and target shareholders to garner voting support and mitigate legal liability. Calls are associated with positive market reactions and a higher likelihood of deal completion. However, for public targets, only the latter result holds after correcting for endogeneity. Using a probabilistic topic modelling approach, we identify 20 highly interpretable topics as prevalent in the presentations and discussions recorded in the transcripts. The relative importance of several of these in a deal transcript is associated with target characteristics (e.g., whether the target is a private or a public firm), the method of payment, and acquirer characteristics (e.g., governance). The importance of several topics is associated with significant abnormal returns on deal announcement, and with deal completion likelihood.

I. Introduction

As one of the most important transactions firms engage in, mergers and acquisitions (M&A) have attracted a great deal of attention in academic research as well as in the financial press and other media. Deal valuation is at the center of M&A discussions. Shareholders need to assess deal quality to prevent managers from pursuing empire-building, and much of the focus in the financial economics literature has been on understanding whether mergers and acquisitions create or destroy value. It is well recognized that information asymmetry creates a fundamental obstacle for outsiders to evaluate a deal, which spurs agency concerns and may compel the management to communicate more information to gain shareholder support and reduce legal risk.

Deal valuation is a complicated exercise for the market. Investors are interested not only in obtaining management's estimates of deal value, but also in forming a comprehensive understanding about how the estimate is generated (i.e., assumptions for the financial forecasts), where deal synergies come from (i.e., why a particular deal presents an "opportunity" or how it fits into broader corporate strategy of the acquirer), whether there are issues that could affect the deal process (i.e., regulatory hurdles, antitrust issues, and the relevant timeframe for deal completion), what factors matter for the post-merger integration (i.e., people and culture, branding and availability of distribution channels for products, operation and production, and technology adoptions), and how the deal is financed (i.e., the debt financing arrangement and the impact on the acquirer's capital structure). To empirical researchers, these issues, to a large extent, are a black box.

In this paper, we address two main questions. First, we examine which issues are more intensively discussed by the management and investors following the announcement of mergers and acquisitions, and how the demand for information is relevant for managers' strategies of disclosing information. Second, we investigate the implications of information communication on deal success, namely, whether it matters for deal completion and market reactions. Answers to these questions could shed light on the multifaceted nature of information exchange in assessing deal value, as well as how external governance and voluntary disclosure interact in alleviating information asymmetry in mergers and acquisitions.

We focus on the conference calls that management may decide to hold following the announcement of a deal. In our sample, 44% of the mergers between two US public firms are associated with a conference call.¹ In these calls, the acquirer management makes a presentation to explain the rationale for the deal and answers questions from call participants, who are mainly analysts representing investment banks and institutional investors. We first investigate how the decision to hold an M&A call

¹ Here only the calls that are scheduled on the same day or on the day after the deal announcement date are considered.

is associated with deal and firm characteristics, as well as the latent motivations to address certain concerns regarding the deal. Second, we provide a granular description of the topics discussed in these calls and how the topic distribution is related to deal characteristics. Third, we associate both the call decision and call contents to deal outcomes, i.e., deal completion and the acquirer's market reactions to deal announcement.

Our analyses are based on the transcripts of 5,565 M&A conference calls obtained from Street Event that could be matched with deals in Security Data Company's (SDC) M&A data. We apply a *probabilistic topic modelling* approach to uncover the themes from the concurrence of words in these call transcripts. Unlike dictionary-based textual analysis, *topic modelling* does not look for specific topics based on a predetermined vocabulary for each topic, but rather lets the algorithm identify topics, which enables us to depict an objective full picture of the issues identified as relevant by the management and investors. We infer the meanings of each thematic group ("topic" hereafter) from the words appearing with the highest frequency under each topic and label them as shown in Table 2. As expected, we find that a central issue in the M&A calls is *financial projection*, such as a deal's impact on earnings per share (EPS). Moreover, investors are interested not only in managers' forecasts but also in a variety of issues which could justify how the estimation is formed and what the sources of synergy are, such as *financial projection assumptions* (e.g., profit margins), *growth*, *business complementarities*, *customer*, *production and operation*, *global location*, *technology*, *deal financing*, and *team, labor, and culture*. Last, widely discussed governance and legal issues include *ownership and control* (e.g., minority shareholder issues, voting rights, bylaws), *deal process* (e.g., the process through which the target/acquirer was found, the timeframe of deal negotiation and completion, regulatory issues), and *contractual issues* (e.g., breakup and termination fees, compensation contracts/ severance pay, other third-party contracts).

We develop our hypotheses in the context of a cost-benefit framework that considers the provision of disclosure through conference calls as well as the governance forces influencing the disclosure decision. Given that conference calls accompany fewer than half of mergers initiated by a public acquirer, there are costs associated with holding a call. Some are straightforward, like the executive team's time needed for preparation and the actual call. Some are asymmetric, such as the cost of exposing the team to unpredictable questions or statements by analysts. Other costs include the costs of disclosure to rivals and regulators, along with the potential that additional detail will become the basis for future litigation.

Weighed against these costs of supplying information are the benefits from such disclosure. Larger, costlier and more complex deals, or deals without clear source of synergy, will need to be "sold" to acquirer's institutional shareholders and target shareholders. In a private deal, the selling shareholders are more likely to have been involved in the negotiations in the first place, but in a public deal,

shareholders are dispersed, and acquirer and target shareholders are both concerned about agency problems with their own management (e.g., Hartzell, Ofek, and Yermack (2004) and Fich, Cai, and Tran (2011)). Governance mechanisms are intertwined with the supply and demand for disclosure: institutional shareholdings indicate both a greater demand for information production and the ability to influence managers to provide it. Independent directors on acquirer boards simultaneously mitigate agency-driven deals and provide a voice for greater disclosure.

We first examine what drives the management's decision to hold calls. We find evidence supporting these tradeoffs; conference calls are significantly more likely to take place for public deals than for private deals, and when the acquirer has greater institutional shareholdings or more analysts following it (another proxy for institutional interest). We further find that likelihood of a conference call is increasing in the percentage of independent directors on the acquirer board.

The decision to hold a call also depends on whether the acquirer has held calls in the past; those who have done so are associated with a significantly higher likelihood of holding a call for subsequent deals. This suggests that unobservable acquirer characteristics—e.g., attitudes of top management teams about whether calls in general satisfy the cost/benefit tradeoff—may have a major influence in the decision to hold calls.² We find that including acquirers' call history as an explanatory variable triples the statistical fitness for the regression addressing the call decision, suggesting it is a strong predictor of the tendency to hold calls. However, such a history is unlikely to be directly related to the quality of a current deal, and thus we use it as an instrumental variable in the rest of our analysis.

In addition to studying the decision to disclose information through a conference call, we also study the type of information disclosed and the type of information demanded by outsiders. We can observe both because of the presentation / Q&A format of the calls. Call content can vary dramatically from the private to public deals. For private targets, the most important information will be that which supports the valuation agreed to by the acquirer. On the other hand, public targets have dispersed shareholders whose concerns about the deal's motivations and negotiation process must be addressed in order to avoid shareholder hold-outs and to reduce the risk of shareholder lawsuits. We test how the proportion of each topic in the presentation and Q&A segment of calls is associated with deal characteristics in a Heckman model (Heckman (1979)), and we include the Inverse Mills Ratio (IMR) from the selection equation as a control variable.³ We find confirming evidence that public deals are associated with a higher weight on the topics of *business complementarities*, *deal process*, and *team*,

² Another (non-mutually exclusive) explanation is that once a firm has a history of holding a call, deviating from this "norm" is taken as a negative signal about the current deal.

³ In the first-stage selection equation, we control for deal and acquirer characteristics, as well as the acquirer's call history as the instrument variable.

labor and culture, while private deals tend to focus more on *financial projection assumptions, growth, customer, technology, and ownership and control*.

We also focus on the coefficients of IMR in these regressions of topic weights, which could shed light on whether the manager's latent motivation to hold a call is related to demand for certain types of information by analysts and a more extensive discussion on certain issues.⁴ We first find that IMR is significant and positive for *deal process* and *contractual issues* in the Q&A segment. Since *deal process* covers deal negotiation issues and questions intended to ensure that the target is being sold to the highest potential bidder, the proportion of Q&A segment dedicated to this topic likely reflects investors' governance concerns.⁵ The positive sign on IMR in the regression of *deal process* suggests that addressing investors' governance concerns is an important motivation for managers to hold conference calls. The positive sign on IMR for *contractual issues*, on the other hand, suggests that managers' anticipation of the demand for information on legal issues also drives their decision on holding calls. In contrast, IMR is not significantly related to any of the topic weights for the presentation section, suggesting that these latent motivations relate to concerns that are best addressed in the Q&A segment rather than explicitly brought up in the presentation segment.

We next examine the impact on deal completion of both the call decision and call content. We first find that calls are associated with a higher likelihood of deal completion, and this effect remains significant after we instrument the indicator of holding calls with the acquirers' past call history. This evidence suggests that more information dissemination elicits more shareholder support for the deal. Moreover, the impact on deal completion for public deals is three to four times as large as the corresponding effect for private deals, consistent with our argument that conference calls are an important forum for communicating with dispersed investors. Last, we find that more discussion of *deal process* is associated with significantly lower deal completion, confirming that this topic reflects concerns rather than merits of the deal.

Our final set of exercises investigate market reactions to deals/calls as a function of the decision to hold calls, as well as the length of discussion on topics in the conference calls. We first find that there is a significant positive association between the abnormal market reaction (Cumulative Abnormal returns, henceforth *CAR*) of the acquirer around deal announcement and the indicator of having a conference call on the day of or one day after the announcement date. The positive association is not

⁴ Since IMR is the residual term from the first-stage selection equation, it can be interpreted as the updated estimate of the decision makers' private information behind their selection choice, conditional on observing that choice (see Li and Prabhala (2007)). The fact that IMR is significant and positive suggests that such private information is also related to the dependent variable in the second-stage equation. In other words, the selection choice could be driven by some unobservable factors that also affect the second-stage outcome variable.

⁵ This topic also covers discussions on the deal completion procedure, such as shareholder approval or other approvals from regulators. Questions about shareholder voting procedure may also reflect investors' concern about shareholder approval.

significant when the indicator is instrumented by the acquirer's call history. These findings suggest a strong signaling role of calls: managers are more willing to showcase deals that they expect to generate favorable market reactions, while an exogenous decision to hold calls is not always associated with good news released to the market. However, when we examine separately deals involving private and public targets, we find that for the former, there is a significant and positive market reaction even in the Instrumental Variable (IV) setting. This is consistent with calls mitigating information risk associated with private acquisitions.⁶

Last, we examine the impact of call content on the acquirer's market reactions around deal announcement. Before discussing our findings, we make a distinction between three types of topics that are classified based on the correlations of their weights in the presentation and Q&A segments as well as their relative prevalence in two segments. The first type of topic appears mainly in the presentation segment, and as such is information that acquirer management chooses to supply. They are *business complementarities*, which is likely to be part of the CEO's presentation about deal rationales, and *financial projection outcomes*, which would be the CFO's presentation of the financial impact of the deal. The second type of topic predominantly shows up in the Q&A segment, representing information demand unmet by the presentation section. They are *financial projection assumptions*, *growth*, *deal process*, and *general comments*. These topics reflect the issues analysts care about for deals in general – the financial details for improving their own forecasts and *deal process* in order to form an expectation about the timeframe of deal completion. The third type includes topics with high correlation of the weights in the two segments – *customer*, *technology*, *ownership and control*, *deal financing*, *global location*, *production and operation*, *contract*, and *team labor and culture*. These topics are likely to be deal-specific, namely, when they are important for certain deals, they are discussed to a larger extent in both the presentation and Q&A segments.

We find that the market reactions around deal announcement are more significantly related to the third type of topics that are balanced across two segments and likely to be deal-specific. In particular, the *technology*, *team labor and culture*, *deal financing*, and *global location* topics are significantly related to returns. This is both interesting and a validation of our approach: deal-specific topics that receive attention both in the management's presentation and from questioners are the issues most informative about deal value and should be the ones related to returns, which is what we find. Further, as these issues are impossible to discern from standard datasets, our approach adds value here.

⁶ Garleanu and Pedersen (2003) and Lambert, Leuz, and Verrecchia (2007) demonstrate the conditions under which information risks increase the required returns and costs of capital. Moreover, an extensive body of voluntary disclosure literature suggests that corporate disclosure, by reducing information asymmetry, reduces the cost of capital faced by the firm and increases stock liquidity. (e.g. Leuz and Verrecchia (2000), Balakrishnan, Billings, Kelly, and Ljungqvist (2014)).

As there are many other channels for information disclosure around deal announcement, one may wonder whether these results could reflect reverse causality – that the topics raised in the M&A calls may well be in response to particular types of market reaction to the deal announcement. To understand to what extent our results should be attributed to such an explanation, we conduct further analysis on a subset of calls scheduled on the day following deal announcement. We first find that the relative weights on most topics are generally not sensitive to the pre-call market reactions to deal announcement (CAR [-1, 0]). Controlling for the pre-call market reaction, we find that the post-call market reactions (i.e. CAR [+2, +5]) remain significantly associated with the length of *technology* and *team labor and culture*. Notably, we find the coefficient on *financial projection outcomes* shows a significant and positive impact on the acquirer’s post-call abnormal returns after we have controlled for the pre-call returns. This is consistent with the hypothesis that M&A conference calls reveal additional information and/or allow management to resolve critical questions about financial forecasts.

We make several contributions to the M&A literature. First, we provide new evidence on the occurrence of and motivation for M&A conference calls held after deal announcements. Kimbrough and Louis (2011) study the market reactions to deal announcement and focus on the signaling role of M&A calls as one of the voluntary disclosure mechanisms. We relate call decisions to the need to communicate information to target and acquirer shareholders on specific features of the deals, as well as to acquirer and target characteristics. Relating the decision to hold a conference call to firm characteristics such as governance structure, and to deal characteristics such as whether the target is private or public, separates our study from those of earnings conference calls which are routine for all listed companies.⁷

As far as we know, we are the first to conduct a large-sample examination of what is presented and discussed in the M&A calls. Kimbrough and Louis (2011) provide a description of call contents based on 20 transcripts that are read manually. Hu, Shohfi, and Wang (2018) focus on several aspects of M&A calls, including the presence of executives, the sentiment of call content, and how quantitative the discussions are, and associate these aspects with the market reactions to deal announcement. Our paper examines the transcripts of more than 5,000 M&A conference calls by applying a powerful machine learning technique. We are able to assess which deal features, reflected by the issues extensively discussed in the M&A calls, affect deal outcomes such as completion likelihood and market reaction to deal and call announcements.

Our analysis extracts and quantifies significant “soft” information from the conference call transcripts that are relevant for deals but is not available in standard databases. We demonstrate an

⁷ The earnings conference call literature establishes that holding calls mitigates information asymmetry, which is reflected in a reduction of analyst forecast errors and dispersions (Bowen, Davis, and Matsumoto 2002) and an attenuation of the post-earnings announcement drifts (Kimbrough 2005). For an application of the *topic modelling* approach to earnings conference calls and analyst reports, see Huang et al. (2018).

application of machine learning through *probabilistic topic modelling* that significantly expands the set of information available to the empiricist studying mergers. While *probabilistic topic modelling* has been applied in finance and economic literature, (Huang, Lehavy, Zang, and Zheng (2018), Hansen, McMahon, and Prat (2018), Fedyk and Hodson (2019), Matthias, Matthias, and Jan (2019), and Lowry, Michaely, and Volkova (2020)), our paper is the first to apply the methodology in the M&A context. The *structured topic modelling* (STM) method that we apply accommodates rich information from the metadata—in our case, the acquirer’s industry. This enables us to address the fact that some issues in M&A can be expressed by terminologies that vary dramatically across industries. Although a plain version of *topic modelling*, such as LDA, would potentially classify such terminologies into multiple topics, as a recognition of the diversified industry terminologies, STM would cluster those in one topic, which significantly improves the interpretability of the model outputs.

The rest of the paper is organized as follows. Section 2 discusses the data and sample. Section 3 illustrates the topic modelling methodology used in this paper and the model output. Section 4 presents our empirical analysis of the decision to hold M&A conference calls, how call contents are related to acquirer and target characteristics, and the impact of call decision and content on deal outcomes (i.e., market reactions and deal completion). Finally, Section 5 presents some concluding observations.

II. Data and Sample

We obtain the transcripts of M&A conference calls from StreetEvents, a data vendor that collects conference call transcripts. The sample spans the period from 2003 to 2017. We match the call transcripts with M&A deals in SDC using a fuzzy matching process based on the titles of the calls. We further manually validate the matching by cross-checking the call transcripts and the deal synopses. There are 5,565 unique calls that can be matched with a merger deal in SDC. Among the matched calls, 87% are scheduled on the same day of the deal announcement or the following day. Such calls are likely to be prescheduled and announced at the press release announcing the deal. We refer to these as “scheduled calls” hereafter, while the calls held two days after the deal announcement or later are classified as “unscheduled calls.”⁸ In our sample, 91% of calls are hosted by the acquirers, while the other 9% are held by the target firms.⁹ An overview of the matched calls is presented in Panel A of Table 1. We estimate the *topic model* using these 5,565 matched calls, details of which are discussed in the next section.

After obtaining the outputs from *topic modelling*, we further restrict our focus on the deals that are made by a US public acquirer. This is because a majority of our sample comprises acquirer-initiated

⁸ We have dropped the calls held later than 90 days after deal announcement, since such calls are likely to be mismatched with the deal.

⁹ Although most calls are hosted by the acquirer, it is common for the managers of the target firm to attend a conference call hosted by the acquirer firm, and vice versa.

calls, and we need information on stock prices and other financial variables of the acquirer to understand the motives behind holding calls and how call content and deal outcomes are related to acquirer characteristics. We also require that (1) the acquirer holds less than 50% of target company shares before the deal, (2) the acquirer seeks to own 100% shares after the deal, (3) transaction value is higher than 1 million US dollars, (4) acquirer can be matched with a stock in CRSP, and (5) the deal is not done between a financial acquirer and nonfinancial target. From SDC we obtain 14,332 M&A deals that satisfy these requirements and are announced between 2004 and 2016.¹⁰ There are 2,559 (17.86%) deals among these that can be matched with M&A conference calls. As shown in Panel B of Table 1, 2,273 (89%) of the 2,559 deals are associated only with scheduled calls, while the remaining 286 (11%) are associated with unscheduled calls. We find that 2,438 (95%) of the 2,559 deals are associated only with calls hosted by the acquirer, and the other 121 (5%) deals are associated with calls hosted by the target. In our regression analysis, we will consider only the first scheduled call hosted by the acquirer, which accounts for over 84% of all the matched calls in this sample.

In Panel C of Table 1, we provide an overview of the sample regarding the proportion of deals associated with calls. We split the sample according to public/private status and the location of the target. The probability of holding calls is as high as 44.2% for deals between two US public firms. We find that the likelihood of holding calls is significantly higher for public deals than for private deals. However, since private deals account for 85% of our sample, we end up with 1,611 private target deals associated with calls in contrast to 948 public target deals associated with calls. Among the public deals, deals involving US targets are more likely to hold calls than those involving foreign targets. In Figure 1, we plot the number of deals announced each year, and the propensity for these deals to be associated with a conference call. We find the propensity to hold calls exhibits a counter-cyclical pattern. While the period from 2008 to 2011 witnessed a lower number of deals, the propensity of holding calls is higher relative to the other years. This suggests that firms tend to provide more information by holding calls when the market faces higher uncertainty and could be more suspicious about deal values.

III. Topic Modelling

To retrieve the contents of M&A calls and analyze call transcripts into interpretable thematic groups, we apply a *probabilistic topic modelling* approach, which is a set of recently developed machine learning techniques that has been widely applied in the finance and economics literature (e.g., Huang et al. (2017), Hansen et al. (2018), Fedyk and Hodson (2019), Matthias et al. (2019), and Lowry et al. (2020)). *Topic modelling*, a type of unsupervised machine learning, does not rely on predetermined keywords to search for specific topics, but rather uncovers thematic structures and discriminates topics

¹⁰ We first obtain 16,781 deals announced between 2003 and 2016. In our regression analysis, the acquirer's history on call decisions is an important variable. Thus, we have dropped the deals in 2003 from our analysis and only use them to construct the variable of acquirer's call history.

based on how words are distributed in the documents. This feature enables us to objectively depict a full picture of what issues are discussed by the management and investors in these M&A calls.

Topic modelling assumes that data (specifically, a set of documents consisting of words) is generated via a random process. A topic is defined as a distribution over words. Each document is assumed to contain a certain number of topics in different proportions that can be represented by a per-document distribution over topics. Each word in a document is assumed to be generated by first choosing a topic at random according to the per-document distribution over topics, and then choosing a word from the distribution over words in a topic. While the documents themselves are observed, the thematic structure (i.e., topics and the per-document distribution over topics) is hidden. *Topic modelling* does a “reverse engineering” and infers the hidden structure in a set of documents. The algorithm of a *topic model* produces a probabilistic distribution over words for each identified topic (referred to as “word vector of the topic” or “topic content” hereafter) and a probabilistic distribution over topics for each document (referred to as “topic distribution” or “topic prevalence” hereafter). It is up to the researcher to interpret and assign labels for the identified topics, usually based on the words that are distinctive across topics.

1. Structural Topic Model

We adopt a recent variant of *structural topic model* (STM) developed by Roberts, Stewart, and Airoldi (2016), which is in the same spirit as the *latent Dirichlet Allocation* or LDA (Blei, Ng, and Jordan (2003)) but accommodates more flexibility in the data generating process. Specifically, STM allows both the *topic contents* and *topic prevalence* to be a function of certain covariates obtained from metadata,¹¹ which in our application are the industries that the acquirers belong to. This approach is analogous to assuming industry fixed effects in the data-generating process, which emulates the fact that some issues in the context of M&A could be expressed by industry-varying terminologies. For example, production and operation, as an important issue for post-merger integration, is likely to be described by terms like “capacity,” “facility,” and “utilization” in a manufacturing industry, but by other terms like “business,” “retail,” and “shipment” in a transportation industry. Although a plain version of the *topic model*, such as LDA, would potentially classify such terminologies into multiple topics, STM could cluster them as one topic that is associated with multiple word vectors for each covariate. The output of STM includes the probabilistic distributions over words for each pair of topic and covariate,¹²

¹¹ STM assumes that the per-document distribution over topics is drawn from a logistic normal distribution with a mean vector parameterized as a function of the covariates. For *topic contents*, the idea of STM is to parameterize the distribution over words as a function of topics, of observed covariates, and of topic-covariate interactions, which effectively allows the word distributions to vary across covariates within each topic. STM is essentially a hierarchical mixed membership model.

¹² Under STM, a topic is represented by a matrix of C by V dimensions, where C is the number of covariates and V is the number of unique terms. This is different from LDA, in which topic is represented by a vector over terms (of V dimension) independent of covariates.

and the word vector for each topic can be aggregated across covariates. Such a feature of STM could significantly improve the interpretability of model outputs.

2. Model Estimation

We define a document, the basic unit of *topic model*, as one paragraph in the presentation or one pair of questions and answers in the Q&A segment. The former usually captures one speech made by the management, and the latter captures the combination of a question raised by the analysts and the corresponding answer given by managers. In our matched transcripts, there are 23,633 paragraphs of presentation and 163,394 Q&A pairs.

Before estimation, we preprocess the raw text data following a standard procedure in Natural Language Processing. Specifically, we first drop the stop words and punctuation marks via Stemming and Lemmatization. Further, we count the number of documents in which each unique term appears, and exclude the terms that have appeared in too few documents, since such terms are likely to be names, trademarks, or other jargon that are unhelpful with theme discovery in *topic models*. In determining the dropping threshold, we balance the computational efficiency and preservation of information. In Appendix Figure 1, we plot the number of dropped documents, unique terms, and the number of words corresponding to different thresholds. We eventually choose to set the threshold at 50 and drop the terms that have appeared in less than 50 documents, which excludes 70,660 terms and 262 documents from our sample. In the end, there are 7,916 unique words and 186,765 documents (23,543 paragraphs from presentation and 163,222 from Q&A) as the inputs for model estimation.

The estimation of a *topic model* could be regarded as a process of dimension reduction. The original data is essentially a document-word matrix. In our sample, this matrix is of 186,765 by 7916 dimensions. The output of the *topic model* involves a document-topic matrix. Thus, *topic modelling* reduces the dimensionality for each document from the number of unique terms to the number of topics.

The number of topics is an important choice for *topic models*, since it determines the dimensionality of the latent space. As pointed out by Hansen et al. (2018), choosing the appropriate number of topics remains an unresolved issue in unsupervised learning. Chang, Gerrish, Wang, Boyd-Graber, and Blei (2009) suggest that there is a typical trade-off between the interpretability of model outcomes and statistical goodness-of-fit. While interpretability usually favors a low number of topics, statistical fitness in general favors a high number. Since the purpose of our application is to generate interpretable topic clusters, instead of predicting topics out of sample, we choose the number of topics based on the most meaningful topic clustering. We try from 15 to 25 topics, and eventually find that 20 topics perform the best in terms of interpretability. As pointed out by Blei (2012), interpretability should be a legitimate reason for choosing the number of topics that is different from what performs best in terms of fitness.

3. Model Outputs

We estimate the *structural topic model* under the assumption of 20 latent topics, allowing *topic content* and *topic prevalence* to vary across 10 industries measured by the acquirer's one-digit SIC code.¹³ From the model, we obtain two sets of outputs: the word vectors for each identified topic and the topic distribution for each document.

We first discuss the word vectors. The model produces 10 word-vectors for each of the 20 topics (one for each industry for each topic). As shown by Roberts et al. (2016), each word-vector for topic t and industry c , denoted as $\beta_{c,t}$, could be represented as a function of three components, κ_t for a base topic t that is shared across all the topics, κ_c for an industry c that is shared across all the industries, and $\kappa_{c,t}$ that captures the interaction between the topic and industry.

To understand the meaning of each topic, we first focus on the base topic contents, κ_t . We are particularly interested in the terms that are important in distinguishing the topics, as well as the terms that are the most frequently used in each topic. First, we follow Roberts et al. (2016) to construct the FREX index that measures the relative distinctiveness of words for each topic. FREX reflects not only the rank of a word's frequency within a topic, but also how exclusive a word is to a certain topic.¹⁴ We also construct two other measures to capture the popularity of words in each topic, which are the Kappa index in Roberts et al. (2016) and the "word probability".¹⁵ While the word probability captures the overall frequency of a word's occurrence in certain topic, the Kappa index reflects a word's relative frequency in certain topic benchmarked to its frequency in all the documents. In Table 2, we report the words with high values on the three measures. We infer the economic meanings of each topic based on these distinctive terms and report the labels we manually assign in Table 2. We also carefully read the original documents with high weights on each topic to get a better sense of what the topic is about. We show representative documents for each topic in Appendix B.

¹³ We consider 10 industries classified as follow. Agriculture, Forestry and Fishing with SIC from 0100-0999; Mining with SIC from 1000-1499; Construction with SIC from 1500-1799; Manufacturing with SIC from 2000-3999; Transportation, Communications, Electric, Gas and Sanitary service with SIC from 4000-4999; Wholesale Trade with SIC from 5000-5199; Retail Trade with SIC from 5200-5999; Finance, Insurance and Real Estate with SIC from 6000-6799; Services with SIC from 7000-8999, and Public Administration with SIC from 9100-9729.

¹⁴ FREX is obtained by taking the harmonic mean of rank by probability within the topic (frequency) and rank by distribution of topic for a given word (exclusivity) for each term. Specifically, we calculate the FREX vector over V terms, for each covariate within each topic. (See details in Bischof and Airolidi (2012) and Roberts et al. (2016).) To measure the FREX index for the base topic, we take the weighted average FREX across 10 industries within each topic, using the number of documents in each industry as the weights.

¹⁵ The Kappa index is $\kappa^{(t)}$ in Roberts et al. (2016), which is a K -by- V matrix containing the log-transformed rate deviation for each topic k and term v over the baseline log-transformed rate for term v . Word probability is the estimated probability for each word to show up in certain topic and covariate, which maps into $\beta_{d,k,v}$ in Roberts et al. (2016). Here to gauge the word probability for the base topic, we take the weighted average across 10 industries within each topic, using the number of documents in each industry as the weights.

From Table 2, we find that financial issues are extensively discussed in the M&A conference calls. The model identifies four topics related to the financial aspects of deals, including *financial projection outcomes*, *financial projection assumptions*, *deal financing*, and *growth*. Since the model learns topics from the concurrence of words, and the *outcomes* (e.g., EPS forecasts) and *assumptions* (e.g. profit margins assumed for the forecasts) of *financial projections* are likely to involve a different set of words, the algorithm has clustered them as two different topics. Moreover, the model uncovers a variety of topics focusing on deal details, such as *business complementarities*, *customer*, *production and operation*, *global location*, *technology*, and *team labor and culture*. These topics are likely to involve “soft” information on the sources of deal synergy that could be used to validate the credibility of the financial projections provided by the management. Also, there is a group of topics regarding the legal and governance aspects of deals, such as *ownership and control* (e.g., minority shareholder issues, voting rights, bylaws), *deal process* (e.g., the process through which the target/acquirer was found, the timeframe of deal negotiation and completion, regulatory issues), and *contractual issues* (e.g., breakup and termination fees, compensation contracts/severance pay, other third-party contracts). Last, there are also several topics involving opening remarks, conjunctions, and names. We exclude such topics from our analysis as they are unlikely to reveal any economically interesting issues.¹⁶

To assess model performance, we examine how the estimated word vectors (*topic contents*) vary across covariates, which is determined by κ_c and $\kappa_{c,t}$. Intuitively, issues involving terminologies, such as production and technology, are likely to present dispersed *topic contents* across industries, while the universal issues, such as disclaimer and general comments, are unlikely to show cross-industry variations in their word vectors. We first take the topic of *production and operation* as an example and plot the word clouds for each industry as shown in Figure 2. The size of each term is approximately proportional to its estimated probability. As observed, the model outcome presents a great deal of cross-industry variation in the phrases used to describe *production and operation*. To further understand the degree to which the contents of each topic vary across industries, we construct a cosine similarity score. Specifically, we first aggregate a base word vector for each topic t from the industry word vector, $\beta_{c,t}$, associated with it by taking the weighted average (using the number of documents in each industry as the weights, denoted as β_t). We then calculate the cosine similarity between β_t and $\beta_{c,t}$ before taking an average within each topic, $\cos_t = \frac{1}{10} \sum_{c=1}^{10} \cos(\beta_t, \beta_{c,t})$. A higher \cos_t indicates a lower dispersion in the contents of the topic t across industries. We report this measure in Table 2. Consistent with intuition, there are low vocabulary dispersions for the universal topics like *opening remarks*, *disclaimer*, and *general comments*, but high dispersions for the topics involving industry terminologies, such as *production and operation*, *customer*, and *technology*.

¹⁶ We drop the topic 2, 9, 10, 15, and 20 in Table 2. These topics all have small weights and in total weight less than 10% of a conference call on average.

The other model output that we are particularly interested in is the probabilistic weights on topics of each document: $\{w_d^t\}_{t \in \{1,2,\dots,20\}}$. w_d^t could be regarded as the likelihood that document d is focused on the topic t , or the proportion of words in the document d that are devoted to the topic t . We first assess the fitness of the model by examining each document's estimated (cumulative) probabilities on the topic(s) with the highest likelihood(s). As shown in Table A1 of the Appendix, we find that documents in our sample on average have a probability of 0.39 on the topic with the highest estimated likelihood, and a total probability of 0.77 on the three most likely topics. Next, we examine the extent to which each topic presents a cross-industry variation in its prevalence. We calculate the standard deviations¹⁷ for the industry-average weights on each topic, which are reported in Table 2. We expect the standard deviation to be greater for the issues that are more relevant for certain industries than for the others, and smaller for the topics that are equally important for any industry. Consistently, we find in Table 2 that standard deviation is much larger for the topics like *technology*, *customer*, and *team labor and culture* than for the topics like *business complementarities*, *deal financing*, and *disclaimer*.¹⁸

3. Empirical Measures

For each call, we construct the “topic weights” by aggregating the probabilistic weights w_d^t across the documents within each call, denoted with i , and each segment (presentation/ Q&A), denoted with j . We take a weighted average for each topic $t \in \{1,2, \dots, 20\}$ as follow.

$$\bar{w}_{i,j}^t = (\sum_{d \in D_{i,j}} w_d^t \cdot n_d) / (\sum_{d \in D_{i,j}} n_d)$$

where $D_{i,j}$ denotes the set of documents associated with call i and segment j and n_d denotes the number of words in document d .¹⁹ These aggregated topic weight, $\bar{w}_{i,j}^t$, reflect the proportion of presentation or conversation that is devoted to topic t in call i and segment j .²⁰ We report the mean and standard deviations of these topic weights in Table 3. We notice that many topics have an unbalanced distribution across segments. For example, *disclaimers* mainly show up in the presentation segment, while *general comments* are mainly used in the Q&A segment. On the other hand, some topics have a relatively balanced distribution, such as *technology*, *production and operation*, and *global location*. These topics are more likely to be deal-specific issues, i.e., when they are relevant for certain deals, they are discussed to a larger extent in both the presentation and Q&A segments.

¹⁷ We measure the weighted standard deviations, using the number of documents in each covariate as the weights.

¹⁸ Managers invariably mention synergies related to business complementarities, which probably explains why there is not much cross-industry variation in the weight of *business complementarities*.

¹⁹ The number of words measures the length of each document. We take the average weighted by document length, since the long documents presumably discuss more economically meaningful issues, while the short paragraphs are usually the openings, conjectures, and closures.

²⁰ We aggregate within each segment of a call instead of within a call pooling two segments, since this avoids putting unfairly large weights on the presentation paragraphs, which are usually much longer than the Q&A pairs.

We classify topics into three groups to distinguish the segment-specific topics from the deal-specific ones. To measure the extent to which each topic is unbalanced/balanced across segments, we calculate a ratio between a topic's weight in the Q&A segment and that in the presentation segment ("weight ratio" hereafter), as well as the correlation coefficient for each topic's weights in two segments ("segment correlation" hereafter). Based on these two measures, we classify topics into three groups. The first group contains three topics that are predominantly discussed in the presentation segment (with the segment correlation relatively low and weight ratio smaller than one). These topics are *business complementarity*, *disclaimer*, and *financial outcome projections*. From reading the original documents, we find that *business complementarity* is usually discussed by the CEO as part of the introduction of the deal, and *financial outcome projections* are usually from the CFO's presentation on the deal's financial impact. The second group consists of four topics that mainly appear in the Q&A segment (with the segment correlation relatively low and weight ratio larger than one). They are *general comments*, *financial projection assumptions*, *growth*, and *deal process*. These topics reflect the issues that are typically identified by the analysts in any M&A call—analysts are interested in financial details that are relevant for financial forecasts, as well as deal process issues, possibly to form an expectation on the timeframe for deal completion. The third group contains the topics with a relatively high cross-segment correlation, including *customer*, *technology*, *ownership and control*, *deal financing*, *global location*, *production and operation*, *contractual issues*, and *team labor and culture*. These topics are likely to capture deal-specific issues.

In addition to topic weights, we also construct a measure of "topic length" to capture the volume of discussion on each topic. Topic length is calculated by multiplying the "topic weight" by the number of words in the corresponding segment and call. A natural logarithm transformation is further taken to underweight the impact of skewness.

$$\bar{l}_{i,j}^t = \ln\left(\sum_{d \in D_{i,j}} w_d^t \cdot n_d\right)$$

We will use topic length to study deal outcomes such as market reactions and the likelihood of deal completion, as the volume of discussions is likely to be relevant for the analysis of these outcomes.

IV. Empirical Analysis

In this section, we aim to understand the determinants of firms' decisions to hold M&A conference calls, how the contents of calls are associated with deal characteristics, and how deal outcomes are affected by call decisions and call contents.

1. M&A Call Decisions

We examine how the decision to hold calls, conditional on doing the M&A deal, is associated with deal and firm characteristics. A conference call should be more likely to take place when there is more demand for information on deal rationales and the sources of synergy. The information demand from both sides (both the acquirer and target shareholders) has to be addressed for deal success and should drive the decision to hold a call. Conference calls provide a public forum that supports interactive information exchange, which is particularly efficient for communicating information with more dispersed investors, and unlike filings and press releases uniquely provides a forum for investors to demand specific information. Thus, we expect the public status of merging companies to be an important factor for the decision to hold M&A calls, given that public firms have a more dispersed ownership structure and potentially more agency concerns than private firms. Second, when a larger proportion of the payment is made in stock, an M&A call is more likely to take place, since the shareholders of both sides would retain shares in the combined firm and thus there is a higher demand for information on ownership splits, sources of synergy, and valuation of the acquirer's stock. Finally, greater external monitoring, represented by institutional holdings and analyst following, increases both the demand for more information and has the potential to influence managers to provide it.

In Table 4, we regress an indicator of holding M&A calls²¹ on the target firm's public status, method of payment, deal size, and acquirer's characteristics. In the first two columns, we examine the sample of all deals made by US public acquirers and find supporting evidence for the arguments above. We find that there is a significantly higher likelihood of holding calls when the target is a public firm, a larger fraction of deal payment is made in stock, institutional investors are more important for the acquirer, and the acquirer is followed by a larger number of security analysts. We also find that calls are more likely to take place when both firms are from the same industry, the deal is large relative to the acquirer's market capitalization, the acquirer has a lower leverage before the deal announcement, the acquirer has a higher ROA and R&D expenses in the past, and the acquirer's board has a larger proportion of independent directors. The last coefficient possibly reflects that independent directors face more legal and reputational concerns, and thus are following a more transparent disclosure policy. The positive coefficient on deal size is expected given the potential for value creation or destruction is greater and larger deals are more likely to have complicated structures and legal issues, requiring more explanation to the market.

In addition to the demand for information, call decisions could also be affected by the acquirer's past decisions of holding calls. Management may have a fixed attitude on whether conference calls are an efficient channel for information disclosure in M&As. We measure the acquirer's past call decisions by constructing two indicator variables. The first indicator takes a value of 1 if the acquirer held a call for any past deal, and the other indicator equals 1 if the acquirer did not hold a call, conditional on

²¹ Here we only consider the scheduled calls hosted by the acquirer. Such calls (associated with 2,161 deals) account for 84.4% of all the matched calls as observed in Table 1.

having done a deal in the past. If the acquirer has never made acquisitions since 2003, both indicators take the value of 0.²² In the third and fourth columns of Table 4, we include both indicators in the regression of call decisions, and find that the first indicator is significantly positive and the second one is significantly negative. Moreover, including these indicators more than doubles the R-square in the first two columns, which suggests that the acquirer's fixed tendency of holding calls has strong explanatory power for call decisions. Since such a tendency is unlikely to be directly related to the fundamentals of a current deal, we will use these indicators as the instrumental variables for our analyses of call contents and deal outcomes in the next subsections.

In the last two columns of Table 4, we further include the target's characteristics and governance measures, restricting our attention to the subsample of deals involving two US public firms. We find that the target's institutional ownership and analyst coverage have an even stronger positive impact on the acquirer's decision to hold calls. This is consistent with our argument that communicating with the target shareholders, as well as their analysts, could be an important reason for holding calls.

2. M&A Call Content

In this subsection, we examine how the contents of M&A calls are determined by the demand for information on different aspects of a deal. The set of fundamental issues is likely different for the deals involving different types of targets or methods of payment. For example, a private target, having no prior disclosures, will attract more questions regarding the target's valuation in an M&A call, while a public target with more agency concerns would be associated with more discussion of governance and legal issues.

We test how topic weights in each segment of M&A calls are related to deal and firm characteristics under the framework of the Heckman selection model, since call contents are only observable among the deals for which a call has taken place. The selection issue is formalized as follows.

$$\omega_i = X_i \cdot \beta_1 + Z_i \cdot \gamma + \eta_i$$

$$Choice_i = \begin{cases} Call, & \text{if } \omega_i > 0 \\ NoCall, & \text{if } \omega_i \leq 0 \end{cases}$$

$$T_i = X_i \cdot \beta_2 + \varepsilon_i, \text{ when } Choice_i = Call$$

Here, ω_i represents the latent benefit of holding an M&A call, conditional on doing the deal i , and T_i refers to the topic weights estimated from the *topic model*, which is only observed when a conference call is associated with the deal. X_i refers to the deal, acquirer and target characteristics of interest. Z_i captures the acquirer's history of call decisions, which affects the decision to hold calls but is unlikely

²² We truncate call history at the year 2003, since we do not have data on M&A calls before that year. If the acquirer has made multiple deals in the past, some with calls and some without calls, both indicators would equal 1.

to be directly related to the current deal's fundamentals. Thus, we include Z_i in the first-stage selection equation as the instrument variable but not in the second-stage regressions of topic weights. Following Heckman (1979), we estimate the second-stage regressions controlling for the Inverse Mills Ratio, $\lambda_{call} = E(\eta_i | \omega_i > 0)$ obtained from the first-stage equation as below.

$$E(T_i | Call) = X_i \cdot \beta_2 + \pi \cdot \lambda_{call}$$

The Inverse Mills Ratio can be regarded as the managers' private information on the latent benefit of holding calls which cannot be explained by observables. The coefficient of π tells us whether the latent benefit of holding calls is correlated with a more extensive discussion of certain topics. A positive and significant coefficient of π reflects that communicating certain topics is part of the latent reasons for holding calls.

The regression results are reported in Table 5. First, we find that public deals are associated with a higher weight on the topics of *business complementarities*, *deal process*, and *team labor and culture*, while private deals have more discussion of *financial projection assumptions*, *growth*, *customer*, *technology*, and *ownership and control*. This is consistent with our expectation that private deals demand more valuation-relevant information, while public deals require more explanations about 1) the process of deal negotiation and completion, 2) motivations of the merger, and 3) the integration issues along the dimension of *team labor and culture*. In Figure 3, we present the visual evidence on the relative importance of different topics across private and public deals in the presentation and Q&A segments. Although the two segments present different distributions over topics, the topics get emphasised more (or less) in public deals as opposed to in private deals are generally similar across segments. This is consistent with the regression results in Table 5.

Second, we find that a larger fraction of payment in stock is associated with more focus on the topics of *financial projection outcomes*, *deal financing*, *deal process*, *ownership and control*, and *business complementarities*. As the target shareholders would retain stakes in the combined firm after a stock-financed deal, there should be a higher demand for information regarding ownership splits, as well as the motivation of a deal. Also, when share issuance exceeds 20% of the acquirer's shares outstanding, shareholder approval is required for deal completion (Li, Liu, and Wu (2018)), which could make the deal completion process a nontrivial issue. Another important issue is the concern about the EPS impact of a stock-financed deal (Dasgupta, Harford, and Ma (2020)), which could induce more discussions on the outcomes of financial projections and the financial arrangements.²³

²³ In Appendix Table A2, we show that the probability of holding a conference call is higher, when a shareholder voting is required for the acquirer, and when the exchange ratio implies an immediate EPS dilution (assuming no deal synergy). Moreover, in Appendix Table A3, we find that the deals with share issuance exceeding 20% have significantly higher weights on the topics of *business complementarities*, *financial projections*, *deal process*, *ownership and control*, and *contractual issues*.

Third, we find that larger deals and larger acquirers are associated with higher weights on *business complementarities*, *financial projection assumptions*, *deal process*, and *ownership and control*, which reflects the more complicated deal structure or ownership structure associated with such deals.

Fourth, when the acquirer is followed by a larger number of analysts, the Q&A segment of the M&A calls contains more *general comments* and more discussion of *technology* and *team labor and culture*, but fewer discussions on *financial projections*, *deal financing*, *deal process*, and *ownership and control*. Such a pattern reflects the likelihood that with more analysts, discussion becomes more comprehensive, and the “soft” information aspects will gain in importance relative to the “hard” information aspects of the deal. The coefficients on the acquirer’s institutional ownership are generally consistent with those on analyst coverage.

Finally, before leaving this section, we highlight the coefficients on the Inverse Mills Ratio. We find that the coefficient of the IMR is significantly positive for the weights on *deal process* and *contractual issues* and negative for the weight on *deal financing* in the Q&A segment. However, IMR is insignificantly related to any of the topic weights in the presentation segment. These patterns suggest that addressing investors’ concerns regarding deal negotiation and the completion process is an important latent reason for holding calls. More discussion on *contractual issues*, such as breakup fees, is also positively related to the latent benefit of holding calls. In contrast, answering questions regarding the financial arrangement of a deal is negatively associated with the managers’ private information on the benefit of holding calls.

3. Deal Completion

We next examine how deal completion is associated with call decisions and call content. Call decisions are endogenous, so *ex ante*, it is unclear how the decision to hold a call is associated with deal outcomes, such as success in deal completion.²⁴ However, when calls are done for reasons exogenous to a deal, holding a call could increase completion likelihood if issues that concern investors can be identified and explicitly addressed, and management can selectively release information that would positively influence shareholders’ perception of the deal. However, specific deal features could be either positively or negatively associated with the likelihood of deal completion.

In Table 6, we first regress a completed-deal indicator on an indicator of holding a scheduled call by the acquirer in an OLS setting. We find that there is a strong positive association between call decision and deal completion. We next instrument the decision of holding calls with the acquirer’s call history. In this IV setting, we find that calls which are held for reasons exogenous to the current deal

²⁴ While it is possible that managers will only hold a call if that improves the likelihood of deal completion, the correct counterfactual deals are not observed. For example, some deals that are observably “good deals” may not require a call, and only the more problematic deals are associated with a call. In this case, the incidence of calls will be negatively associated with deal completion success.

have a positive impact on deal completion. Moreover, such an impact is much larger for deals involving public targets than for private targets, which suggests that M&A calls are particularly effective for addressing the types of issues that are relevant for public target shareholders.

To gain further understanding of what issues are relevant for deal completion, we estimate a Heckman model for the indicator of completed deals. In the first stage, the choice of holding calls is again instrumented by the acquirer's past call decisions. In the second stage, deal completion is regressed on the length of discussions of each topic obtained from the *topic model*, controlling for deal and firm characteristics, as well as the IMR from the first-stage equation. The second stage outcomes are reported in Table 7. In the full sample of deals made by US public acquirers, we find that a more extensive discussion on *deal process* is negatively associated with deal completion, after controlling for the selection issue of call decision. The negative coefficient suggests that more discussion of *deal process* reflects investors' concerns on the process of deal negotiation and shareholder approvals, as well as the other regulatory hurdles for deal completion.²⁵ Moreover, when we split the sample based on the public status of the target, we find that the negative coefficient is concentrated in the subsample of public deals. This is consistent with our argument that *deal process* is particularly relevant for the acquisition of public firms. Last, in the subsample of public deals, we find that deal completion is positively associated with the length of discussion of *team labor and culture*, which could reflect the fact that such postmerger integration issues are extensively raised only when the deal is very likely to be completed. Interestingly, none of the topic lengths for private target are relevant for deal completion, suggesting that communicating with and bringing public target shareholders on board is an important motivation behind what is discussed in the conference calls.

4. Market Reactions

In this subsection, we examine the impact of call decisions and call content on the acquirer's market reaction around deal announcement. As M&A calls are not mandatory, one would expect that the management is more likely to hold a call when it could release more favorable information about the deal to the market. We examine such a signalling effect by regressing the acquirer's abnormal stock returns²⁶ around deal announcement on the indicator of scheduled calls hosted by the acquirer.²⁷ As shown in Table 8, we find a strong positive association between the acquirer's market reactions and

²⁵ Although we find in Table 5 that IMR is positive in the regression of *deal process*, suggesting the latent benefit of holding calls is positively related to the discussion of this topic, this does not imply that the length of deal process must have a positive sign in explaining deal outcomes. The deals with more concerns on *deal process* are the ones less likely to complete, leading to a negative sign on deal completion in Table 7. The coefficients in Table 7 reflects the equilibrium associations rather than the influence of topic discussion on deal completion.

²⁶ Measured based on a market model.

²⁷ Focusing on the scheduled calls alleviates the concern of reverse causality, i.e., that calls could be held after managers observe a positive market reaction. The scheduled calls are the M&A calls held on the deal announcement date or the following day. They are likely to be pre-determined and announced at the press release for deal announcement (Kimbrough and Louis (2011)).

whether the deal announcement is associated with a conference call. However, when the call decision is instrumented by the acquirer's call history, there is no significant impact of holding a call on the acquirer's market reaction. These results are highly consistent with a signalling effect, that is, calls are more likely to be held when the deal has better quality, but a call held for exogenous reasons could release either good or bad news, and thus does not have an unambiguous impact on the market reaction. Moreover, when we restrict our attention to the subsample of private deals as shown in Panel B of Table 8, we find a significant and positive impact on market reactions even in the IV setting. This is consistent with the argument that M&A calls alleviate information asymmetry, which is more relevant for private targets that have limited or no disclosures.

Our last set of analyses concerns the impact of call content on the acquirer's market reactions. As argued before, the length of discussion on each topic could reflect the aspects of the deal that are most relevant for valuation from the perspective of the management and call participants. We examine the association between the acquirer's abnormal returns around the deal announcement and topic length in each segment of a scheduled M&A call, controlling for the choice of holding calls in a Heckman model, in the same setting as in the previous sections. The coefficient on each topic length reflects the average correlation between a more extensive discussion of a certain topic and the acquirer's market reactions.

Unique deal features are likely to attract more attention and be discussed more extensively in both the presentation and Q&A segments of the call. As shown in Table 9, we find that deal-specific topics, i.e., the ones with high cross-segment correlations, are associated with a more significant relationship with the acquirer's CAR. The results are informative about which deal features are liked (disliked) by the market. For example, there is a significantly negative sign on *technology* and *team labor and culture* across various windows around the deal announcement. There is also a significant and positive sign for *deal financing*, while *global location*, which is related to entry into new markets, is positively associated with the acquirer's abnormal return within a three-day window around the deal announcement, but the effect is not significant for a longer window.²⁸

Second, we find the segment-specific topics, such as *financial projections* and *growth*, are less significant in explaining the acquirer's CARs. This is possibly because these issues are discussed in many M&A calls, and thus their length is not informative about market perceptions. One significant exception is the topic of *general comments*. As this topic contains favorable phrases such as "love the deal," "big deal for us," and "see a lot of opportunities," a lengthy discussion about these is associated with a more positive market perception of the deal.

²⁸ These findings could reflect the tendency of overpaying for high-tech targets, or investors' perception of the overpayment as high-tech targets often have weaker earnings, and compatibility concerns along the dimensions of *team labor and culture*. *Deal financing* typically involves discussions of debt arrangements and could reflect managers' private information on future earnings underlying their financing choice (Ross (1977)).

One may wonder to what extent the results above could be explained by a reverse causality argument that the topic length is in response to the stock price movements, which are driven by the information released around deal announcement through channels other than M&A conference calls. To examine this issue, we conduct further analysis using a subsample of M&A calls that are held on the day following the deal announcement date. We control for the pre-call market reactions from the day before the deal announcement to the end of the announcement day in the second-stage regression of a Heckman model for the post-call market reactions over a variety of windows.²⁹

As shown in Table 10, the post-call acquirer CAR is positively associated with the pre-call returns. Moreover, the coefficients on *technology* and *team labor and culture* remain significant and negative, but the coefficient on *deal financing* is no longer significant and that on *global location* becomes weaker. These findings suggest that investors learn about topics such as *deal financing* and *global location*, which are generally favorably received by the market and reflect “hard” information, through channels other than conference calls, such as the press releases, in which these topics are likely to be emphasised. Analysts, on the other hand, could still ask for more details from the management in an M&A call, possibly to confirm the initial positive reception of the deal. On the contrary, the topics of *technology* and *team labor and culture* could reflect the manager’s private and “soft” information and thus are less likely reach the market prior to an M&A call.

From Table 10, we also find that the coefficient on *financial projection outcomes* is significant and positive after we control for the pre-call returns, which suggests that the unique interactive format of the calls is valuable to outsiders assessing the financial impact. Moreover, when we repeat this analysis in subsamples, we find that the positive sign for *financial projection outcomes* is concentrated in the subset of private deals, consistent with the alleviation of information asymmetry regarding such deals. Also, the negative coefficient on *technology* is also observed only for private deals.

To further examine the possible reverse causality issue, we also examine how the weights on each topic in the calls held on the day following the deal announcement date are associated with the pre-call acquirer CAR [-1,0]. In Table A4 of the Appendix, we find that most topic weights are not sensitive to the pre-call acquirer’s stock return, which alleviates this concern.³⁰

V. Conclusion

²⁹ We also control for the pre-call market reactions in the first-stage selection equation and find it to be insignificant for the choice to hold calls. This is consistent with our argument that the decision to hold a scheduled call is unlikely to be affected by the market reactions to deal announcement, but rather is determined before the announcement.

³⁰ The only exceptions are the weights on *growth* and *technology* in the presentation segment and *financial projection assumptions* and *production and operation* in the Q&A segment, and on *contractual issues* in both segments. We do not attempt to interpret the coefficients of CAR[-1,0] on these topic weights as it is unclear to what extent the topic weights reflect deal features that may be already evident to the market on deal announcement, as opposed to management reaction to the market reaction.

Mergers and acquisitions are often a black box for empirical researchers. Apart from standard information provided by the established data sources on the merging entities and financial terms, very little is known about the unique features of a deal: why they are done, the sources of value, and the key concerns regarding deal success. In this paper, we provide a more granular description of the relevant issues from the market's perspective, by analysing a large set of textual data from M&A conference call transcripts. Applying a *probabilistic topic modelling* approach, we cluster the contents of transcript documents into 20 thematic groups and measure the amount of time in each call that has been devoted to discussing specific topics. We establish evidence on how topic distributions are associated with deal and firm characteristics, and how market reactions and deal completion are related to the contents of M&A calls.

M&A calls provide an efficient channel for management to discuss deal-specific issues with shareholders. Such discussions can not only release value-relevant information to the market, but also address governance issues concerning deal completion. Although these two effects apply to all deals, the former is more relevant for the acquisition of private targets, and the latter is more important for deals involving public targets. We first show that topic distributions are sensitive to the public status of target firms. Next, we find that the market reactions to calls are stronger among private acquisitions, while deal completion is more sensitive in calls for public deals. Moreover, we establish evidence that topics such as *financial projection outcomes* are more relevant for market reactions, especially among the private deals. On the other hand, topics such as *deal process* reflect shareholders' concern and are associated with lower deal completion rates, the effect of which is more profound when public targets are involved.

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Figure 1: Time trend of mergers and the propensity of holding M&A conference calls

The bars in the figure plot the number of mergers and acquisitions announced in each calendar year. The line depicts the fractions of deals associated with a M&A conference call.

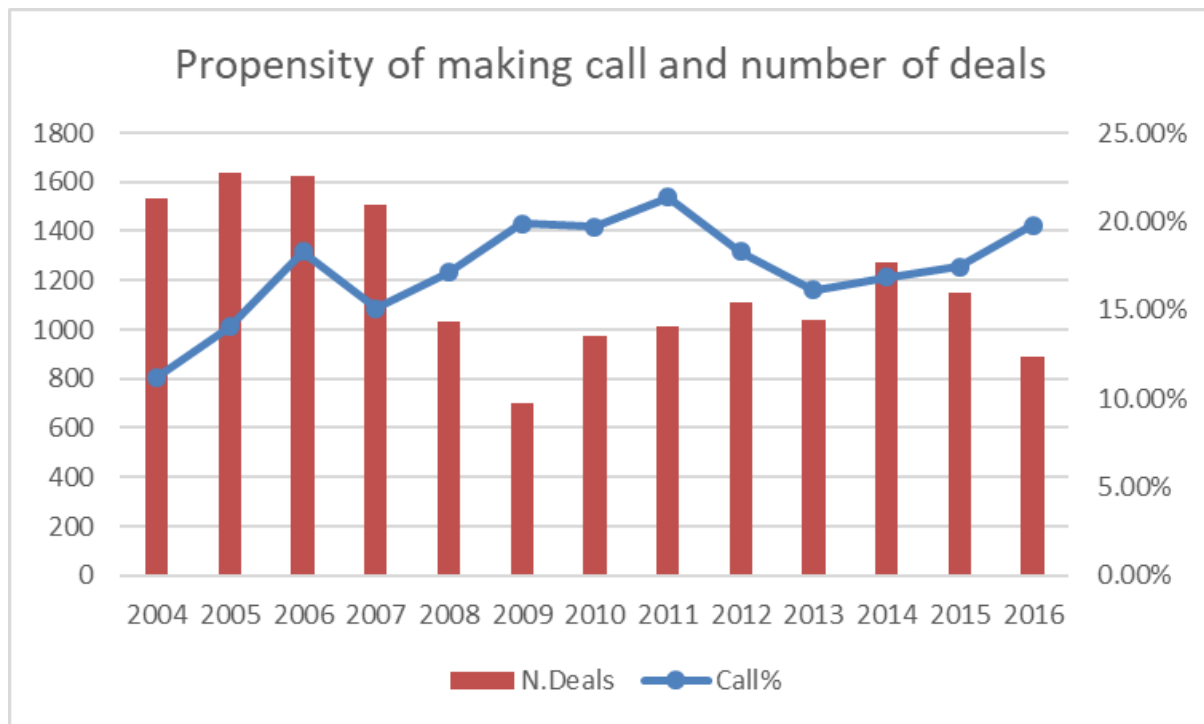
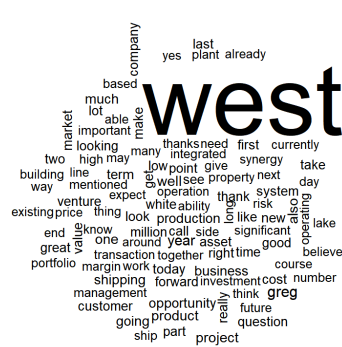
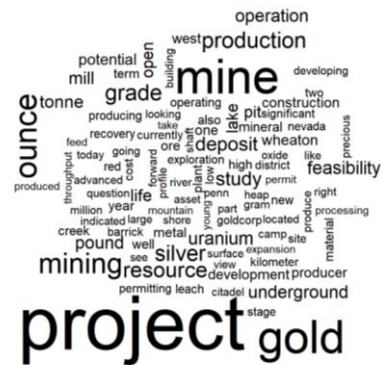


Figure 2: Word clouds for each industry of the topic of *production and operation*

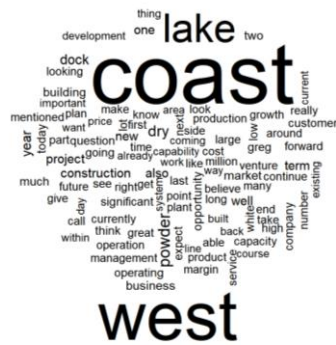
The word cloud figures represent the vocabulary distributions for each covariate (acquirer industry). The size of words is approximately proportional to its probability.



1. Agriculture Industry



2. Mining Industry



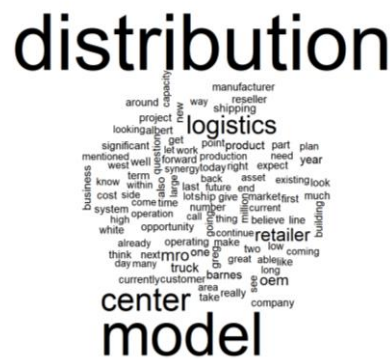
3. Construction Industry



4. Manufacturing Industry



5. Transportation, Communications, Electric, Gas, and Sanitary Services



6. Wholesale Trade



Figure 3: Topic distributions in the M&A conference calls for private- and public-target deals

The figures plot the relative weights on each topic in the Q&A and Presentation segments of the M&A conference calls. The left bars are for the deals with private targets and the right bars are for the deals with public targets.

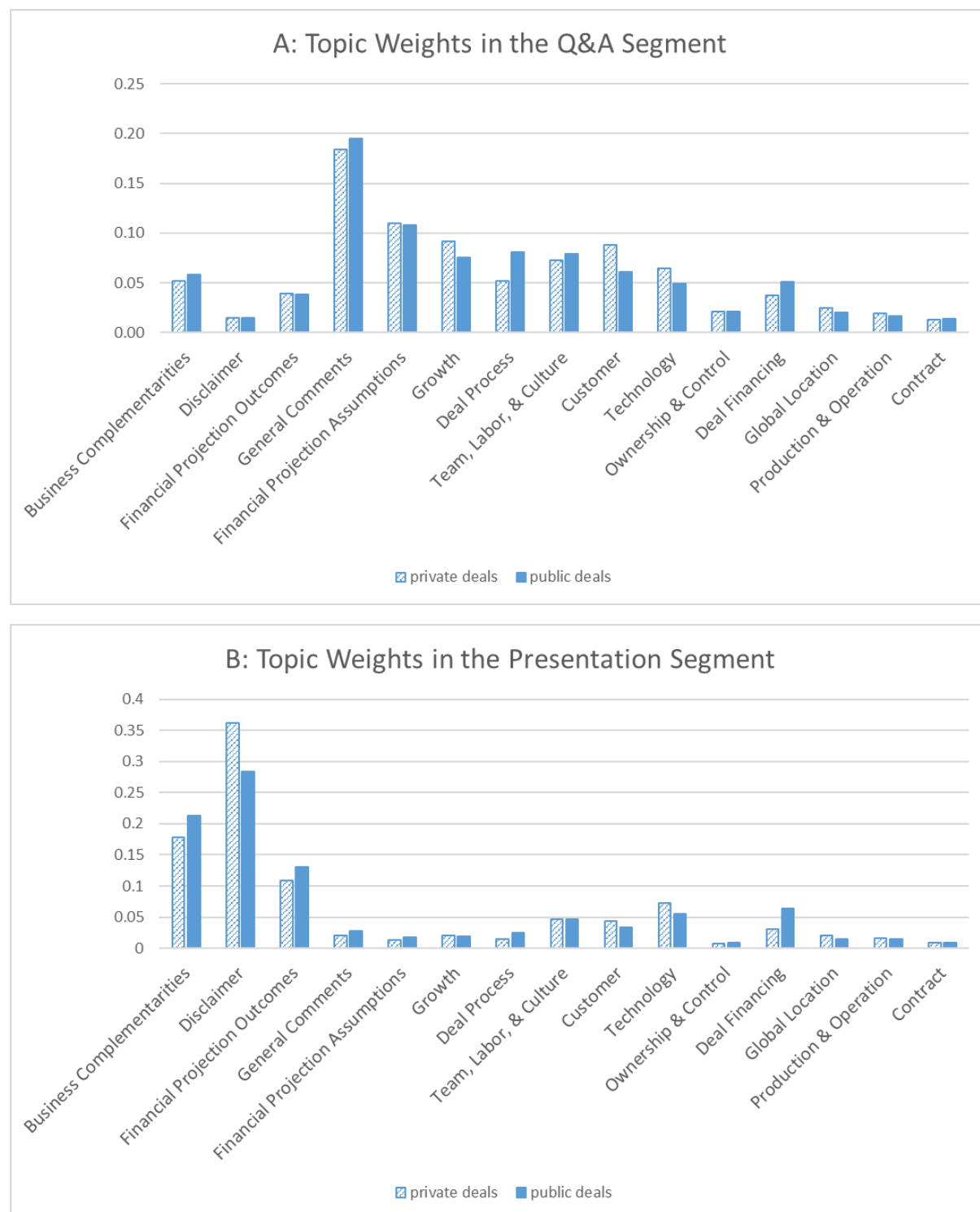


Table 1: Summary statistics of the M&A conference calls matched with deals

Panel A shows the number of M&A calls that could be matched with deals in SDC. Panel B shows the number of deals with a US public acquirer that are associated with M&A calls. Panel C shows the number of deals with a US public acquirer that are associated with calls in different subsamples which are split according to the target firms' public status or location.

Panel A: M&A conference calls matched with deals

Call Date Relative to Deal Announcement Date	Call Hosted By		Total	
	Acquirer	Target		
0	3336	340	3676	[66.06%]
1	1076	86	1162	[20.88%]
[+2, +5]	313	23	336	[6.04%]
>=6	361	30	391	[7.03%]
Total	5086	479	5565	[100.00%]
	(91.39%)	(8.61%)	(100.00%)	

Panel B: Summary on the deals made by US public acquirers

Call Type	Caller Type				
	Acquirer	Target	Both Side	No Call	Total
Scheduled	2161	76	36	0	2273
	(15.08%)	(0.53%)	(0.25%)	(0.00%)	(15.86%)
Unscheduled	246	6	2	0	254
	(1.72%)	(0.04%)	(0.01%)	(0.00%)	(1.77%)
Multiple (Scheduled & Unscheduled)	31	0	1	0	32
	(0.22%)	(0.00%)	(0.01%)	(0.00%)	(0.22%)
No Call	0	0	0	11773	11773
	(0.00%)	(0.00%)	(0.00%)	(82.14%)	(82.14%)
Total	2438	82	39	11773	14332
	(17.01%)	(0.57%)	(0.27%)	(82.14%)	(100%)

Panel C: Probability of holding calls for different types of deals

Target Type	Foreign Target			US Target		
	No Call	Call	Total	No Call	Call	Total
<i>Private</i>	1957	317	2274	8547	1294	9841
	(86.06%)	(13.94%)		(86.85%)	(13.15%)	
<i>Public</i>	211	110	321	1058	838	1896
	(65.73%)	(34.27%)		(55.80%)	(44.20%)	
Total	2168	427	2595	9605	2132	11737
	(83.55%)	(16.45%)		(81.84%)	(18.16%)	

Table 2: The distinctive and frequent terms of each topic

This table reports the distinctive and frequent terms in each topic. The first (second/ third) row reports the terms with high values of FREX index (Kappa index/ estimated word probability) for each topic. The labels are manually assigned based on these terms. The last two columns report measures of how much cross-industry variation there is in the terms for each topic (*topic content*) and in the distribution of topics (*topic prevalence*). The former is measured using the average cosine similarity between the word vector for each topic-industry and that for the corresponding base topic. The latter is measured by the standard deviation of industry-average topic weights on each topic.

Topic	Terms that are frequent within a topic or exclusive to the topic					Label	Variation of Topic term weight similarity Std. dev.	
1	leading unparalleled company	leader unmatched business	leadership talented growth	innovation excellence market	complementary headquartered opportunity	Business Complementarities	0.927	0.003
2	europe kong market	china latin europe	country hong country	european netherlands america	asia european china	Global Location	0.900	0.004
3	correct speaker thank	yes correct yes	thank housekeeping right	sorry clarification multiple	speaker thank correct	Conjunction of Q&A	0.999	0.003
4	manufacturing shipping capacity	west labeling manufacturing	capacity white development	plant tonnage facility	factory compliant product	Production & Operation	0.565	0.007
5	quarter flattish year	year seasonality growth	half quarter revenue	guidance loaded last	digit decline business	Growth	0.933	0.007
6	thing smarter think	lot stuff going	really heck really	people awful thing	think learn lot	General Comments	0.978	0.014
7	stake shareholding question	minority stake share	scheme minority course	course supervisory offer	therefore egm price	Ownership & Control	0.929	0.007
8	digital laptop technology	content streaming service	cable telephony system	video smartphones network	mobile video platform	Technology	0.754	0.011
9	okay luck okay	thanks congrats question	appreciate okay much	congratulation hop thanks	helpful alright great	Closing of Q&A	0.995	0.004
10	good	morning	david	afternoon	shape	Opening of Q&A	0.995	0.002

11	morning good margin math cost	good morning accretion envelope margin	afternoon david higher accretion synergy	evening afternoon gross ballpark number	gentleman quick lower teen term	Financial Projection Assumptions	0.880	0.004
12	debt paydown cash	loan revolving debt	financing issuance capital	bank financed bank	balance loan balance	Deal Financing	0.823	0.004
13	diligence fiduciary deal	bid unsolicited transaction	process ftc process	vote auction shareholder	discussion approached time	Deal Process	0.968	0.008
14	fee breakup agreement	arrangement fee contract	break renegotiate fee	breakup contractual break	contract renegotiated asset	Contract	0.767	0.005
15	hey ross guy	ron hey hey	pat ron partner	ross ryan mike	phil curt joe	Names	0.620	0.002
16	reinsurance repair business	category retrofit market	selling harvest product	concentration cleaning customer	servicing industrial opportunity	Customer	0.743	0.012
17	patient team opportunity	clinical impressed acquisition	cancer layoff team	therapy cultural continue	disease recruit development	Team, Labor, & Culture	0.740	0.017
18	statement instruction call	conference undertakes statement	instruction sir today	sec recorded conference	welcome session forward	Disclaimer	0.995	0.004
19	approximately revolving million	pro approximately share	million forma cost	forma totaling revenue	closing cad earnings	Financial Projection Outcomes	0.967	0.006
20	acquisition concentrate acquisition	basically nickel one	relationship cobalt term	part copper part	regard scarcity relationship	Miscellaneous	0.718	0.003

Table 3: Summary statistics of topic weights

This table reports the mean and standard deviations of each topic's weights within each call or each call segment, the median value of the ratio between a topic's weight in the Q&A and that in the presentation segment, and the correlation between a topic's weights in two segments. The sample contains all the M&A calls that could be matched with deals in SDC.

Topic	Full Call		Q&A		Presentation		QA/PER Ratio	Correlation	Topic Type
	Mean	std	Mean	std	Mean	std	Median	QA & Pre	
1. Business Complementarities	10.5%	0.087	5.1%	0.042	17.3%	0.157	0.31	0.52	Presentation-dominant
18. Disclaimer	8.4%	0.083	1.7%	0.012	34.1%	0.318	0.07	0.14	Presentation-dominant
19. Financial Projection Outcomes	6.9%	0.054	3.9%	0.025	10.3%	0.102	0.46	0.21	Presentation-dominant
6. General Comments	12.0%	0.063	16.7%	0.070	2.6%	0.042	14.07	0.29	Q&A-dominant
11. Financial Projection Assumptions	7.3%	0.042	10.3%	0.051	1.5%	0.021	11.73	0.25	Q&A-dominant
5. Growth	6.9%	0.039	9.0%	0.044	2.4%	0.032	6.19	0.32	Q&A-dominant
13. Deal Process	5.7%	0.046	7.3%	0.055	2.3%	0.035	5.21	0.34	Q&A-dominant
17. Team, Labor, & Culture	6.2%	0.071	6.8%	0.067	4.1%	0.083	3.46	0.58	Balanced (deal-specific)
16. Customer	6.0%	0.054	6.8%	0.054	3.7%	0.061	3.37	0.53	Balanced (deal-specific)
8. Technology	5.7%	0.078	5.1%	0.066	5.6%	0.101	2.06	0.72	Balanced (deal-specific)
7. Ownership & Control	4.6%	0.069	5.1%	0.070	2.7%	0.060	3.35	0.75	Balanced (deal-specific)
12. Deal Financing	4.2%	0.051	4.1%	0.040	3.5%	0.066	2.26	0.55	Balanced (deal-specific)
2. Global Location	3.3%	0.040	3.1%	0.031	2.9%	0.053	2.16	0.57	Balanced (deal-specific)
4. Production & Operation	1.9%	0.028	1.9%	0.025	1.6%	0.034	2.15	0.67	Balanced (deal-specific)
14. Contract	1.4%	0.017	1.5%	0.016	1.0%	0.019	2.20	0.58	Balanced (deal-specific)

Table 4: Decision to hold M&A conference calls

This table reports the OLS regression results of the decision to hold the scheduled M&A conference calls by the acquirer. The independent variables are the deal and firm characteristics. The sample for the first four columns includes all the merger deals with a US public acquirer announced from 2004 to 2016, excluding the ones between a financial acquirer and a nonfinancial target. The sample of the last two columns contains the subsample of deals between two US public firms. In columns 1, 3, and 5 we control for the fixed effect of deal announcement year, and in columns 2, 4, and 6 we also control for the acquirer's and target's (one-digit SIC) industries. T-statistics are reported using the robust standard errors in columns 1, 3, and 5, and the standard errors clustered on the acquirer industry levels in columns 2, 4, and 6. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

<i>Sample:</i>	M&A Call (scheduled, acquirer-hosted)					
	<i>Acquirer = US Public</i>				<i>Both = US Public</i>	
Tar Public	0.16*** (12.39)	0.16*** (9.04)	0.088*** (8.01)	0.089*** (10.25)		
Tar US	0.023*** (2.79)	0.025*** (3.40)	0.015** (2.22)	0.016** (2.92)		
Stock%	0.10*** (6.25)	0.11*** (6.96)	0.083*** (5.87)	0.085*** (12.14)	0.065* (1.77)	0.036 (1.62)
Same SIC2	0.023*** (3.52)	0.023*** (4.00)	0.012** (2.17)	0.013** (2.66)	0.056** (1.98)	0.048* (2.00)
Deal Value/Acq MktCap	0.27*** (16.64)	0.27*** (16.41)	0.21*** (14.33)	0.21*** (11.07)	0.024 (0.76)	0.019 (0.59)
ln(AT)Acq	-0.0033 (-1.34)	-0.0034 (-0.61)	-0.0051** (-2.38)	-0.0060 (-1.58)	-0.037*** (-3.16)	-0.043*** (-3.05)
Book Lev.Acq	-0.070*** (-3.81)	-0.081*** (-4.86)	-0.044*** (-2.75)	-0.047** (-3.23)	0.0051 (0.05)	0.025 (0.13)
MTB Acq	-0.0011 (-1.04)	-0.00081 (-0.51)	-0.00035 (-0.38)	-0.00015 (-0.14)	0.00091 (0.22)	0.0016 (0.28)
ROA Acq	0.090*** (3.27)	0.10*** (5.17)	0.083*** (3.49)	0.085*** (3.93)	-0.061 (-0.36)	-0.034 (-0.13)
RD Acq	0.37*** (6.12)	0.38*** (15.16)	0.27*** (5.15)	0.28*** (9.78)	-0.29 (-1.04)	-0.21** (-3.15)
D(Ind Board)Acq	0.025*** (3.72)	0.017*** (4.01)	0.020*** (3.46)	0.017** (2.66)	0.049* (1.80)	0.040 (1.78)
Inst.Own% Acq	0.077*** (6.48)	0.075*** (7.38)	0.063*** (6.18)	0.063*** (7.70)	0.16*** (2.77)	0.15*** (4.13)
ln(1+N.Analyst) Acq	0.050*** (8.65)	0.049*** (8.35)	0.029*** (5.73)	0.031*** (6.48)	-0.012 (-0.39)	-0.0084 (-0.43)
D[Past Deal Call]			0.62*** (43.71)	0.61*** (26.35)	0.43*** (10.17)	0.43*** (5.81)
D[Past Deal No Call]			-0.072*** (-8.88)	-0.076*** (-5.76)	-0.067* (-1.68)	-0.066 (-1.22)
Book Lev.Tar					-0.010 (-0.12)	-0.041 (-0.44)
MTB Tar					-0.0065* (-1.67)	-0.0039 (-0.63)
RD Tar					-0.087 (-0.61)	-0.052 (-1.58)

Inst.Own% Tar					0.21***	0.23***
					(3.48)	(4.70)
ln(1+N.Analyst) Tar					0.092***	0.10***
					(3.65)	(6.40)
Constant	-0.086***	-0.079	0.015	0.020	0.29***	0.33**
	(-4.87)	(-1.77)	(0.97)	(0.55)	(3.01)	(2.31)
Year and Industry	NO	YES	NO	YES	NO	YES
Observations	12041	12041	12041	12041	1121	1121
Adjusted R-squared	0.150	0.156	0.387	0.389	0.261	0.268

Table 5: Topic weights in each segment of M&A calls

This table reports the results from the second stage of Heckman regression of the topic weights in each call segment on the deal and acquirer characteristics, controlling for deal announcement year, acquirer's and target's (one-digit SIC) industries, and the Inverse Mills Ratio (IMR) from the first-stage selection equation that is shown in the fourth column of Table 4. Panel A includes the topics that are more prevalent in the presentation segment, Panel B includes the topics that are more prevalent in the Q&A segment, and panels C and D include the topics that are balanced across segments and are likely to be deal-specific. In the parentheses, we report the t-statistics based on Heckman (1979) standard errors. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

Panel A: Presentation-dominant topics

Segment:	Business Complementarities		Disclaimer		Financial Projection Outcomes	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Tar Public	0.026*** (3.21)	0.0052** (2.43)	-0.00097 (-0.06)	0.00067 (1.22)	0.0067 (1.25)	-0.00036 (-0.30)
Tar US	-0.0087 (-0.97)	-0.0016 (-0.67)	0.00029 (0.02)	0.00052 (0.83)	0.010* (1.66)	0.0017 (1.23)
Stock%	0.033*** (2.91)	0.0044 (1.44)	-0.087*** (-3.93)	0.0018** (2.36)	0.020*** (2.59)	0.0031* (1.84)
Samesic2	-0.0057 (-0.76)	-0.0068*** (-3.36)	0.019 (1.30)	-0.00030 (-0.58)	0.0063 (1.24)	0.0013 (1.19)
Deal Value/Acq ME	0.044*** (5.62)	0.0074*** (3.58)	-0.11*** (-6.98)	-0.00084 (-1.58)	0.032*** (6.09)	0.00079 (0.68)
ln(AT)Acq	0.0084*** (2.70)	0.0016* (1.94)	-0.024*** (-3.98)	0.000031 (0.15)	-0.0011 (-0.51)	-0.00045 (-0.96)
Book Lev.Acq	-0.061*** (-2.74)	-0.025*** (-4.09)	0.063 (1.44)	0.00095 (0.62)	0.026* (1.75)	0.013*** (3.89)
MTB Acq	0.0025** (2.49)	0.00031 (1.13)	-0.0055*** (-2.73)	-0.00012* (-1.77)	-0.00058 (-0.84)	-0.00037** (-2.44)
ROA Acq	0.066** (2.30)	0.0096 (1.23)	-0.091 (-1.61)	-0.00048 (-0.24)	0.043** (2.20)	0.010** (2.35)
RD Acq	-0.00071 (-0.01)	0.0059 (0.40)	-0.17 (-1.56)	0.014*** (3.77)	-0.030 (-0.80)	-0.024*** (-2.85)
D(Ind Board)Acq	0.0084 (1.22)	0.0049*** (2.67)	0.00029 (0.02)	0.00061 (1.29)	-0.0044 (-0.95)	-0.00062 (-0.60)
Inst.Own% Acq	0.030**	0.0052	-0.010	-0.0047***	0.0042	-0.0075***

	(2.36)	(1.52)	(-0.40)	(-5.34)	(0.48)	(-3.90)
ln(1+N.Analyst) Acq	0.014*	0.0028	-0.038***	-0.0031***	0.00069	-0.0057***
	(1.96)	(1.43)	(-2.66)	(-6.07)	(0.14)	(-5.11)
Constant	0.066	0.029	0.58***	0.022***	0.15***	0.089***
	(0.81)	(1.34)	(3.67)	(4.03)	(2.79)	(7.42)
IMR	-0.0016	-0.0012	0.0069	-0.00024	-0.0033	-0.00034
	(-0.30)	(-0.84)	(0.65)	(-0.64)	(-0.89)	(-0.41)
Year and Industry	YES	YES	YES	YES	YES	YES
Observations	12041	12039	12041	12039	12041	12039
Pseudo R2	0.171	0.131	0.0928	0.130	0.110	0.159

Panel B: Q&A-dominant topics

Segment:	General Comments		Financial Projection Assumptions		Growth		Deal Process	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Tar Public	-0.0019 (-0.95)	0.0082** (2.47)	-0.00021 (-0.19)	-0.0062** (-2.37)	-0.0031*** (-2.63)	-0.012*** (-5.98)	0.0062*** (5.22)	0.024*** (12.52)
Tar US	0.000030 (0.01)	0.011*** (3.07)	0.0018 (1.46)	0.0022 (0.75)	-0.00056 (-0.42)	-0.0041* (-1.89)	0.00060 (0.45)	0.0015 (0.69)
Stock%	0.0097*** (3.40)	0.0026 (0.56)	0.0019 (1.20)	-0.0048 (-1.30)	-0.000024 (-0.01)	-0.0053* (-1.94)	0.0088*** (5.28)	0.0051* (1.86)
Samesic2	-0.0041** (-2.13)	0.0027 (0.86)	-0.0027*** (-2.58)	0.0048* (1.93)	-0.0025** (-2.21)	0.0027 (1.50)	0.000085 (0.08)	0.0047*** (2.59)
Deal Value/Acq ME	0.0023 (1.18)	-0.0050 (-1.57)	0.0047*** (4.36)	0.0027 (1.09)	0.0046*** (4.01)	-0.0048** (-2.56)	0.0046*** (4.00)	0.011*** (6.12)
ln(AT)Acq	0.0039*** (4.97)	-0.0014 (-1.06)	0.0013*** (2.98)	0.0036*** (3.52)	0.00074 (1.59)	-0.0023*** (-3.03)	0.0014*** (2.99)	0.0040*** (5.31)
Book Lev.Acq	-0.012** (-2.11)	-0.050*** (-5.41)	0.0052* (1.68)	0.043*** (5.87)	-0.0017 (-0.52)	0.0029 (0.53)	0.0051 (1.56)	0.017*** (3.18)
MTB Acq	0.00086*** (3.35)	0.0012*** (2.78)	0.00019 (1.31)	-0.00083** (-2.50)	0.00019 (1.26)	-0.00031 (-1.24)	-0.000039 (-0.26)	0.00019 (0.77)
ROA Acq	0.0022 (0.30)	0.0034 (0.29)	0.0011 (0.27)	0.021** (2.25)	0.0055 (1.29)	0.020*** (2.79)	-0.0038 (-0.89)	0.0099 (1.41)
RD Acq	-0.011	0.062***	-0.012	-0.083***	-0.0079	-0.028**	0.0019	0.018

	(-0.76)	(2.69)	(-1.57)	(-4.60)	(-0.97)	(-2.05)	(0.24)	(1.34)
D(Ind Board)Acq	-0.0034*	-0.0017	-0.0020**	-0.0033	0.00013	-0.0023	-0.00065	-0.0011
	(-1.94)	(-0.59)	(-2.09)	(-1.48)	(0.13)	(-1.35)	(-0.65)	(-0.63)
Inst.Own% Acq	-0.0039	0.013**	-0.00050	0.00059	0.0020	0.0056*	-0.0034*	-0.0071**
	(-1.21)	(2.46)	(-0.28)	(0.14)	(1.05)	(1.80)	(-1.78)	(-2.28)
ln(1+N.Analyst) Acq	0.00093	0.019***	0.00016	-0.0078***	0.0014	-0.0037**	-0.0026**	-0.0081***
	(0.50)	(6.10)	(0.15)	(-3.22)	(1.31)	(-2.04)	(-2.37)	(-4.52)
Constant	-0.011	0.10***	0.0024	0.097***	0.0082	0.11***	0.0096	0.023
	(-0.56)	(3.11)	(0.22)	(3.71)	(0.68)	(5.45)	(0.81)	(1.20)
IMR	-0.0012	-0.0022	-0.000082	0.0026	0.0011	0.00053	0.0011	0.0027**
	(-0.88)	(-0.99)	(-0.11)	(1.47)	(1.35)	(0.40)	(1.33)	(2.04)
Year and Industry	YES	YES	YES	YES	YES	YES	YES	YES
Observations	12041	12039	12041	12039	12041	12039	12041	12039
Pseudo R2	0.0780	0.196	0.131	0.147	0.0520	0.141	0.119	0.229

Panel C: Deal-specific topics

	Team, Labor, & Culture		Customer		Technology		Ownership & Control	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Tar Public	0.0013	0.0062*	-0.010***	-0.013***	-0.022***	-0.015***	-0.00054	-0.0024***
	(0.26)	(1.73)	(-3.20)	(-4.69)	(-3.91)	(-4.30)	(-0.78)	(-2.68)
Tar US	0.0051	0.0057	-0.00030	0.00055	0.013**	0.0033	-0.0033***	-0.0043***
	(0.94)	(1.41)	(-0.08)	(0.18)	(2.07)	(0.87)	(-4.28)	(-4.32)
Stock%	-0.0031	-0.0016	-0.0050	-0.0096**	-0.0035	-0.0048	0.0047***	0.0044***
	(-0.45)	(-0.31)	(-1.09)	(-2.46)	(-0.44)	(-1.01)	(4.85)	(3.49)
Samesic2	0.017***	0.011***	-0.010***	-0.0091***	-0.015***	-0.016***	0.00026	-0.00080
	(3.82)	(3.19)	(-3.30)	(-3.51)	(-2.87)	(-4.94)	(0.41)	(-0.96)
Deal Value/Acq ME	0.0042	0.0049	0.0093***	-0.0054**	-0.00074	-0.0062*	0.0013**	0.0023***
	(0.90)	(1.40)	(2.95)	(-2.04)	(-0.14)	(-1.88)	(1.98)	(2.69)
ln(AT)Acq	-0.00016	-0.0038***	0.00026	-0.0050***	0.0028	0.00066	0.00082***	0.0016***
	(-0.09)	(-2.69)	(0.20)	(-4.61)	(1.27)	(0.50)	(3.06)	(4.66)
Book Lev.Acq	0.015	-0.016	0.032***	0.022***	-0.038**	-0.021**	-0.000078	0.0032
	(1.11)	(-1.55)	(3.54)	(2.89)	(-2.43)	(-2.22)	(-0.04)	(1.30)
MTB Acq	0.00074	0.00032	0.00017	-0.00028	0.00017	0.000010	0.00020**	0.000051

	(1.22)	(0.70)	(0.42)	(-0.81)	(0.23)	(0.02)	(2.27)	(0.46)
ROA Acq	-0.071***	-0.11***	0.028**	0.025**	0.052**	0.033***	-0.000041	-0.0023
	(-4.12)	(-8.63)	(2.42)	(2.51)	(2.58)	(2.65)	(-0.02)	(-0.71)
RD Acq	0.31***	0.15***	-0.092***	-0.15***	0.24***	0.22***	-0.0095**	-0.0042
	(9.42)	(5.99)	(-4.14)	(-7.99)	(6.22)	(9.44)	(-2.01)	(-0.69)
D(Ind Board)Acq	0.0027	0.0034	0.00046	0.0014	-0.014***	-0.0089***	-0.00072	-0.00070
	(0.66)	(1.11)	(0.17)	(0.57)	(-2.93)	(-3.02)	(-1.22)	(-0.91)
Inst.Own% Acq	-0.0042	-0.00041	0.0071	0.016***	-0.0025	-0.00070	0.00020	-0.0020
	(-0.54)	(-0.07)	(1.37)	(3.70)	(-0.28)	(-0.13)	(0.18)	(-1.40)
ln(1+N.Analyst) Acq	0.0021	0.0057*	-0.0073**	-0.0016	0.029***	0.014***	-0.0010*	-0.0016*
	(0.49)	(1.73)	(-2.46)	(-0.61)	(5.60)	(4.56)	(-1.65)	(-1.93)
Constant	-0.0071	0.098***	0.072**	0.14***	0.011	0.071**	0.027***	0.026***
	(-0.15)	(2.71)	(2.22)	(5.22)	(0.19)	(2.09)	(3.87)	(2.97)
IMR	0.0013	0.0013	0.0022	0.0012	-0.0050	-0.0038	0.00050	0.00049
	(0.39)	(0.53)	(0.99)	(0.64)	(-1.32)	(-1.63)	(1.08)	(0.81)
Year and Industry	YES	YES	YES	YES	YES	YES	YES	YES
Observations	12041	12039	12041	12039	12041	12039	12041	12039
Pseudo R2	0.133	0.257	0.124	0.252	0.226	0.297	0.0716	0.0734

Panel D: Deal-specific topics (cont.)

	Deal Financing		Global Location		Production & Operation		Contract	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Tar Public	0.0069**	0.00067	-0.0033**	-0.0016	-0.0020	0.00024	-0.0011	0.00092
	(1.98)	(0.34)	(-1.98)	(-1.46)	(-1.14)	(0.19)	(-1.28)	(1.29)
Tar US	0.0055	0.0033	-0.022***	-0.020***	-0.0052**	-0.0051***	-0.00044	0.00064
	(1.39)	(1.50)	(-11.60)	(-15.83)	(-2.57)	(-3.68)	(-0.44)	(0.79)
Stock%	0.023***	0.0092***	-0.00048	-0.00034	0.0020	0.0017	-0.0015	-0.0016
	(4.74)	(3.30)	(-0.20)	(-0.22)	(0.78)	(0.96)	(-1.23)	(-1.54)
Samesic2	0.0014	0.0042**	-0.0020	-0.00079	0.0017	0.0033***	-0.0011	-0.00051
	(0.42)	(2.27)	(-1.29)	(-0.76)	(1.01)	(2.80)	(-1.38)	(-0.76)
Deal Value/Acq ME	-0.0045	-0.0027	0.0063***	0.00095	-0.0019	-0.0028**	0.00080	0.00085
	(-1.32)	(-1.43)	(3.83)	(0.89)	(-1.09)	(-2.32)	(0.94)	(1.23)

ln(AT)Acq	0.0028** (2.04)	0.0032*** (4.13)	0.00069 (1.05)	-0.000100 (-0.23)	0.00090 (1.28)	-0.00046 (-0.94)	0.00027 (0.79)	0.00021 (0.77)
Book Lev.Acq	-0.033*** (-3.33)	-0.00079 (-0.14)	0.017*** (3.66)	0.012*** (3.75)	-0.017*** (-3.44)	-0.011*** (-3.22)	0.0022 (0.88)	0.0063*** (3.13)
MTB Acq	0.00044 (0.99)	-0.0000034 (-0.01)	0.000034 (0.16)	-0.000076 (-0.54)	0.00029 (1.25)	0.00014 (0.92)	0.00018 (1.62)	0.00012 (1.35)
ROA Acq	-0.013 (-1.04)	-0.0042 (-0.59)	-0.0047 (-0.77)	-0.0032 (-0.81)	-0.0087 (-1.34)	-0.0044 (-0.99)	-0.0031 (-0.97)	0.0018 (0.69)
RD Acq	-0.093*** (-3.84)	-0.083*** (-6.04)	-0.067*** (-5.75)	-0.054*** (-7.10)	-0.038*** (-3.07)	-0.037*** (-4.32)	0.0080 (1.33)	0.012** (2.47)
D(Ind Board)Acq	0.011*** (3.69)	0.0052*** (3.04)	0.0014 (0.98)	-0.00072 (-0.76)	-0.0000067 (-0.00)	0.0014 (1.30)	0.00023 (0.30)	0.00038 (0.61)
Inst.Own% Acq	-0.017*** (-2.98)	-0.013*** (-4.16)	-0.0016 (-0.60)	0.0026 (1.46)	0.0023 (0.80)	0.00021 (0.11)	0.00058 (0.41)	0.00077 (0.67)
ln(1+N.Analyst) Acq	-0.0015 (-0.46)	-0.0072*** (-3.95)	0.0027* (1.74)	0.00084 (0.82)	0.0023 (1.41)	0.00092 (0.80)	-0.0011 (-1.38)	-0.0012* (-1.88)
Constant	0.035 (0.98)	0.031 (1.56)	0.013 (0.76)	0.022** (1.99)	0.00045 (0.02)	0.013 (1.09)	0.0047 (0.53)	0.0035 (0.49)
IMR	-0.0029 (-1.23)	-0.0028** (-2.04)	0.0014 (1.19)	0.0011 (1.52)	-0.00034 (-0.28)	-0.000071 (-0.08)	0.00044 (0.73)	0.0010** (2.12)
Year and Industry	YES	YES	YES	YES	YES	YES	YES	YES
Observations	12041	12039	12041	12039	12041	12039	12041	12039
Pseudo R2	0.414	0.326	0.170	0.253	0.0537	0.131	0.0584	0.114

Table 6: Deal completion and M&A call decision

This table reports the regression results of an indicator for the completed deals on the decision of holding scheduled calls by the acquirer, controlling for deal and acquirer characteristics, announcement year, and the acquirer's and target's (one-digit SIC) industry. The sample for the left panel contains all the acquisitions made by public firms from 2004 to 2016. The sample for the middle (right) panel contains the subsample of deals involving the private (public) target. The first column of each panel reports the OLS regression result, and the second (third) column reports the first (second) stage result in a 2SLS regression setting, where the indicator of holding scheduled call is instrumented by the acquirer's call history – the indicators of holding call and not holding calls for the past deals. The first stage F-statistics is reported at the bottom. An intercept is included but not reported. T-statistics are reported using robust standard errors. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

<i>Sample: Specification:</i>	Deal Completion								
	<i>Full Sample</i>			<i>Private Target</i>			<i>Public Target</i>		
	<i>OLS</i>	<i>IV Reg</i>		<i>OLS</i>	<i>IV Reg</i>		<i>OLS</i>	<i>IV Reg</i>	
		<i>1st Stage</i>	<i>2nd Stage</i>		<i>1st Stage</i>	<i>2nd Stage</i>		<i>1st Stage</i>	<i>2nd Stage</i>
Call [Sch, Acquirer]	0.060*** (7.40)		0.077*** (6.82)	0.035*** (8.69)		0.046*** (4.38)	0.12*** (4.39)		0.14*** (4.67)
Tar Public	-0.074*** (-4.56)	0.089*** (8.09)	-0.077*** (-8.05)						
Tar US	0.035*** (4.52)	0.016** (2.27)	0.035*** (5.14)	0.024** (2.53)	0.0045 (0.64)	0.024*** (3.60)	0.091*** (6.81)	0.11*** (4.23)	0.087*** (3.34)
Stock%	0.021 (1.80)	0.085*** (5.88)	0.019* (1.68)	0.010 (0.54)	0.091*** (5.37)	0.0089 (0.66)	0.022 (1.81)	0.088*** (3.14)	0.019 (0.84)
Same SIC2	-0.011 (-1.72)	0.013** (2.20)	-0.011** (-2.15)	-0.0095 (-1.23)	0.014** (2.32)	-0.0098* (-1.78)	-0.033** (-2.46)	0.019 (0.85)	-0.035** (-2.02)
DealVal/AcqME	-0.054*** (-3.74)	0.21*** (14.23)	-0.058*** (-5.12)	-0.011 (-0.62)	0.22*** (11.86)	-0.014 (-1.08)	-0.12*** (-4.57)	0.16*** (6.51)	-0.12*** (-5.62)
ln(AT)Acq	-0.00039 (-0.19)	-0.0060** (-2.47)	-0.00033 (-0.13)	-0.0011 (-0.62)	-0.0046* (-1.95)	-0.0010 (-0.41)	0.0026 (0.49)	-0.014 (-1.60)	0.0028 (0.37)
Book Lev.Acq	-0.023 (-0.65)	-0.047*** (-2.84)	-0.022 (-1.34)	-0.019 (-0.61)	-0.046*** (-2.87)	-0.018 (-1.07)	-0.015 (-0.18)	-0.036 (-0.53)	-0.013 (-0.23)
MTB Acq	-0.0033*** (-3.51)	-0.00015 (-0.16)	-0.0033*** (-3.35)	-0.0025** (-2.99)	-0.00022 (-0.24)	-0.0025** (-2.53)	-0.0049** (-2.59)	0.00070 (0.23)	-0.0049* (-1.72)
ROA Acq	0.056* (2.04)	0.085*** (3.53)	0.054** (2.26)	0.047 (1.35)	0.076*** (3.13)	0.046* (1.94)	0.12 (1.85)	0.22** (2.31)	0.12 (1.21)

RD Acq	0.028 (1.13)	0.28*** (5.09)	0.021 (0.48)	0.036 (1.08)	0.28*** (5.06)	0.032 (0.71)	0.18 (1.30)	0.23 (1.17)	0.17 (0.98)
D(Ind Board)Acq	0.013* (1.93)	0.017*** (2.88)	0.013** (2.41)	0.011 (1.72)	0.011* (1.91)	0.011** (2.00)	0.016 (1.64)	0.044** (2.17)	0.015 (0.95)
Inst.Own% Acq	-0.0026 (-0.29)	0.063*** (6.02)	-0.0038 (-0.38)	0.020* (1.92)	0.040*** (3.97)	0.019* (1.86)	-0.073 (-1.54)	0.19*** (4.70)	-0.078** (-2.43)
ln(1+N.Analyst) Acq	-0.0037 (-0.61)	0.031*** (5.41)	-0.0045 (-0.81)	-0.0092 (-1.71)	0.028*** (5.04)	-0.0097* (-1.78)	0.021 (1.03)	0.049** (2.23)	0.018 (0.94)
D[Past Deal Call]		0.61*** (42.23)			0.68*** (40.94)			0.47*** (14.16)	
D[Past Deal No Call]		-0.076*** (-9.03)			-0.071*** (-8.43)			-0.098*** (-3.38)	
Year and Industry	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	12041	12041	12041	10125	10125	10125	1916	1916	1916
1st Stage F-statistics		1531.3		0.020	1293.4		0.094	314.6	
Adjusted R-squared	0.034		0.018			0.002			0.052

Table 7: Deal completion and topic length in each segment of M&A calls

This table reports the second-stage results from Heckman regressions of an indicator for deal completion on the length of topics in each segment of the M&A calls, controlling for deal and acquirer characteristics, year and (one-digit SIC) industries, and the Inverse Mills' Ratio (IMR) from the first-stage selection equation that is shown in the fourth column of Table 4. The sample of the left two columns contains the scheduled calls hosted by a US public acquirer, and that of the middle (right) two columns contains the subsample of deals involving the private (public) target. The same set of control variables as Table 6 (excluding the instrument variables) are included but not reported. In the parentheses, we report the t-statistics based on Heckman (1979) standard errors. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

<i>Sample: Segment:</i>	Deal completion					
	<i>Full sample</i>		<i>Private</i>		<i>Public</i>	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Business Complementarities	0.0072 (1.32)	-0.0099 (-1.20)	0.010* (1.83)	0.011 (1.31)	0.0075 (0.71)	-0.025 (-1.58)
Disclaimer	-0.015 (-1.37)	0.012 (1.00)	-0.0033 (-0.27)	0.010 (0.84)	-0.033 (-1.56)	0.015 (0.62)
Fina. Projection Outcomes	0.0039 (0.58)	0.012 (1.02)	0.0011 (0.15)	0.00062 (0.05)	0.0084 (0.64)	0.016 (0.67)
General Comments	0.0058 (0.67)	0.025* (1.70)	-0.0020 (-0.21)	0.015 (1.06)	0.0073 (0.44)	0.033 (1.14)
Fina. Projection Assumptions	0.0072 (0.74)	0.014 (1.09)	-0.0037 (-0.34)	0.019 (1.37)	0.027 (1.56)	0.017 (0.65)
Growth	-0.0072 (-0.81)	-0.0066 (-0.51)	0.0056 (0.59)	-0.0028 (-0.21)	-0.029* (-1.72)	-0.010 (-0.39)
Process	-0.026*** (-3.33)	-0.043*** (-3.69)	-0.0043 (-0.46)	-0.013 (-1.04)	-0.058*** (-4.16)	-0.085*** (-3.87)
Team, Labor, & Culture	0.0036 (0.83)	0.014** (2.08)	-0.0051 (-1.09)	-0.0022 (-0.36)	0.016* (1.82)	0.030*** (2.70)
Customer	0.0039 (0.71)	0.0042 (0.50)	0.0016 (0.28)	0.00098 (0.12)	-0.00048 (-0.04)	-0.00024 (-0.01)
Technology	-0.0015 (-0.35)	0.0061 (0.97)	0.0028 (0.69)	0.0023 (0.40)	-0.0037 (-0.43)	0.020 (1.49)
Ownership & Control	-0.00024 (-0.03)	-0.012 (-0.99)	-0.0067 (-0.67)	-0.018 (-1.48)	0.011 (0.58)	0.0013 (0.05)
Deal Financing	-0.00081 (-0.15)	-0.0078 (-1.08)	-0.00018 (-0.03)	0.0024 (0.32)	0.00026 (0.03)	-0.025* (-1.78)
Global	0.0026 (0.42)	-0.0057 (-0.66)	0.0039 (0.62)	-0.0039 (-0.46)	0.0043 (0.33)	-0.0069 (-0.42)
Production & Operation	-0.0030 (-0.54)	0.00059 (0.08)	-0.0038 (-0.67)	-0.0019 (-0.26)	-0.0074 (-0.69)	0.0043 (0.32)
Contract	0.0022 (0.31)	0.0063 (0.69)	-0.0062 (-0.83)	-0.014 (-1.61)	0.020 (1.43)	0.038** (2.25)

Inverse Mill's Ratio	-0.0019 (-0.23)	0.00052 (0.06)	-0.00044 (-0.06)	0.00064 (0.09)	-0.016 (-0.75)	-0.0033 (-0.14)
Deal and Acq Characteristics	YES	YES	YES	YES	YES	YES
Year and Industry	YES	YES	YES	YES	YES	YES
Observations	12041	12041	10125	10125	1916	1916
Pseudo R2	0.0532	0.0582	0.0260	0.0241	0.0622	0.0790

Table 8: Acquirer's market reactions and M&A call decisions

This table reports the regression results of the acquirer's market reactions around the deal announcement on the decision of holding scheduled calls by the acquirer, controlling for deal and acquirer characteristics, year, and (one-digit SIC) industry. The sample for Panel A contains all the deals made by US public acquirers from 2004 to 2016. The left three columns show the OLS regression results, and the fourth column (right three columns) shows the first (second) stage result in a 2SLS regression setting, where the indicator of holding a scheduled call is instrumented by the acquirer's call history – the indicators of holding calls and not holding calls for the past deals. Panel B shows the subsample results among the deals involving the private and public targets. The first stage F-statistics is reported at the bottom. An intercept is included but not reported. T-statistics are reported using robust standard errors. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

Panel A: Full sample of acquisitions made by US public firms

	OLS Regressions			1st Stage	IV Regressions		
	CAR [-1, +1]	CAR [-1, +5]	CAR [-5, +5]		CAR [-1, +1]	CAR [-1, +5]	CAR [-5, +5]
Call [Sch. Acquirer]	0.0082*** (4.47)	0.010*** (6.47)	0.0088*** (8.10)		0.0038 (1.19)	0.0061 (1.55)	0.0036 (0.83)
Tar Public	-0.016*** (-12.24)	-0.016*** (-9.87)	-0.015*** (-6.27)	0.087*** (7.76)	-0.016*** (-8.35)	-0.015*** (-6.50)	-0.014*** (-5.51)
Tar US	0.00016 (0.15)	-0.00087 (-1.10)	-0.0019* (-1.92)	0.014* (1.95)	0.00025 (0.19)	-0.00078 (-0.45)	-0.0018 (-0.89)
Stock%	-0.0088** (-2.77)	-0.012** (-2.28)	-0.011 (-1.58)	0.081*** (5.57)	-0.0084*** (-3.02)	-0.012*** (-3.23)	-0.011*** (-2.71)
Same SIC2	0.0050*** (5.03)	0.0060** (3.24)	0.0054** (2.73)	0.015** (2.46)	0.0051*** (4.41)	0.0061*** (4.04)	0.0055*** (3.24)
DealVal/AcqME	0.012** (2.91)	0.0078* (1.89)	0.0098* (2.16)	0.21*** (13.73)	0.013*** (4.15)	0.0089** (2.29)	0.011*** (2.80)
ln(AT)Acq	-0.0016*** (-3.40)	-0.0026*** (-4.53)	-0.0027*** (-3.99)	-0.0058** (-2.34)	-0.0016*** (-3.50)	-0.0026*** (-4.38)	-0.0027*** (-3.92)
Book Lev.Acq	0.0019 (0.35)	0.0034 (0.53)	-0.0022 (-0.38)	-0.043*** (-2.61)	0.0016 (0.47)	0.0031 (0.68)	-0.0026 (-0.52)
MTB Acq	0.000022 (0.13)	-0.00046** (-2.72)	-0.00055** (-2.99)	-0.00050 (-0.53)	0.000017 (0.10)	-0.00046** (-2.06)	-0.00055** (-2.08)
ROA Acq	-0.0023 (-1.64)	-0.0029 (-0.45)	0.0015 (0.19)	0.096*** (3.89)	-0.0019 (-0.29)	-0.0025 (-0.29)	0.0021 (0.22)
RD Acq	-0.062*** (-3.48)	-0.072*** (-3.66)	-0.072*** (-3.52)	0.28*** (4.93)	-0.060*** (-5.03)	-0.071*** (-4.40)	-0.070*** (-3.89)

D(Ind Board)Acq	-0.0011 (-1.01)	-0.0025 (-1.64)	-0.0027 (-1.63)	0.015** (2.51)	-0.0011 (-0.98)	-0.0024* (-1.70)	-0.0026 (-1.62)
Inst.Own% Acq	-0.0031** (-3.16)	-0.0025 (-1.22)	-0.0037* (-1.84)	0.058*** (5.49)	-0.0028 (-1.31)	-0.0022 (-0.78)	-0.0033 (-1.05)
ln(1+N.Analyst) Acq	0.00043 (0.68)	0.0012 (1.12)	0.0014 (0.98)	0.030*** (5.09)	0.00063 (0.56)	0.0014 (0.95)	0.0016 (0.97)
D[Past Deal Call]				0.62*** (41.98)			
D[Past Deal NoCall]				-0.079*** (-9.15)			
Year and Industry	YES	YES	YES	YES	YES	YES	YES
Observations	11618	11618	11610	11618	11618	11618	11610
1st Stage F-statistics				1531.3			
Adjusted R-squared	0.035	0.027	0.021		0.023	0.016	0.011

Panel B: Subsamples of private and public deals

Sample: Specification:	CAR [-1, +5]					
	Private Target			Public Target		
	OLS	IV Reg 1st Stage	2nd Stage	OLS	IV Reg 1st Stage	2nd Stage
Call [Sch. Acquirer]	0.013*** (11.55)		0.0095** (2.07)	-0.0011 (-0.30)		-0.010 (-1.40)
Tar US	-0.00094 (-0.95)	0.0031 (0.43)	-0.00092 (-0.50)	-0.0023 (-0.81)	0.11*** (3.88)	-0.0010 (-0.20)
Stock%	-0.0019 (-0.32)	0.091*** (5.33)	-0.0015 (-0.30)	-0.020* (-2.10)	0.076*** (2.65)	-0.020*** (-3.32)
Same SIC2	0.0048** (3.10)	0.014** (2.28)	0.0049*** (2.94)	0.0091 (1.76)	0.030 (1.33)	0.0096** (2.43)
DealVal/AcqME	0.023*** (4.42)	0.22*** (11.25)	0.024*** (4.49)	-0.020*** (-4.36)	0.17*** (6.68)	-0.018*** (-3.51)
ln(AT)Acq	-0.0023*** (-5.29)	-0.0052** (-2.20)	-0.0023*** (-3.62)	-0.0048** (-3.27)	-0.010 (-1.13)	-0.0049*** (-3.00)
Book Lev.Acq	0.00037 (0.09)	-0.043*** (-2.67)	0.00011 (0.02)	0.040 (1.78)	-0.027 (-0.40)	0.039*** (2.96)
MTB Acq	-0.00045**	-0.00050	-0.00045*	-0.00061	-0.00020	-0.00062

	(-2.28)	(-0.55)	(-1.81)	(-1.23)	(-0.06)	(-1.22)
ROA Acq	-0.0016	0.085***	-0.0013	0.023	0.24**	0.026
	(-0.19)	(3.43)	(-0.14)	(1.22)	(2.45)	(1.04)
RD Acq	-0.069***	0.28***	-0.068***	-0.10*	0.23	-0.097**
	(-4.22)	(4.88)	(-3.96)	(-2.05)	(1.13)	(-2.20)
D(Ind Board)Acq	-0.0028*	0.0091	-0.0028*	0.0016	0.044**	0.0019
	(-1.86)	(1.56)	(-1.80)	(0.56)	(2.14)	(0.54)
Inst.Own% Acq	0.0020	0.036***	0.0022	-0.013	0.18***	-0.011
	(0.92)	(3.58)	(0.75)	(-1.84)	(4.42)	(-1.41)
ln(1+N.Analyst) Acq	0.00063	0.028***	0.00078	0.0042	0.040*	0.0049
	(0.51)	(4.99)	(0.50)	(1.68)	(1.79)	(1.22)
D[Past Deal Call]		0.68***			0.48***	
		(40.40)			(13.87)	
D[Past Deal NoCall]		-0.073***			-0.11***	
		(-8.42)			(-3.61)	
Year and Industry	YES	YES	YES	YES	YES	YES
Observations	9810	9810	9810	1808	1808	1808
Adjusted R-squared	0.027		0.018	0.080		0.021
1st Stage F-Statistics		1273.5			311.8	

Table 9: Acquirer's market reactions to deal announcement and topic length

This table reports the second-stage results from Heckman regressions of the acquirer's market reactions around deal announcement on the length of topics in each segment of the M&A calls, controlling for deal and acquirer characteristics, year, and (one-digit SIC) industries, and the Inverse Mills' Ratio (IMR) from the first-stage selection equation that is shown in the fourth column of Table 4. The sample contains all the scheduled calls made by acquirers from 2004 to 2016. The same set of control variables as in Table 8 (excluding instrument variables) are included but not reported. In the parentheses, we report the t-statistics based on Heckman (1979) standard errors. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

<i>Segment:</i>	CAR1[-1 +1]		CAR1[-1 +5]		CAR1[-5 +5]	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Business Complement.	-0.0039** (-2.17)	-0.0059** (-2.17)	-0.0038* (-1.78)	-0.0053 (-1.63)	-0.0036 (-1.53)	-0.0043 (-1.22)
Disclaimer	0.0051 (1.37)	-0.00071 (-0.18)	0.0056 (1.26)	-0.0075 (-1.60)	0.0066 (1.35)	-0.0074 (-1.44)
Fina. Proj. Outcomes	0.0025 (1.16)	0.0013 (0.34)	0.0029 (1.09)	0.0043 (0.91)	0.0032 (1.10)	0.0086* (1.66)
General Comments	0.0061** (2.13)	0.0093* (1.93)	0.0082** (2.38)	0.0088 (1.53)	0.012*** (3.11)	0.012* (1.95)
Fina. Proj. Assumptions	0.00022 (0.07)	0.0025 (0.58)	-0.0021 (-0.54)	-0.0013 (-0.24)	-0.0032 (-0.77)	-0.0037 (-0.66)
Growth	-0.0022 (-0.77)	-0.000029 (-0.01)	-0.0021 (-0.60)	0.00043 (0.08)	-0.0013 (-0.34)	0.00027 (0.05)
Process	-0.0045* (-1.76)	-0.0015 (-0.40)	-0.0059* (-1.89)	0.0025 (0.55)	-0.0066* (-1.94)	0.00089 (0.18)
Team, Labor, & Culture	-0.0025* (-1.77)	-0.0054** (-2.41)	-0.0022 (-1.28)	-0.0054** (-2.00)	-0.0042** (-2.21)	-0.0071** (-2.39)
Customer	-0.0022 (-1.20)	-0.0054** (-1.97)	-0.0013 (-0.61)	-0.0042 (-1.26)	-0.0010 (-0.42)	-0.0034 (-0.93)
Technology	-0.0051*** (-3.69)	-0.0060*** (-2.91)	-0.0050*** (-3.02)	-0.0058** (-2.31)	-0.0064*** (-3.49)	-0.0066** (-2.40)
Ownership & Control	-0.00025 (-0.08)	-0.0028 (-0.68)	0.0028 (0.74)	0.0027 (0.54)	0.0023 (0.55)	0.0043 (0.80)
Deal Financing	0.0041** (2.27)	0.0012 (0.52)	0.0056** (2.54)	0.0051* (1.78)	0.0035 (1.45)	0.0052* (1.67)
Global	0.0059*** (2.85)	0.0075*** (2.64)	0.0033 (1.32)	0.0044 (1.29)	0.0042 (1.53)	0.0047 (1.25)
Production & Operation	0.00020 (0.11)	0.0014 (0.58)	0.00023 (0.11)	0.00032 (0.11)	-0.0012 (-0.52)	-0.0043 (-1.34)
Contract	0.0021 (0.89)	0.0040 (1.33)	-0.00046 (-0.16)	0.0021 (0.59)	0.0024 (0.76)	0.0029 (0.73)
Inverse Mill's Ratio	0.0035 (1.30)	0.0026 (0.97)	0.0030 (0.92)	0.0017 (0.53)	0.0017 (0.47)	0.00044 (0.12)
Deal and Acq Character.	YES	YES	YES	YES	YES	YES
Year and Industry	YES	YES	YES	YES	YES	YES
Observations	11937	11938	11937	11938	11936	11937
Pseudo R2	0.125	0.120	0.107	0.106	0.0888	0.0915

Table 10: Acquirer's market reactions to M&A calls and topic length

This table reports the second-stage results from Heckman regressions of the acquirer's market reactions to the M&A calls on the length of topics in each segment of the M&A calls, controlling for deal and acquirer characteristics, year, and (one-digit SIC) industries, and the Inverse Mills' Ratio (IMR) from the first-stage selection equation that is shown in the fourth column of Table 4. The sample contains all the calls scheduled on day after the deal announcement date and hosted by the acquirer. The dependent variables include the acquirer's cumulative abnormal returns after the M&A calls. The same set of control variables as in Table 8 (excluding instrument variables) are included but not reported. In the parentheses, we report the t-statistics based on Heckman (1979) standard errors. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

<i>Segment:</i>	CAR [+1]		CAR [+1, +2]		CAR [+2, +5]	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Business Complement.	-0.0083*** (-2.69)	-0.0039 (-0.80)	-0.019*** (-2.79)	-0.0085 (-0.80)	-0.053*** (-2.94)	-0.039 (-1.36)
Disclaimer	-0.0024 (-0.37)	-0.0058 (-0.80)	-0.0076 (-0.55)	-0.010 (-0.67)	-0.028 (-0.74)	-0.031 (-0.74)
Fina. Proj. Outcomes	0.0091** (2.37)	0.014** (1.97)	0.019** (2.30)	0.028* (1.79)	0.055** (2.45)	0.076* (1.86)
General Comments	0.012** (2.18)	0.025*** (2.80)	0.025** (2.14)	0.052*** (2.71)	0.082** (2.57)	0.14*** (2.73)
Fina. Proj. Assumptions	-0.0057 (-0.96)	-0.0044 (-0.55)	-0.0094 (-0.74)	-0.0096 (-0.57)	-0.022 (-0.63)	-0.026 (-0.58)
Growth	-0.0023 (-0.41)	-0.010 (-1.29)	-0.012 (-1.01)	-0.025 (-1.43)	-0.062* (-1.86)	-0.078* (-1.67)
Process	-0.00070 (-0.15)	-0.0023 (-0.35)	-0.00042 (-0.04)	-0.0046 (-0.32)	0.0027 (0.10)	-0.0013 (-0.03)
Team, Labor, & Culture	-0.0041 (-1.54)	-0.015*** (-3.73)	-0.0061 (-1.07)	-0.029*** (-3.41)	-0.0016 (-0.10)	-0.071*** (-3.18)
Customer	-0.0013 (-0.38)	-0.0011 (-0.24)	-0.0023 (-0.33)	-0.00076 (-0.07)	-0.0063 (-0.33)	0.00064 (0.02)
Technology	-0.0082*** (-3.07)	-0.016*** (-3.96)	-0.014** (-2.46)	-0.031*** (-3.69)	-0.024 (-1.51)	-0.069*** (-3.05)
Ownership & Control	-0.0059 (-1.05)	0.0069 (0.94)	-0.011 (-0.89)	0.019 (1.22)	-0.027 (-0.82)	0.054 (1.28)
Deal Financing	0.0015 (0.48)	-0.00097 (-0.23)	0.0061 (0.92)	0.00021 (0.02)	0.028 (1.57)	0.012 (0.48)
Global	0.0077* (1.87)	0.0015 (0.26)	0.014 (1.54)	-0.0031 (-0.25)	0.028 (1.15)	-0.024 (-0.72)
Production & Operation	0.0076** (1.97)	0.0032 (0.61)	0.017** (1.99)	0.0091 (0.79)	0.035 (1.55)	0.020 (0.67)
Contract	0.0050 (1.22)	0.0065 (1.25)	0.0083 (0.94)	0.010 (0.89)	0.0080 (0.33)	0.019 (0.63)
CAR1[-1, 0] Acquirer	0.51*** (16.77)	0.51*** (16.42)	1.01*** (15.33)	0.99*** (14.87)	2.21*** (12.29)	2.04*** (11.56)
Inverse Mill's Ratio	-0.0011 (-0.26)	-0.0015 (-0.35)	-0.0023 (-0.24)	-0.0032 (-0.35)	-0.013 (-0.52)	-0.021 (-0.83)
Deal and Acq. Character.	YES	YES	YES	YES	YES	YES
Year and Industry	YES	YES	YES	YES	YES	YES
Observations	10129	10129	10129	10129	10129	10129
Pseudo R2	0.503	0.506	0.460	0.463	0.371	0.368

Table 11: Acquirer's market reactions to calls and topic length in subsamples

This table reports the subsample results for the same specification as in Table 10. Panel A reports the results among the private deals, and Panel B reports the results among the public deals.

Panel A: Subsample of private deals

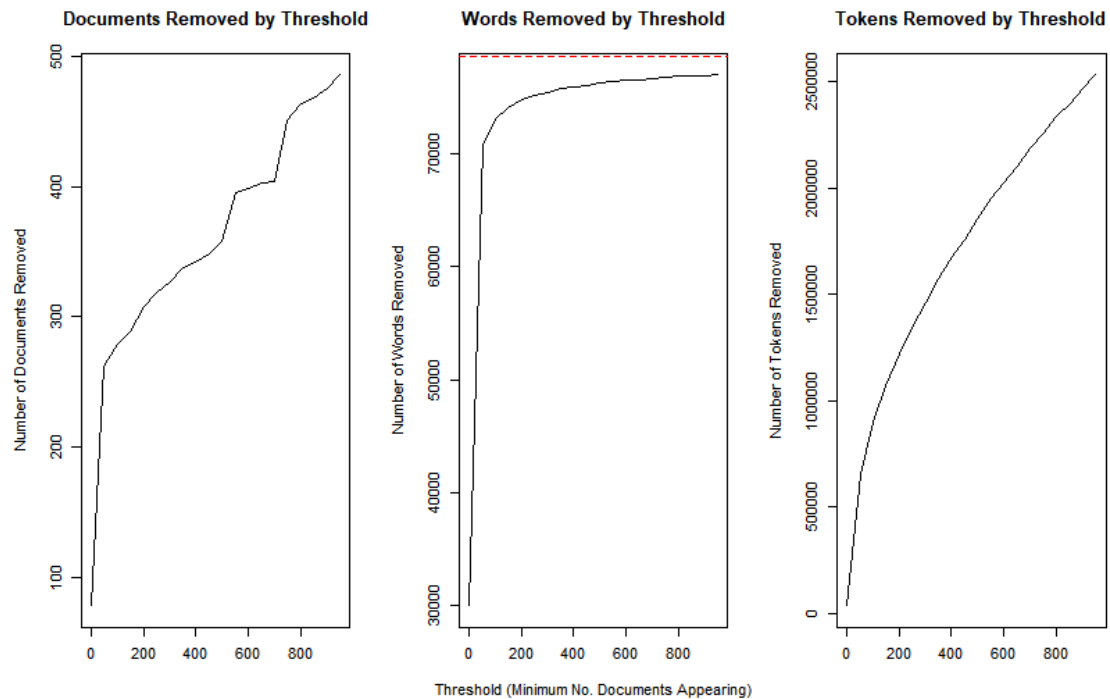
<i>Segment:</i>	CAR1[+1]		CAR1[+1, +2]		CAR1[+2, +5]	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Business Complement.	-0.010*** (-2.61)	-0.0041 (-0.69)	-0.022*** (-2.60)	-0.0079 (-0.60)	-0.063*** (-2.58)	-0.041 (-1.13)
Disclaimer	0.0028 (0.36)	-0.015* (-1.81)	0.0054 (0.32)	-0.035* (-1.88)	0.015 (0.30)	-0.095* (-1.83)
Fina. Proj. Outcomes	0.0098** (1.99)	0.0052 (0.65)	0.021** (1.99)	0.011 (0.66)	0.064** (2.08)	0.057 (1.18)
General Comments	0.013* (1.93)	0.024** (2.33)	0.032** (2.10)	0.056** (2.50)	0.12*** (2.70)	0.17*** (2.69)
Fina. Proj. Assumptions	-0.0090 (-1.18)	0.0060 (0.65)	-0.018 (-1.11)	0.0079 (0.39)	-0.048 (-1.00)	-0.011 (-0.19)
Growth	0.00047 (0.07)	-0.0097 (-1.11)	-0.0076 (-0.52)	-0.023 (-1.22)	-0.048 (-1.14)	-0.057 (-1.08)
Deal Process	-0.0043 (-0.71)	-0.0089 (-1.09)	-0.0097 (-0.73)	-0.019 (-1.04)	-0.026 (-0.69)	-0.031 (-0.62)
Team, Labor, & Culture	-0.0039 (-1.27)	-0.0090** (-2.15)	-0.0065 (-0.95)	-0.018** (-1.98)	-0.0040 (-0.21)	-0.050** (-1.97)
Customer	0.00080 (0.21)	-0.0026 (-0.47)	0.0025 (0.29)	-0.0025 (-0.21)	0.0056 (0.23)	-0.0015 (-0.05)
Technology	-0.0095*** (-3.27)	-0.016*** (-4.07)	-0.018*** (-2.85)	-0.034*** (-3.93)	-0.040** (-2.23)	-0.083*** (-3.44)
Ownership & Control	-0.013* (-1.82)	0.015* (1.86)	-0.024 (-1.54)	0.034* (1.91)	-0.060 (-1.33)	0.083* (1.66)
Deal Financing	0.0042 (1.03)	0.0026 (0.48)	0.012 (1.29)	0.0065 (0.56)	0.038 (1.47)	0.020 (0.63)
Global Location	0.0067 (1.42)	-0.0095 (-1.39)	0.010 (0.99)	-0.028* (-1.90)	0.015 (0.51)	-0.079* (-1.91)
Production & Operation	0.0099** (2.19)	0.0080 (1.34)	0.021** (2.09)	0.019 (1.46)	0.043 (1.54)	0.036 (1.01)
Contract	0.0095** (1.97)	0.012** (2.01)	0.020* (1.90)	0.024* (1.93)	0.043 (1.44)	0.058 (1.64)
CAR1[-1, 0] Acquirer	0.53*** (14.55)	0.54*** (14.94)	1.04*** (13.15)	1.05*** (13.45)	2.28*** (10.09)	2.19*** (10.03)
Inverse Mill's Ratio	-0.0032 (-0.69)	-0.0042 (-0.91)	-0.0056 (-0.54)	-0.0078 (-0.78)	-0.019 (-0.65)	-0.030 (-1.09)
Deal and Acq. Character.	YES	YES	YES	YES	YES	YES
D[Past Deal Call]	NO	NO	NO	NO	NO	NO
D[Past Deal NoCall]	NO	NO	NO	NO	NO	NO
Observations	8893	8893	8893	8893	8893	8893
Pseudo R2	0.487	0.493	0.439	0.450	0.335	0.333

Panel B: Subsample of public deals

<i>Segment:</i>	CAR1[+1]		CAR1[+1 +2]		CAR1[+2 +5]	
	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>
Business Complementarities	-0.0077 (-1.55)	-0.0013 (-0.18)	-0.017* (-1.70)	-0.0048 (-0.32)	-0.047** (-2.13)	-0.0099 (-0.30)
Disclaimer	-0.0016 (-0.16)	0.011 (1.03)	-0.0027 (-0.14)	0.024 (1.07)	0.0016 (0.04)	0.051 (1.03)
Financial Projection Outcomes	0.0062 (1.07)	0.012 (1.05)	0.014 (1.21)	0.031 (1.27)	0.047* (1.83)	0.059 (1.11)
General Comments	0.011 (1.27)	0.027* (1.81)	0.021 (1.23)	0.047 (1.54)	0.045 (1.19)	0.067 (1.01)
Financial Projection Assumptions	0.0030 (0.36)	-0.0092 (-0.72)	0.010 (0.61)	-0.020 (-0.78)	0.026 (0.71)	0.0049 (0.09)
Growth	-0.011 (-1.17)	-0.0041 (-0.31)	-0.028 (-1.47)	-0.0043 (-0.16)	-0.096** (-2.34)	-0.039 (-0.66)
Deal Process	0.0039 (0.62)	0.0052 (0.48)	0.0094 (0.73)	0.018 (0.82)	0.030 (1.05)	0.072 (1.48)
Team, Labor, & Culture	-0.0085* (-1.83)	-0.019*** (-3.40)	-0.015 (-1.63)	-0.035*** (-3.08)	-0.024 (-1.17)	-0.070*** (-2.77)
Customer	-0.0096* (-1.77)	-0.0064 (-0.79)	-0.018 (-1.61)	-0.0093 (-0.56)	-0.033 (-1.37)	-0.027 (-0.73)
Technology	-0.0012 (-0.27)	-0.011* (-1.69)	-0.0014 (-0.16)	-0.020 (-1.47)	0.010 (0.53)	-0.026 (-0.87)
Ownership & Control	0.0031 (0.41)	-0.016 (-1.13)	0.0014 (0.09)	-0.033 (-1.18)	-0.010 (-0.30)	-0.062 (-1.00)
Deal Financing	-0.0025 (-0.62)	0.00089 (0.13)	-0.0047 (-0.58)	0.00100 (0.07)	-0.0022 (-0.12)	0.0084 (0.28)
Global Location	0.0065 (0.94)	0.022** (2.53)	0.015 (1.08)	0.043** (2.48)	0.039 (1.26)	0.070* (1.81)
Production & Operation	0.0050 (0.81)	-0.012* (-1.72)	0.010 (0.81)	-0.025* (-1.69)	0.019 (0.68)	-0.047 (-1.47)
Contract	0.0073 (1.06)	-0.00050 (-0.06)	0.0087 (0.62)	-0.0095 (-0.61)	0.0091 (0.30)	-0.036 (-1.06)
CAR1[-1 0] Acquirer	0.48*** (8.60)	0.45*** (8.54)	0.92*** (8.21)	0.87*** (8.05)	1.88*** (7.64)	1.78*** (7.45)
Inverse Mill's Ratio	-0.0035 (-0.42)	-0.0031 (-0.35)	-0.0066 (-0.39)	-0.0058 (-0.32)	-0.022 (-0.60)	-0.021 (-0.51)
Deal and Acq. Characteristics	YES	YES	YES	YES	YES	YES
D[Past Deal Call]	NO	NO	NO	NO	NO	NO
D[Past Deal NoCall]	NO	NO	NO	NO	NO	NO
Observations	1236	1236	1236	1236	1236	1236
Pseudo R2	0.575	0.586	0.553	0.565	0.523	0.527

Appendix Figure A1: Number of documents, terms, and words removed in preprocessing

This figure shows the influence of the last step of our preprocessing of raw data, which excludes the terms that appear in less than N documents. Three sub-figures below show the number of documents, the number of unique terms, and the number of words that would be removed by setting the threshold N at different levels. We eventually choose $N=50$, which balances computational efficiency and the number of documents preserved.



Appendix Table A1: Summary of outcomes of the topic model

This table reports the summary statistics of the probability weights obtained from the topic model. For each document, we rank the 20 topics based on the corresponding probabilities. We refer to the topic with the highest probability as the Top 1 topic, and to the topics with the highest three (five) probabilities as the Top 3 (5) topics. We calculate the cumulative probabilities for Top 3 and 5 topics and report the summary statistics of the (cumulative) probabilities of Top 1, Top 3, and Top 5 topics among all the documents.

	N. Document	Mean	Min	Q1	Median	Q3	Max
Prob.Top1	186765	0.386	0.092	0.268	0.352	0.458	0.988
Cum.Prob.Top3	186765	0.654	0.266	0.567	0.652	0.736	0.992
Cum.Prob.Top5	186765	0.771	0.406	0.712	0.775	0.833	0.994

Appendix Table A2: Call decisions and shareholder voting

This table reports the OLS regression results of the decision to hold the scheduled M&A conference calls by the acquirer. The main independent variables include (1) an indicator of the likelihood for the acquirer firm to have shareholder voting on the deal, namely an indicator that share issuance associated with the deal exceeds 20% of the acquirer's shares outstanding, and (2) an indicator of EPS dilution assuming zero deal synergy, namely an indicator that the exchange ratio exceeds the ratio of the target's and acquirer's pre-merger EPS (see Dasgupta, Harford, and Ma (2019)). We control for the same set of deal and firm characteristics as in column 3 of Table 4. The sample for the first two columns includes all the acquisitions made by a US public acquirer with non-zero share issuance. The sample for next two columns contains the deals between two US public firms with non-zero share issuance. The sample for the last two columns includes the stock and mixed deals between two US public firms with non-missing information on exchange ratio and EPS. In columns 2, 4, and 6, we control for the fixed effect of deal announcement year as well as the acquirer's and target's (one-digit SIC) industries. T-statistics are reported using the robust standard errors in columns 1, 3, and 5, and the standard errors clustered on the acquirer industry levels in columns 2, 4, and 6. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

<i>Sample:</i>	M&A Call (scheduled, acquirer-hosted)					
	<i>Share Issue>0</i>				<i>Stock & Mixed Deals</i>	
	<i>Acquirer=US & Pub</i>	<i>Both=US & Pub</i>	<i>Both=US & Pub</i>	<i>Both=US & Pub</i>	<i>Both=US & Pub</i>	<i>Both=US & Pub</i>
D (Share Issue>20%)	0.085*** (2.83)	0.078*** (6.62)	0.068* (1.66)	0.052** (2.63)		
D (Immediate Dilutive)					0.075 (1.60)	0.098** (2.47)
Deal Characteristics	YES	YES	YES	YES	YES	YES
Acquirer Characteristics	YES	YES	YES	YES	YES	YES
Acquirer Call History	YES	YES	YES	YES	YES	YES
Year and Industry FE	NO	YES	NO	YES	NO	YES
Observations	2387	2387	866	866	430	430
Adjusted R-squared	0.304	0.315	0.240	0.249	0.226	0.246

Appendix Table A3: Comparison of topic weights between deals requiring shareholder votes or not

This table reports the mean of each topic weights in the subsamples of deals involving share issuance more than (less than) 20% of the acquirer's shares outstanding, the difference in the mean topic weights between two subsamples, and the t-tests on it. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively. The last column indicates the potential reason for certain topics to present a larger weight in the subsample of deals that are likely to require acquirer shareholder voting, namely the deals with share issuance more than 20%.

<i>Sample:</i>	Presentation Segment				Q&A Segment				Comment
	<i>0<Issue<20%</i>	<i>Issue>20%</i>	<i>Diff</i>	<i>T-stat</i>	<i>0<Issue<20%</i>	<i>Issue>20%</i>	<i>Diff</i>	<i>T-stat</i>	
Business Complementarities	0.1740	0.2340	-0.060***	(-5.719)	0.0500	0.0620	-0.013***	(-4.118)	Source of Synergy
Disclaimer	0.3150	0.2390	0.076***	(4.413)	0.0150	0.0170	-0.002**	(-2.135)	EPS Impact
Financial Proj. Outcomes	0.1270	0.1510	-0.024***	(-3.345)	0.0390	0.0440	-0.006***	(-3.279)	
General Comments	0.0260	0.0280	-0.002	(-0.775)	0.1900	0.1800	0.010**	(2.208)	
Financial Proj. Assumptions	0.0160	0.0190	-0.003*	(-1.724)	0.1050	0.1110	-0.007*	(-1.852)	
Growth	0.0210	0.0200	0.001	(0.817)	0.0850	0.0750	0.010***	(4.177)	Vote for Completion
Deal Process	0.0190	0.0280	-0.009***	(-4.428)	0.0610	0.0840	-0.023***	(-7.601)	
Team Labor, & Culture	0.0550	0.0510	0.005	(0.769)	0.0900	0.0890	0.001	(0.100)	
Customer	0.0320	0.0390	-0.007*	(-1.669)	0.0670	0.0570	0.010***	(2.907)	
Technology	0.0640	0.0480	0.016**	(2.454)	0.0600	0.0410	0.019***	(4.539)	Split of Synergy
Ownership & Control	0.0080	0.0100	-0.002*	(-1.736)	0.0210	0.0240	-0.003***	(-2.683)	
Deal Financing	0.0700	0.0620	0.009	(1.232)	0.0520	0.0530	-0.001	(-0.323)	
Global Location	0.0130	0.0150	-0.002	(-1.008)	0.0210	0.0180	0.003**	(2.133)	
Production & Operation	0.0120	0.0120	0.000	(0.014)	0.0160	0.0150	0.001	(0.498)	Deal Terms
Contract	0.0090	0.0100	-0.001	(-0.977)	0.0130	0.0150	-0.002*	(-1.656)	
Num. Calls	497	383	880		483	367	850		

Appendix Table A4: Topic weights and pre-call abnormal returns

This table reports the results from the second stage of Heckman regression of the topic weights in each call segment on the acquirer's abnormal stock return from one day before deal announcement to the end of the announcement day, controlling for deal and acquirer characteristics, deal announcement year, acquirer's and target's (one-digit SIC) industries, and the Inverse Mills Ratio (IMR) from the first-stage selection equation that is shown in the fourth column of Table 4. The sample contains the M&A calls held by the acquirer on the day following the deal announcement date. The same set of deal and firm characteristics as in Table 4 are included but not reported. Panel A includes the topics that are more prevalent in the presentation segment, Panel B includes the topics more prevalent in the Q&A segment, and Panel C and D include the topics that are balanced across segments and are likely to be deal-specific. In the parentheses, we report the t-statistics based on Heckman (1979) standard errors. *, **, and *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

Panel A: Presentation-dominant topics

<i>Segment:</i>	Business Complementarities		Disclaimer		Financial. Projection Outcomes	
	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>
CAR [-1, 0] Acquirer	0.017 (1.08)	0.037 (0.57)	-0.012* (-1.78)	0.054 (0.34)	0.0024 (0.21)	-0.029 (-0.56)
Inverse Mills Ratio	0.00064 (0.28)	0.0031 (0.33)	-0.00017 (-0.17)	0.0023 (0.10)	-0.0016 (-1.01)	0.0027 (0.37)
Deal Characteristics	YES	YES	YES	YES	YES	YES
Year and Industry	YES	YES	YES	YES	YES	YES
Observations	10129	10129	10129	10129	10129	10129
Pseudo R2	0.172	0.151	0.194	0.120	0.173	0.122

Panel B: Q&A-dominant topics

<i>Segment:</i>	General Comments		Financial Projection Assumptions		Growth		Deal Process	
	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>
CAR [-1, 0] Acquirer	0.061** (2.13)	0.020 (1.26)	-0.043* (-1.92)	0.0083 (0.79)	-0.013 (-0.70)	0.022* (1.94)	0.013 (0.72)	0.0096 (0.86)
Inverse Mills Ratio	0.0022 (0.53)	-0.0036 (-1.59)	-0.00059 (-0.18)	-0.00063 (-0.42)	0.0015 (0.57)	0.0013 (0.78)	0.0050** (1.98)	0.0019 (1.18)
Deal Characteristics	YES	YES	YES	YES	YES	YES	YES	YES
Year and Industry	YES	YES	YES	YES	YES	YES	YES	YES
Observations	10129	10129	10129	10129	10129	10129	10129	10129
Pseudo R2	0.221	0.177	0.247	0.215	0.217	0.120	0.235	0.165

Panel C: Deal-specific topics

<i>Segment:</i>	Team, Labor, & Culture		Customer		Technology		Ownership & Control	
	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>
CAR [-1, 0] Acquirer	-0.0019 (-0.05)	-0.039 (-0.84)	-0.000079 (-0.00)	-0.0029 (-0.09)	-0.023 (-0.80)	-0.080* (-1.76)	-0.0090 (-0.94)	-0.0096 (-1.36)
Inverse Mills Ratio	0.0011 (0.24)	0.000034 (0.01)	-0.0021 (-0.59)	0.0026 (0.55)	-0.0078* (-1.96)	-0.0092 (-1.43)	-0.0010 (-0.75)	0.00013 (0.13)
Deal Characteristics	YES	YES	YES	YES	YES	YES	YES	YES
Year and Industry	YES	YES	YES	YES	YES	YES	YES	YES
Observations	10129	10129	10129	10129	10129	10129	10129	10129
Pseudo R2	0.279	0.176	0.368	0.192	0.383	0.292	0.156	0.260

Panel D: Deal-specific topics (cont.)

<i>Segment:</i>	Deal Financing		Global Location		Production & Operation		Contract	
	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>	<i>Q&A</i>	<i>PRE</i>
CAR [-1, 0] Acquirer	-0.0034 (-0.17)	-0.028 (-0.72)	0.0033 (0.36)	-0.0019 (-0.15)	-0.013* (-1.72)	-0.0019 (-0.17)	0.024*** (2.82)	0.037*** (3.24)
Inverse Mills Ratio	-0.00047 (-0.17)	0.0019 (0.35)	0.00040 (0.31)	-0.0010 (-0.58)	0.00086 (0.81)	-0.00040 (-0.26)	0.0013 (1.09)	-0.000074 (-0.05)
Deal Characteristics	YES	YES	YES	YES	YES	YES	YES	YES
Year and Industry	YES	YES	YES	YES	YES	YES	YES	YES
Observations	10129	10129	10129	10129	10129	10129	10129	10129
Pseudo R2	0.508	0.490	0.315	0.250	0.348	0.173	0.177	0.144

Appendix B: Document examples for each topic

We provide representative documents with high weights on each topic. The words with the highest probabilities within each topic have been highlighted.

Topic 1 Business Complementarities

I'm also pleased with how the **complementary strengths** of our companies and technology platforms and **services** will **enable rapid strategic** expansion into molecular diagnostics and environmental detection markets, throughout **robust global** commercial and **services** channel

In **summary**, I **believe** this acquisition is the right move for Caliper and its **unique** opportunity for its **customers** and **employees**. We have a **shared vision** for **successfully** innovating life **science discovery** to **improve** the **health** and safety of people and the environment, and I am personally **excited** to become part of this **unique** opportunity, and to help Rob take PerkinElmer to the next level.

Topic 2 Global

-Hi, me again. I wonder if you could tell us more about the **geographies** you think are most interesting with the Foster Wheeler deal. You mention **Latin America** and growth **regions** in general. What spots in **particular** do you **see** where Amec isn't as **strong** as you like and Foster Wheeler fills the gap for you?

-Well, if I can go through the **world**, first I start from the **West** towards the **East**. If I go with the Americas, so they have a good **position** in **Mexico** and **also** in Colombia, which we do not have. If I move to **Europe**, they have in **Finland** and **Italy**, which we do not have. If I move to the **Middle East**, they have a good **position** in Saudi, which we do not have a very **strong position**, as you know, there. Now **also moving east**, so they have a high-value **engineering center** in **India**. They have a lot of people in Thailand. They have **also** enhancing our **position** in **China**.

Topic 3 Conjunction of Q&A

Right, right, yes, I **understand** that. So, I'm **saying** but like (**multiple speakers**) -- After that adjustment, there hasn't been much of a change. That's **right**.

Topic 4 Production of Operation

-Dr Chao, just wondering in terms of the **manufacturing facility** that you have, and they have, there's no way of **rationalizing** theirs. Is there any way to **site transfer** or--in essence is Andrx as we see it standalone with their **manufacturing** always going to be standalone **separate** from your **sites**?

-Andrx has a specialized sustained release technology development program as well as state of art of **manufacturing facility** with sustained release **product** and **using** their technology. We **intend** to **continue** operating the **facility**, strengthen it as **product** pipeline begin to grow in **sustaining** these **product** [INAUDIBLE]. Watson **currently** has a programming **rationalize** Puerto Rico **facility**, **moving** the **products** to [Camo], **New** York and [Corna], **California**. This **addition facility** will be third **facility**, will be the **center** of actions of a sustained release **product manufacturing**. We **intend** to **keep** it.

Topic 5 Growth

-Can you **give** us a sense of what this company has been growing, its **revenue growth** and its **EBITDA growth**, over the **last couple years**?

-We can give you revenue growth. It's been mid-single-digits, mid to high single-digits. It's probably high single-digits.

Topic 6 General Comments

-And then is there any progress there? What's the opportunity?

-There's lots of progress there and there's still a lot of opportunities. I think they were smart to do that. I think going out and getting people that understand the technology and the direction. That want to be part of it, invest in it. I think that's a good model. So, I think what they've done in the past we would continue to do and look for other people that would make investments. And if it's viable you're going to get more people that want to invest.

Topic 7 Ownership & Control

[Example 1]

-But they do have interest bearing liabilities of several tens of billions?

-I'll leave it up to your imagination.

And your last question about 20% TOB in relation to TTML. Minority shareholders--there's a scheme to protect the minority shareholders in the listed companies in India. Now TTML's shares, as you point out, TTSL owns 38% of TTML shares currently. And also, Tata Group companies also own shares. So more than 60% of the TTML shares are in the hands of Tata Group, meaning that they have management control.

But we have invested in TTML--TTSL, rather, and we have significant influence. So, therefore, I think we can exercise control over TTML which is part of Tata Group. So we have a group of shareholders that control TTML and DoCoMo is going to be part of that investor group going forward. So the scheme to protect TTML minority shareholders, that structure base is going to change, and that is why, based on the local regulations, there has to be an open offer, and the minimum block is 20% . So, therefore, we have to make an open offer to acquire up to 20% as the minimum obligation under the local securities regulations. Now, together with Tata Group, we will be making a joint open offer. Now the distribution between the burden, it is not yet determined between the two groups, but we're talking about JPY20b at the aggregate--as the aggregate amount required.

[Example 2]

-This is Luis Amusategui from [Signus] Asset Management. I have a question -- two questions in fact. First one, in relation to the flexibility of the conditionality of your Offer, both in terms of the voting rights and the majority of shares, would you be considering -- increasing the level of flexibility of that and maybe accepting the Offer, even if there's no removal of the Bylaws? Or is there a scenario where you would say, there is no way, we will definitely say no? Now is there any scenario that can completely rule out at this point?

The second one was in relation to the alternative of disposals or potential share issues. Would you consider relisting Endesa shares? You feel more comfortable with a listed Endesa or an unlisted Endesa? Could you elaborate a bit on that point?

-First, there is potentially the chance to remove those conditions but we are not intending to do so. We are clearly targeting for removal of the voting rights limitations and we are also targeting for a majority

in the **Company** to be able to determine, together with the **Endesa** management, its future. And, **therefore**, no plan to **change** that.

Second one was -- Delisting of **Endesa**, there are no plans to do so.

Topic 8 Technology

We're not exiting. We **address** this market in ways which best leverage our strengths.

We do this in 2 ways. First, IBM provides the back-end **hardware**, **software**, and **services infrastructure** required to **interface** to the proliferation of **devices**. Second, we **address** this market at the **component** level. We're seeing a **convergence** of **devices** in **home** which we believe will be at the **component** level. And our **power architecture** is the key player in this **space**.

As you know, we're **providing processors** to all of the leading game **machine** manufacturers. And we continue to expand on our success in this area. Our announcements last week on the Cell **Processor** and Power.org, an open-standard community around **chips** and **systems** which use **power architecture technology**, are 2 good **examples** of proliferation of the **power architecture**.

Topic 9 Closing of Q&A

-Okay. That's **great**. **Thanks** for all of your **time**.

-Okay. **Thanks**, **Chris**.

-Thank you all for **dialing** in on such **short notice**. We **appreciate** your **support** and I'm around all **day**, so give me a **call** if you have any follow-up **questions**. **Take care** and have a **nice holiday**. Bye-bye.

Topic 10 Opening of Q&A

-**Good morning**, **everyone**, and **congratulations** on the transaction.

-**Good morning**, **Chuck**.

Topic 11 Financial Projections Assumptions

[Example 1]

-Okay, and longer-term, then, the **margin profile**--is this a 20% **operating margin type** business, **longer term**?

-Well, I **think** the business has **got** a **pretty** attractive **margin profile** broadly, and **certainly** as you **look** at the **gross margins** of Intervoice in the 50% to 55% **range**, those are **pretty** attractive **numbers**. I **think** the long-term **margin profile** **depends** on how much you can **scale** the business. And with that **kind** of **gross margin**, **obviously** the **better** we do on the **scale side**, the more we can **drive gross margins**.

[Example 2]

-I got you. I **guess** if I just had a **look** at the 10 **million** in **revenue**, 72 **percent gross margins**, SG & amp; A and R & amp; D **operating expenses** of 60 **percent**, I mean, that **kind** of **gets** you to **like** a **breakeven** 1 or 2 **cents kind** of **EPS number accretion**. Just on the **operating expense side**, is that a fair **assumption** to **assume** that they're doing **around 6 million** in **expenses**? **Operating expenses**?

-I do not have those numbers in front of me, Kevin, but I can tell you that they are breakeven now and they have been breakeven. For us, again, we will guide if it is going to be accretive at all in the second half of this year. We have guided that it is going to be very nicely additive in 2005.

Topic 12 Deal Financing

[Example 1]

-You said that the \$1.4 billion in secured loans that is going to fund the cash portion of the acquisition, and then you're going to refinance a portion of both companies' debt?

-We are going to refinance all of Quintana's debt, except for the new buildings, and we're going to partially refinance our own loan obligations.

[Example 2]

-Yes, hi. Just a couple of clarifications surrounding capital structure. You're talking about a new unsecured credit facility and also issuing some notes. Are you then refinancing both credit facilities at both Allied risk and Republic? And secondly, I know you did mention that there won't be any secured debt following the transaction, just by way of clarification, does that mean that all the existing Allied senior notes which have the BFI assets as collateral will no longer have those assets as collateral following the completion of the transaction.

-This is Ed Lang, first comment on the bank facilities, Republic will put into place a new senior unsecured bank facility that will meet the working capital and letter of credit needs for the merged company. So essentially the two existing bank facilities will go away. And second is with the termination of Allied's secured bank facility, plus the investment grade rating, all of the debt outstanding will be unsecured and treated equally including the BFI notes that are outstanding.

Topic 13 Process

[Example 1]

-Did you consider a strategic buyer, a competitor, rather than going private?

-I'll respond to that question. As part of this process, the Board of Directors formed a special committee of the disinterested members or the independent shareholders. Through that process, they reviewed a lot of different strategic alternatives for the Company. As a result of that process, it was determined by the Strategic Committee of the Board and the full Board, which unanimously approved this agreement, that this represented the best transaction for RAE stockholders.

[Example 2]

-Just in terms of the process of this combination, could you give us a little bit more information as to how that came about? Who engaged who? Did Sound management go through a strategic review process or engage any other potential suitors?

-Well, we announced in May that we were seeking strategic alternatives. We engaged FirstEnergy to act as our agent. FirstEnergy went through a process where we had beta rooms open for four to five weeks, and interested parties were invited to bid. So it was a very open bidding process.

[Example 3]

-I just **wanted** to follow up. You are expecting this **deal** to **close** within a short **period** time, within 90 **days**. I just **wanted** to **make** sure that you're not foreseeing any kind of **issues** between now and then. Is there **anything** that we should be **aware** of between now and the **close**, within 90 **days**, that could prevent the **deal** from **closing**?

-Now, there is the customary **closing conditions**. At this point, we don't see **anything** that will prevent **closing**.

Topic 14 Contract

[Example 1]

-Good morning. What has--does Dow Chemical have a right of first **refusal** as far as its **joint venture** with NOVA? Or does INEOS have a similar **contractual arrangement**? How do the various **joint ventures** of NOVA go forward under this offer?

-They really don't **change**. The **contractual relationships** between the new **ownership** and those companies remain exactly the same because, again, NOVA is an **ongoing** company they've **acquired** in all of its **agreements**. If we had a **specific agreement** that would **change** on a basis to **change** of **control**, it would have an impact.

[Example 2]

-Can you **disclose** like what the **termination fee** and what the **breakup fee** is?

-The **termination fee** is a **customary** 3%, the **breakup fee** is a **customary** 3 %.

Topic 15 Names³¹

-Hi, **guys**.

-Hey, **Jay**.

-Hey, **Jay**.

Topic 16 Customer

-Sure. I was just asking a question about the **channel** growth for Diedrich. Is it **mostly** in **grocery stores**? Are you going with **mass channels** or other **channels**?

-So Diedrich's **primary business** now is in the **retail** non-grocery, which would be some of the department in **stores** and **mass** merchandisers that also carry the **Keurig brewers**. That's a significant **portion**. They also **sell** a **large portion** online and a **large segment** of their **business** is through office **coffee distributors**. They have almost no **business** in **grocery stores**, very **small**.

Topic 17 Team, Labor & Culture

³¹ This topic picks up person names that repeatedly appear in conference call conversations and does not have an economically meaningful theme. We have dropped it in our regression analysis. This topic only accounts for very small proportion (1.1% on average) of the conference calls.

-Are their radiologists, are they compensated better than NightHawk radiologists? Or is there going to be an issue in retaining some of these doctors?

-I don't anticipate any issues in retaining the doctors. No, I think, again, both are compensated well, and as a radiologist, it's my job, responsibility, et cetera, to make sure things are fair and work well for the radiologists. The radiologists are the foundation of what we do, it's their reports that are critical and as such, it's important that we recruit highly competent people, and with both the Radlinx doctors, the TDS doctors and our other doctors whom are all now NightHawk doctors it's incumbent upon us to make them compensated fairly and well.

Topic 18 Disclaimer

Now I would like to draw your attention to our Safe Harbor statement. Information in today's presentation contains certain statements and predictions that constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act. In particular any statements, projections, or estimates that include or reference the words believes, anticipates, plans, intends, expects, will, or any similar expressions while within the safe harbor for forward-looking statements contained in the Reform Act. Actual results or outcomes may differ materially from those indicated or suggested by any such forward-looking statements. More information on potential risks and uncertainties is available in the Company's recent filings with the Securities and Exchange Commission including Cincinnati Bell's annual Form 10-K report, quarterly Form 10-Q reports, and Form 8-K reports.

This presentation also contains certain non-GAAP financial measures. Reconciliations of these non-GAAP measures to the most directly comparable GAAP measures are included in our presentation. The forward-looking statements made on this conference call represent the Company's estimate as of May 13, 2010. The Company anticipates that subsequent events and developments will cause its estimates to change.

With that I am pleased to introduce Cincinnati Bell's President and Chief Executive Officer, Jack Cassidy.

Topic 19 Financial Projection Outcomes

As a result of the acquisition, Sonus expects incremental revenue of approximately \$15 million to \$20 million in the second half of fiscal 2012, with the amount recognized dependent on the timing of the completion of the acquisition. Achievement of \$15 million in revenue is expected to have a dilutive impact on GAAP EPS of approximately \$0.03 per share in the second half of 2012, and a dilutive impact on non-GAAP EPS of approximately \$0.01 per share in the same period.

Achievement of \$20 million in revenue is expected to have a dilutive impact on GAAP EPS of \$0.02 per share in the second half of 2012, and a breakeven to slightly accretive impact on non-GAAP EPS in the same period. Non-GAAP EPS excludes certain expenses, including, but not limited to acquisition-related costs, stock-based compensation, and amortization of intangible assets. As Patti mentioned, Sonus is currently in a quiet period, and we will not be providing a financial update to our 2012 outlook, nor will we comment on NET's financial outlook at this time. Now, I will turn the call back over to Ray.

Topic 20 Miscellaneous³²

[Example 1]

-Cazenove. A couple of questions. Just on the ownership, are there any put or call options in terms of being able to change ownership down the road?

And secondly, in terms of the use of cash, you talk about investing it in the broadband business. Can you just expand a bit more about that? You mentioned our next generation network, I think that is still very much core network as opposed to pushing out broadly the access element at all?

-Again, there is no put and call. A 50/50 venture again as partners looking into the long-term, but there's no short-term relationship for either party. So that's very much aligned on a 50-50 arrangement and to the long-term future.

I think in terms of it is a process in terms of the telco business, I think what we're saying today is we continued our guidance that we gave only two or three weeks ago in terms of the capital investment, and we are putting it into our telco business for the year ahead. As you will all recall, we obviously said we are investing more in our telco asset and building up the reliability and the robustness of that. Nothing has changed as a result of today's announcement. We will continue that investment program as already estimated for the year ahead. And that is really all we're saying in terms of our future investment in that.

[Example 2]

-But now I am confused, because you are saying that Rick was selling to the OEMs, and you are saying you are selling to the dealers. So in your new go to market sales model, are you deemphasizing selling to OEMs? Or how do you balance? Is there a change there? Are you going to be able to sell more of the traditional Dealertrack, legacy Dealertrack to the OEMs?

-No. So look, perhaps I am confusing you a bit. It wasn't singular. Neither of us were singular, that we only sold to an OEM or only sold to a dealer. Where I would say there was particular strength was in the OEM relationships. I mean, Dealer.com has much broader OEM relationships in the digital marketing arena.

In, obviously, the transaction financing arena, we have terrific OEM relationships, so they very much complement each other. There is no question, they had a sales force, they called on dealers. They called on dealers with a more singular solution than the broader solution that we go to market with. So it is not that we didn't see each other on the dealer side. It is just--I am trying to downplay it, because you are suggesting that was really a battle head-to-head. That was not very often the case.

³² This topic picks up the miscellaneous issue and does not present a coherent theme, as could be seen from the two examples shown here. We have dropped it in our regression analysis. This topic only accounts for very small proportion (1.3% on average) of the conference calls.