Fixed Income Conference Calls

Gus De Franco
A.B. Freeman School of Business
Tulane University
gdefranc@tulane.edu

Thomas Shohfi
Lally School of Management
Rensselaer Polytechnic Institute
shohft@rpi.edu

Da Xu
A.B. Freeman School of Business
Tulane University
dxu5@tulane.edu

Zhiwei (Vivi) Zhu
A.B. Freeman School of Business
Tulane University
zzhu4@tulane.edu

March 2020

We thank Pengkai Lin, Bohan Song, and Roger White for helpful comments. We appreciate the financial support of Rensselaer Polytechnic Institute and Tulane University. All errors are our own.

Fixed Income Conference Calls

Abstract

We study the determinants and informational role of firms' fixed-income conference calls, a unique form of voluntary disclosure that deviates from traditional multi-purpose firm disclosures that serve all stakeholders. We find that fixed income calls are more likely to occur for firms with more and varied debt, with lower intangible assets, with greater book-market ratios, and with negative news. In a content analysis, compared with a matched sample of firm-year earnings conference calls, we find that fixed income calls discuss fixed income subjects, in particular debt-equity conflict events such as share repurchases, to a greater degree. The fixed income calls discuss more financial and quantitative information. These calls also have a more negative tone. The executive team hosting these calls more likely consists of a combination of CFO, Chief Accounting Officer, and Treasurer than the more typical team of CEO and CFO found on earnings conference calls. Analysts at insurance companies, who almost exclusively invest in debt, are more likely to participate in fixed income calls. Last, we document that the bond and equity markets react to these calls, consistent with these calls providing new information to public investors. Overall, these results are generally consistent with the idea that fixed income calls meet the differential informational demands of debt versus equity investors.

JEL Classifications: G12, G14, G32, M49

Keywords: conference calls, corporate bonds, corporate debt, debt-equity conflict events, debt investors, fixed income, bond market reaction, bond volume

Fixed Income Conference Calls

1. Introduction

Public and private firms critically rely on corporate debt as a source of funding. In 2018, U.S. firms issued $1.34 trillion of corporate debt—an amount that is six times greater than the $221 billion of U.S. equity issuance (SIFMA, 2019). Given debt's economic importance, it is not surprising that a large literature studies debt in a myriad of ways. Examples include the decision to issue debt (Jung et al., 1996; Badoer and James, 2016), the structure of debt contracts (Barclay and Smith, 1995; Hackbarth et al., 2007; Vig, 2013), the pricing of debt (Datta et al., 1999; Fortin and Pittman, 2007), the actions of debt investors (Green, 2004), as well as more contemporary topics such as the role of sell-side debt analysts (Johnston et al., 2009; De Franco et al., 2014; Gurun et al., 2015). Firms' mandatory and voluntary disclosures, in contrast, often provide a rich set of information that traditionally serves multiple purposes with no intentional delineation between different stakeholders, such as debt and equity investors.

More recently, some firms have started conducting fixed income conference calls that augment the long established tradition of multi-purpose earnings conference calls. In this study, we examine the determinants and informational role of these fixed-income conference calls (FI calls, hereafter). We posit that firms that holds FI calls must expect that the information demands of debt investors are sufficiently different from the information in other types of firm disclosures, such as earnings conference calls, and that providing this information is important enough to justify the additional management effort and other costs associated with conducting these FI calls. This underlying idea motivates our analyses.

We expect the informational demands of debt investors to differ from equity investors in three fundamental ways. First, debt investors have greater demand for fixed-income specific

information, in particular for potential firm decisions that could lead to a wealth transfer from debt to equity investors. These types of wealth-transfer events include mergers (Billett et al., 2004), share repurchases (Maxwell and Stephens, 2003), spinoffs (Maxwell and Rao, 2003), and buyouts (Asquith and Wizman, 1990). Second, debt investors may require current information to help monitor, understand, and value a debt contract. For example, covenants included in debt contracts can require firms to meet certain financial ratios and allow firms to pay an interest rate conditional on firm performance. Third, debt investors, with their fixed claims against the business, demand negative information to a greater degree because of their asymmetric payoff function. Debt investors have limited upside when firms perform well but are more likely to suffer losses when firms experience poor performance. While we expect that firms in general would be trying to satisfy the informational demands of debt investors through their traditional disclosures (e.g., SEC filings, press releases, and earnings conference calls), we examine the situations in which these informational demands are more prominent, and hence are more likely to result in a targeted conference call in which management can address debt investors' questions more directly.

We first examine which firms conduct fixed income conference calls. Capital IQ, the source of our data, identifies 1,256 fixed income conference calls, held by over 300 unique global firms over the period from 2009 to 2019. The locations of these firms span forty countries, with the United States, the United Kingdom, and Canada holding the majority of such calls. Firms represent a wide variety of industries, with the leading industries being Business Services, Depository Institutions, and Holding and Other Investment Offices. Firms typically hold calls twice a year. While we observe some clustering of FI calls around earnings announcements, the majority of calls are outside of the three-day earnings announcement window, and hence are distinct events.

Next we estimate a logit model at the firm-year level that predicts which firms are more likely to have a FI call. As a benchmark analysis we use the same independent variables to predict earnings calls for a sample of firms matched with our public FI call sample firms. We then analyze the relative differences in coefficients for the independent variables across the two FI call and earnings call prediction models. The inferences from these two approaches are highly similar. In terms of differential demand for information by debt investors relative to equity investors, we find support for our predictions. First, firms that have more and varied debt are more likely to host a FI call, consistent with debt investors' greater information demands to monitor and understand firms in these situations. Second, firms with less intangible assets and a greater book-market ratio are more likely to have a FI call relative to an earnings call. This result is consistent with debtholders' demand for more current-period information for firms in which growth options are less important, which translates to firms in which current-period information is more important and long-term information is less important. Third, firms with losses in the prior year are more likely to host a FI call, consistent with debtholder's demand for negative information.

In our second analysis, we investigate the contents of FI calls. Our focus is on a matched sample of earnings conference calls held by public firms within one year of the FI call dates. FI calls use more debt-related words than earnings calls. In particular, consistent with debt investors' interest in management's actions that could transfer wealth between debt and equity investors, FI calls are more likely to discuss these debt-equity conflict events to a greater degree than earnings calls. We find mixed results to support the idea that debt investors demand more current-period information. In contrast to our prediction, FI calls provide less shorter-horizon information. Supporting our prediction, FI calls are more likely to include financial and quantitative information, which arises mainly from quarterly periodic reporting. The net tone of the discussion

is more negative for FI calls, reinforcing the idea that debt investors demand more negative news.

The senior managers hosting FI calls also differ from senior managers present for earnings calls and support the idea that FI call audiences demand debt-specific and current-period information to a greater degree. CFOs, and in particular CEOs, are less likely to attend FI calls. Chief Accounting Officers and Treasurers are much more likely to attend FI calls, consistent with greater demand for accounting information that is reported quarterly and for the communication of short-term liquidity plans. Last, buy-side analysts are more than five times more likely to ask a question and hence appear on FI calls compared with earnings calls. In particular, buy-side analysts from insurance companies, who almost exclusively invest in debt, appear much more frequently.

In our last analysis, to determine whether FI calls are informative to public investors, we test whether FI calls evoke short-window market reactions. Our evidence indicates that both the debt and equity markets react significantly to these FI calls. About 3.14 more debt trades occur during the event period. Given that the average number of institutional trades during the non-event window is about 23.75 trades per day, it suggests that investors make a significantly higher number of trades surrounding the dates of fixed income calls. Similarly, 0.05% more of the total value of the company's outstanding bonds exchange hands daily during the event window, representing a 26.3% relative increase or $12.5 million more trading of debt outstanding per day. Equity of firms holding FI calls is also traded 24.8% more daily during the 3-day event window. Our findings that the bond and equity markets react to FI calls suggest that fixed income calls convey material information to public investors.

To the best of our knowledge, our study is the first to examine FI calls. In doing so, we contribute to two strands of literature. First, while specific information in firm disclosures may be more important to one type of stakeholder compared with another (e.g., debt investors versus

equity investors), firms typically disclose all information broadly. Hence, FI calls that directly target debt investors, one economically important type of stakeholder, are quite novel. By documenting factors associated with the decisions of firms to hold FI calls, the contents of and the participants on FI calls, as well as the market reaction to the FI calls, our study provides evidence that these calls meet the differential informational demands of debt versus equity investors, which helps explain why firms deviate from multi-purpose disclosures. In the context of conference calls, the literature has established that calls impact equity trading (Bushee et al., 2004), reduce post-earnings announcement drift (Kimbrough, 2005), reveal managerial discrimination among analysts (Mayew, 2008), identify instances in which management deliberately withholds relevant information (Hollander et al., 2010), and demonstrate the value of analysts in questioning management (Matsumoto et al., 2011). Our study complements this literature. In particular, our study is more in the spirit of Kimbrough and Louis (2011), who examine conference calls held by bidders in M&A transactions. Both they and we study a specific type of conference call.

Second, we contribute to how debt investors react to corporate disclosures. Krinsky and Lee (1996), Shivakumar et al. (2011), and Kerr and Ozel (2015) examine the impact of earnings announcements and management forecasts on corporate debt and document significant reactions of credit markets to such announcements. We expand this literature by documenting that FI calls, a different and important voluntary disclosure, are informative for debt investors. Furthermore, our debt reaction results extends the current literature on equity market reactions to earnings conference calls (e.g., Bushee et al., 2003; Bushee et al., 2004; Kimbrough, 2005).

A caveat of our analysis is that while we document that FI calls are a global phenomenam, our tests are mainly focused on U.S. firms because for these firms we have access to the data necessary to conduct our tests. That said, while it is possible that our results may not hold for these

other countries, we have no reason to believe that the differential information demands of debtholders relative to shareholders are dramatically different in these other countries.

The next section develops our hypotheses. Section 3 describes the global sample and provides an analysis of the timing of FI calls relative to earnings announcements. In section 4, we model the determinants of FI calls. Section 5 documents the content of and the participants in FI calls. Section 6 provides event-study evidence of FI calls on financial markets. The last section concludes.

2. Hypothesis Development

2.1. Conference Call Literature

The increased use of conference calls over the past two decades has prompted numerous studies examining this voluntary disclosure channel. Tasker (1998) investigates the factors influencing a firm's decision to host a conference call and argues that firms with less-informative financial statements are more likely to host conference calls to resolve the information asymmetry problem between managers and outside shareholders. Similarly, Frankel, Johnson, and Skinner (1999) document that the characteristics associated with more disclosure, such as firm size, profitability, and analyst coverage, are also positively associated with conference calls. The majority of conference calls are 'Earnings' calls that occur immediately following firms' earnings announcements. The majority of public firms regularly hold such calls (National Investor Relations Institute 2016; Li et al. 2014).

Early research mainly focuses on the causes and consequences of conference calls. The evidence suggests that calls convey material information to the market as evidenced by increased equity trading and higher equity price volatility during the call period, reduced analyst and investor's underreaction to announced earnings, as well as more accurate analysts' forecasts

(Frankel et al., 1999; Bushee et al., 2003; Bushee et al., 2004; Kimbrough 2005; Bowen et al., 2002). Consistent with the idea that calls reduce long-term information asymmetry, firms that regularly host calls experience a lower cost of capital (Brown et al., 2004). A more recent literature dives deeper into the linguistic patterns used by participants. For example, managers' speech can be used to detect deceptive behaviors (Hobson et al., 2012; Larcker and Zakolyukina, 2012) or to measure manager's knowledge, optimism, or personality (Li et al. 2014; Davis et al., 2015; Green et al. 2018).

Conference calls can be incrementally informative over other disclosures, such as press releases, for a number of reasons. First, managers can release information not previously disclosed by other means during the presentation part of the call. Second, by delivering information vocally, Mayew and Venkatachalam (2012) argue and show that managers may be providing vocal cues that are incrementally informative to participants. Third, the interactive nature of the call, in which managers answer questions of call participants, such as analysts, can reveal new information. In support of this idea, Matsumoto et al. (2011) provide evidence that the Q&A portion of the call is more informative than the management presentation part of the call. Survey evidence (Brown et al, 2015) sheds further light on the informativeness of conference calls. For example, analysts rank earnings conference calls as the third most useful input for forecasting earnings behind their own knowledge and private communication with management.

2.2. Hypotheses

In many cases debtholders and equity investors will have similar information needs because, for example, they might perform similar tasks, such as forecasting next period's financial results or valuing the assets of the business. In which case, the traditional set of firms' mandatory and voluntary disclosures should be sufficient for both types of investors. Debtholders, however,

with their different payoffs and more detailed contracts with the firm, can have different information demands along some dimensions compared with equity investors. We argue that these differential information needs help explain which firms hold FI calls. Given the existence of a FI call, these differences also affect the topics discussed in the calls as well as the call participants.

2.2.1. Determinants of FI Calls. In our first set of hypotheses, we propose factors that proxy for the different information needs of debt and equity investors and are hence associated with a higher likelihood of having a FI call. To start, we expect debtholders to demand more specific information on debt securities. A larger amount of debt outstanding implies that debt is a relatively more important source of financing, and hence management is more likely to cater to the specific needs of debtholders. Relative to firms with less debt, firms with more debt have more debt contracts and are closer to financial distress. These factors lead to greater demand for monitoring of the firm by debtholders. Also, firms with more complex debt structures make this monitoring more challenging, which increases the demand for debt-specific information. These arguments lead to the following hypothesis:

H1a: The likelihood of a FI call is increasing in the firm's leverage and the number of different types of debt securities that the firm holds.

It is possible that even with the differential informational demands of debt investors, a FI call may not be necessary. Institutional investors, whether they be shareholders or debtholders, often have an opportunity to meet privately with managers or investor relations personnel (in person, on the phone, or have their emails answered), which is an alternative means to satisfy any unique information needs.

Next, we expect debt investors to value current information much more than equity holders. Debt investors use this information to monitor their investments. For example, debtholders will use recently-announced financial statement information to determine whether the firm has met its

debt covenants. As another example, for some bonds, the ability of a firm to pay dividends, conduct repurchases, or issue additional debt, can only occur if the firm achieves a minimum financial position. Further, current financial performance is critical to assessing the ability to pay future interest and principal, which assists in the valuation of their existing investments as well as in the decision to lend firms more money. Unlike equity securities that are often valued based on very long time horizons and never expire, debt securities have shorter durations and firms are often in a position where they must issue new debt or roll over existing debt (i.e., replacing expiring loans, bonds, or other types of debt with newer versions of the same debt instrument). In this determinants setting, we cannot test this greater demand for current information idea directly. Instead, we argue that investors will have greater demand for current-period information from those firms whose current information is economically more important relative to longer-term information. Hence, these types of firms are more likely to hold FI calls. We classify firms with less growth options as having more economically-important current information, and identify less growth option firms as those with lower intangible assets, lower sales growth, and a higher book-market ratio. Our hypothesis is:

H1b: The likelihood of a FI call is decreasing in the firm's intangible assets and sales growth and increasing in the firm's book-market ratio.

Note that this H1b hypothesis is not without tension for two reasons. First, while debt securities have shorter durations than equity securities, debt investors often hold their securities until they mature, which can translate into longer holding periods than a typical equity investor. For example, according to the Investment Company Factbook (2019), equity investors turnover 56% of portfolio assets annually. Second, our prediction is opposite to the traditional prediction found in the extant literature, which is that firms with more growth options are more likely to disclose. The basis of this traditional prediction is that high-growth firms have more information

asymmetry between managers and investors about the firm's longer-term prospects, which creates demand for more disclosure to reduce the asymmetry. For example, Tasker (1998) finds that conference calls are increasing in intangible assets and Frankel et al. (1999) document that the decision to hold a conference call is decreasing in the book-market ratio. Gelb (2003) and Green et al. (2014) also find a positive relationship between intangible assets and other forms of disclosure. These studies mainly take the perspective of equity investors. In our setting, if debt investors are indeed less longer-term orientated, they would care less about the information asymmetry associated with growth options. However, as discussed above, given that debtholders' perspective may not be as short-term as we predict because of their potentially longer holding periods, these information asymmetry issues could still be relevant for debtholders.

The third difference between debt and equity investors relates to the importance of bad news. Debtholders have greater demand for negative information because of their asymmetric payoff function. They have limited upside when firms perform well but are more likely to suffer losses when firms perform poorly. In addition, debt covenants are more likely to be violated in the presence of bad news, which creates more demand for monitoring by debtholders in these situations. Firms with losses proxy for the existence of bad news. Our hypothesis is:

H1c: The likelihood of a FI call increases for firms with losses.

2.2.2. Contents of FI Calls. In our second set of hypotheses, we extend the ideas above to predict the content of FI calls relative to that of earning calls. As calls are interactive, the topics and issues discussed reflect the choices of both managers and other participants, such as analysts.

Given the expected greater importance of fixed income information to debtholders, we expect FI calls to more likely discuss FI topics, such as interest rates, rating agencies, and different types of debt securities. In particular, we expect FI calls to contain more discussion of debt-equity

conflict events that could lead to the wealth transfer from debt to equity investors, such as share repurchases, capital expenditures, and asset sales. Our hypothesis is:

H2a: Relative to the content of earnings calls, FI calls are more likely to include fixed income and debt-equity conflict event words.

If debtholders have greater demand for current information compared with equity holders, then we would expect the FI call discussions to reflect that. Relative to earnings calls, FI calls should discuss topics that are more short-term orientated, such as quarterly financial performance, firm liquidity, and the impact of currency exchange rates. These predictions are consistent with debtholders' information demand to monitor the debt contracts. Furthermore, as financial information, in particular accounting information, plays an important role in debt contracting, we would also expect the FI calls to discuss financial information more often. Last, as a complementary idea, we expect FI call discussions to include more quantitative information because this information is mostly a result of quarterly reporting. Examples include the disclosure of financial accounting numbers, operating performance numbers, and the percentage change or difference between realized numbers compared with benchmarks, such as last year's results. Our hypothesis is:

H2b: Relative to the content of earnings calls, FI calls are more likely to include shorter-horizon, financial, and quantitative words.

As debtholders have greater demand for bad news than equity holders, we expect FI calls to reflect this preference. FI calls are more likely to emphasize the negative aspect of the topic or discuss topics in which there is a greater possibility of negative news. Our hypothesis is:

H2c: Relative to the content of earnings calls, FI calls are more likely to include negative tone words.

2.2.3. Participants of FI Calls. In our last set of hypotheses, we extend the arguments above

to predict who participates on the call. Previous studies document that conference call participants representing the firm typically include the CEO and CFO (Tasker, 1998), but may also include other senior managers, such as the CAOs (Mitsuda, 2019), COOs, CMOs, and IROs (Brochet et al. 2018). Given the expected demand for current information on FI calls, we are particularly interested in and predict that the CAO and Treasurer are more likely to appear on FI calls relative to earnings calls. As mentioned above, we expect more financial information to be discussed in FI calls. Further, the Treasurer is in the best position to discuss firm liquidity and any related short-term debt.

H3a: Relative to the participants of earnings calls, FI calls participants are more likely to include the Chief Accounting Officer and Treasurer.

It is difficult to predict CEO or CFO attendance, and hence we form no hypothesis for these positions. On the one hand, if the call is important enough to occur, we expect the most senior executives to attend. On the other hand, if indeed attendance is greater by other executives such as the Chief Accounting Officer and Treasurer, then there could be less need for the CEO or CFO to attend.[1]

For conference calls, it is common for sell-side analysts to participate by asking questions (Mayew, 2008). But sell-side debt analysts are far less common than equity analysts (Johnston et al., 2009; De Franco et al., 2009), which hence creates demand and leaves more opportunity for buy-side fixed income investors—portfolio managers and analysts—to ask questions. Our hypothesis is:

[1] While it is possible that the CFO is also the CAO or the Treasurer, we have no reason to believe that the CFO having multiple roles should be systematically different for FI calls compared with earnings calls. In general, as the propensity of CFOs with multiple roles increases, the power of our tests decreases and we will be less able to distinguish whether the propensity of CAO or Treasurer differs between FI calls and earnings calls.

H3b: Relative to the participants of earnings calls, FI calls participants are more likely to include buy-side investors rather than sell-side analysts.

3. Sample and Descriptive Statistics

3.1. Global Sample

We identify 1,299 fixed income conference calls within Capital IQ from May 18th, 2009 to December 31st, 2019. We then identify subsidiaries and parent companies from Capital IQ and aggregate these conference calls to the parent company level to remove duplicate observations.[2] After removing duplicate observations, we are left with 1,256 fixed income call events issued by 311 unique global firms. which we refer to as the global sample. As firms often hold multiple FI calls per year, these FI call events translate into 677 firm-year observations. The samples for our tests are smaller because of data requirements. These restrictions are unique to each test, discussed in their respective sections, and results in tests that mainly focus on U.S. firms.

3.2. Global Sample Descriptive Statistics

Table 1 reports descriptive statistics for the global sample of FI calls. Panel A summarizes the geographic distribution of fixed income calls. Our sample covers firms from forty countries/regions across the world. Firms in the United States, the United Kingdom, and Canada hold the highest number of FI calls, representing more than 81% of all FI calls. Panel B shows the time series distribution of FI calls. The number of FI calls steadily increases from the start of our sample in 2009 and peaks in the year 2014, with 220 calls. The number of calls decreases in the most recent years but remains higher than 100 per year. In an untabulated analysis, we analyze the persistence of holding FI calls. If a firm hosts one or more calls in a given calendar year, the

[2] For example, on December 19th, 2017, our FI Call list shows that both Fidelity & Guaranty Life and Fidelity & Guaranty Life Holdings, Inc. held fixed income conference calls on the same day. Since these two companies are essentially the same, and the two calls are held on the same day, we keep only one of them.

chances of holding one or more calls in the following year is 51.5%.

Panel C reports the frequency of FI calls per firm per year. On average, firms hold 1.9 FI calls each year, with more than half of the firms holding only one FI call per year. We also observe that the sample of FI calls is fairly evenly split between private and public firm-years (333 versus 319). The mean frequency of FI calls per year is 17% higher for private firms (2.1) than it is for public firms (1.8). An untabulated test of this difference is statistically significant at the 1% level.

Panel D shows firms in our sample represent a diverse and large set of 2-digit SIC industries. Among all the industries, Business Services hold the greatest number of calls. Depository Institutions and Holding and Other Investment Offices are the two industries that hold the next highest number of calls. The financial sector, broadly defined to include the 2-digit SIC codes starting with the number '6,' represents 28% of fixed income calls in our sample.

3.3. Timing of FI Calls around Earnings Announcements

We examine the timing of FI calls relative to the earnings announcement day for the sample of 549 public firm FI calls that can be matched to a Capital IQ earnings announcement day. We first divide the sample into two groups: (1) FI calls that occur around the time of earnings announcement, which we define as the period of 15 calendar days before to 15 calendar days after the earnings announcement; and, (2) those that fall out of this period. The majority of FI calls (368 or 67% of total) do occur in this 31-day earnings announcement window. Of these, 248 (3 + 228 + 17) occur on one day before, the same day, or one day after the earnings announcement (i.e., [-1, +1]). Six calls occur in the 14-day period before the earnings announcement (i.e., [-15, -2]), while the remaining 114 calls occur in the 14-day period after the earnings announcement (i.e., [+2, +15]). As a general observation, while a large portion of FI calls cluster around earnings announcements, the majority of calls are not in the three-day earnings announcement window, and

hence are distinct events. Second, when the FI call is close to an earnings announcement, the FI call is more likely to follow rather than lead the earnings announcement. While this analysis focuses on FI calls compared with earnings announcements, it also indirectly studies the timing of FI calls around earnings conference calls because earnings calls occur almost exclusively around earnings announcements.[3]

4. Determinants of Fixed Income Calls

In this section, we study the factors that determine firms' decisions to hold a FI call. In the first subsection, we describe our tests, including our predictions. The second subsection discusses the results.

4.1. FI Call Deteminant Tests

Our analysis is based on the following model, estimated at the firm-year level, that empirically predicts whether a firm holds a FI call:

$$\begin{aligned} FI\ Call_{it} = {} & \beta_0 + \beta_1\ Debt\ to\ Assets_{it-1} + \beta_2\ Number\ Debt\ Types_{it-1} + \beta_3\ Intangible_{it-1} \\ & + \beta_4\ Sales\ Growth_{it-1} + \beta_5\ Loss_{it-1} + \beta_6\ Rated_{it-1} + \beta_7\ Private_{it-1} + \beta_8\ Size_{it-1} \\ & + \beta_9\ Foreign_{it-1} + \beta_{10}\ Hitech_{it-1} + \beta_{11}\ Financial_{it-1} + \beta_{12}\ Regulated_{it-1} + \varepsilon \end{aligned} \quad (1)$$

FI Call is an indicator variable that equals one if firm *i* holds one or more fixed income calls in year *t*, zero otherwise. We use the first two independent variables to test H1a. *Debt to Assets* equals total debt scaled by total assets. *Number Debt Types* is the number of different types of debt that the firm uses. Following Colla et al. (2013), we decompose total debt into seven mutually exclusive debt types: commercial paper, drawn credit lines, term loans, senior bonds and notes, subordinated

[3] In untabulated analyses, we also examine the timing of FI calls relative to earnings calls. The earnings call, consistent with its definition, almost always occurs on the same day or one day after the earnings announcement (93%). Hence, FI calls are also relatively distinct events from earnings calls. When FI calls occur on the same day as the earnings call, and we can determine the time of day for each of the two calls, we find that the FI call usually follows the earnings call.

bonds and notes, capital leases, and other debt. We expect that the probability of a FI call is inceasing in these two variables. To test H1b in this specification, we use the level of intangible assets and sales growth. *Intangible* is total intangible assets scaled by total assets. *Sales Growth* is the change in sales scaled by total sales in the previous year. We expect that FI calls are less likely when these variables have higher values. To test H1c we use the variable *Loss*, which is an indicator variable that equals one if firm *i*'s net income is negative, zero otherwise. We predict that firms are more likely to hold a FI call when they suffer a loss.

Our tests include whether the firm's debt is rated. This indicator variable equals one if firm *i* is rated by Standard & Poor's, zero otherwise. We make no prediction about this variable's coefficient. On the one hand, firms that are rated have an expanded information environment. Rating agencies have in-depth access to firm management and related private information, which culminates in the public rating and any other rating agency disclosures. This rating agency information could decrease the information asymmetry between debt investors and management and hence reduce debt investor demand for firm disclosures. On the other hand, information from rating agencies could lead to increased investor demand for information from management because investors are trying to better interpret the rating agency disclosures or perhaps predict the rating itself.

Our tests control for whether a firm is private, which means it lacks publicly-traded equity. In this test, as we restrict this sample to firms with available data in Compustat North America, our private firms of interest do issue public debt, which requires them to file typical SEC disclosures, like 10-Ks and 10-Qs (the source of Compustat's information). These private firms have been the focus of some studies, such as Katz (2009) and Badertscher et al. (2019). Even though they file with the SEC, this sample of private firms continue to have weaker information

environments than typical public firms because they may have less media and sell-side analyst coverage, and by definition they don't have a public stock price that aggregates value relevant information. This weaker information environment should lead to greater information asymmetry between managers and debtholders for these private firms, and hence greater demand for firm disclosures, which could be satisfied with a FI call. *Private* is an indicator variable that equals one if firm *i* has no available public stock price at fiscal year-end, zero otherwise.

We include firm size as a control variable. The fixed costs of having a FI call are economically less important for larger firms. *Size* is the natural logarithm of total assets. We control for whether the target is foreign because, following Kimbrough and Louis (2011), non-U.S. companies may have weaker information environments, and hence greater information asymmetry between managers and investors. *Foreign* is an indicator variable that equals one if firm *i* is a non-U.S. firm, zero otherwise. The limited size of our sample precludes us from using industry fixed effects. Instead, we include *Hitech*, *Financial*, and *Regulated* industry indicators following Kimbrough and Louis (2011). We include year fixed effects to control for year-specific shocks such as the impact of the financial crisis of 2008. All continous variables are winsorized at the 1% and 99% levels.

The sample of 134 firm-year observations for the period 2012 to 2019 with FI calls for this test is created as follows. As mentioned above, our global sample consists of 677 firm years. We then merge the firm-year observations with Compustat North America and lose an additional 473 firm-year observations. Last, we require firm-year observations to have non-missing data to calculate all our variables. As a consequence, we lose an additional 70 firm-year observations.

The control sample of firm-year observations with no-FI calls consists of firms with debt and have similar data restrictions to FI call treatment firms, such as requiring all observations to

have non-missing data. We estimate the model with three different no-FI call samples (but always the same FI call treatment sample). The first no-FI call sample is made up of all firms with available data during our sample period from 2012 to 2019 that do not have a FI call. The second no-FI call sample is further restricted to firms in the same two-digit SIC industries and years as the FI call sample. In other words, only no-FI call observations that occur in the same industry-year as FI calls are included. The third no-FI call sample adds a further restriction. For each FI call sample firm, we choose one no-FI call firm that is in the same industry, the same year, and is closest in absolute size to the sample firm, which makes the number of FI call and no-FI call observations equal in number.

4.2. FI Call Determinant Results

In Panel A of Table 3 we present the mean values of the independent variables partitioned by the FI call and no-FI call samples. Starting with a comparison of FI call firm years in column 1 with no-FI call firm years in column 2, we find that FI call firms tend to issue more distinct debt instrument types compared with no-FI call firms. FI call firms tend to issue 1.4 more types of debt than no-FI call firms. FI call firms have less intangible assets and lower sales growth. In addition, a significantly higher percentage of FI call firms are rated, privately held, larger, and foreign. Comparisons between FI call firms and the column 3 no-FI call firms that are restricted to firms in the same industry and year as FI call firms are highly similar. When comparing FI call firms with the column 4 no-FI call firms that are further matched to be closest in size, we note that the statistical significance generally decreases. An exception, is that now in column 4, FI call firms have significantly more losses than no-FI call firms. Overall, across all three no-FI call samples, in terms of our variables in which we have hypotheses, the significant differences are consistent with our expectations.

Panel B provides the results of estimating equation 1. For parsimony, we discuss the results of the column 1 test in which we use all available no-FI call firms. The results are generally the same for the remaining tests in columns 2 and 3, with the exception of lower statistical significance in the column 3 test that contains a much smaller number of observations. FI calls are more likely when the firm has a greater debt to assets ratio and a higher number of debt types. These results are consistent with H1a—that firms with more debt and a more complex capital structure have greater demand for fixed income information from debtholders. We do not find support for H1b. There is no evidence that firms with less intangible assets and lower sales growth, our proxies for the economic importance of current information, have more FI calls. *Loss* is positive and statistically significant, suggesting that firms with negative news are more likely to hold FI conference calls, consistent with H1c.

The positive and statistically significant coefficient of *Private* is consistent with the idea that private firms with their greater information asymmetry between managers and debtholders are more likely to hold FI calls to resolve such problems. *Size* is positive and statistically significant, consistent with the fixed costs of disclosure being relatively smaller for FI call firms.

In Table 4, we extend this analysis by using the same equation 1 model to predict an earnings call (instead of a FI call) and compare the results with the model that predicts the FI call. We use the full set of no-FI call firms in these tests. To facilitate the comparison, the analysis is restricted to firms with publicly-traded equity (and we hence exclude the private indicator variable). We now include the book-market ratio of each public firm as an independent variable to serve as an additional inverse proxy for the economic importance of current information. *BM* is book value of equity scaled by market value of equity.

In Panel A, we first provide mean values of the independent variables. The first two columns provide summay statistics for FI call and no-FI call firm-year observations used in the FI call prediction model, while the last two columns provide the same information for the earnings call prediction model. The differences between the FI call and no-FI variables in the first two columns generally show the same patterns, including levels of statistical significance, as the variables in the first two columns in Panel A of Table 3. For the book-market variable in this public-firm analysis, we find that FI call firms are more likely to have higher values than for the no-FI call firms. Columns 3 and 4 show that firms with earnings calls versus no-earnings calls differ along all the dimensions we measure at statistically significant levels. Last we observe that the propensity of firms to have an earnings call is much higher than the propensity to have a FI call. A firm is more likely to have an earnings call (17,421 firm years) than not have one (13,995 firm years).

Panel B of Table 4 provides the logit results. Column 1 shows that the FI call prediction model provides similar results to those in column 1 of Panel B in Table 3 for those variables of interest related to our hypotheses. An exception, is that the coefficient on intangibles is now negative and statistically significant, which provides support for H1b. Column 2 of Panel B provides the results of estimating the earnings call prediction model. These results are generally consistent with other studies that model the occurrence of earnings calls. For example, Tasker (1998) argues that firm size is positively associated with holding earnings calls. Bushee et al. (2003) find that high-tech firms are more likely to host calls.

In the last column of the panel, we show a chi-squared test of the differences in coefficients between columns 1 and 2. These differences provide corroborating evidence of our hypotheses. Compared with firms that have earnings calls, firms that have FI calls: (1) have a greater debt-to-

assets ratio and have more debt types, consistent with greater demand for fixed income information; (2) have less intangible assets and greater book-to-market ratios, consistent with greater demand for FI calls when current information is more economically important compared with longer-term information; and, (3) are more likely to have a loss consistent with greater demand for bad news by debt investors compared with equity investors. FI call firms are also more likely to be larger, foreign, and in the financial industry than earnings call firms.

In sum, the results of these logit model analyses, support our expectation that FI calls occur to serve the differential informational demands of debt versus equity investors, which includes demand for more fixed-income specific information, more current-period information when current information is more economically important, and more negative information.

5. Transcript Analysis

In this section, we analyze the sample of fixed income conference calls with available transcripts along two dimensions: content and participants. Before discussing the separate results for these two dimensions, we first describe our sample.

5.1. Sample of FI Call Transcripts

We collect 325 FI call transcripts from Capital IQ, who retain all transcripts that are made publicly available by firms. Of these, 222 are held by firms with publicly-traded equity and 103 are held by private firms or untraded subsidiaries of public firms (e.g. Ford Motor Credit Company, a subsidiary of Ford Motors). These transcripts represent 25.9% of the 1,256 FI call event dates provided in Capital IQ. For the sample of firms with publicly-traded equity, we are able to access transcripts for 39.5% of the 562 FI call events.[4] For comparison purposes, for our publicly-traded

[4] Given this limited availability, we contacted several public and private firms to ask them about their decision to disclose transcripts of their FI calls and to request transcripts of calls that are not available via Capital IQ. We were, however, unable to obtain any additional FI call transcripts directly from firms. Investor relations representatives of the sample of both private and public firms suggested that, unlike earnings conference calls of public firms, FI calls

firms with FI conference call transcripts, we obtain 625 transcripts of earnings calls that occur within one calendar year of each FI call event date. The number of earnings calls is much larger than the number of FI calls because earnings calls occur more frequently and transcripts of the earnings calls are rarely missing.

5.2. FI Call Content Analysis

5.2.1. Measures. We use the Perl programming language to perform our textual analysis We parse the conference call text into two parts—the presentation section and the question and answer section—and provide our measures of content for both parts. Measures are grouped by four categories.

a) Length: We determine the length of each section by counting the total number of words.

b) Debt Discussion: We develop a fixed income dictionary that includes words such as "bond", "borrow", "libor", "principal", "rating", "term", and "yield". These words were chosen based on publicly-available fixed income dictionaries. The list is in part based on the debt-equity conflict related words of De Franco et al. (2014), such as "asset sale", "dividend", "m&a", "repurchase", and "spinoff". These types of words indicate events that potentially generate asset substitution or wealth expropriation by equity holders. Appendix B, Panel A provides the complete list of fixed income words (debt-equity conflict related words are bolded).

c) Current Period Discussion: To measure time-horizon, we use the short-term and long-term word dictionaries from Brochet, Loumioti, and Serafeim (2015). Examples of short-term

are not intended for the general public and are only for existing and prospective institutional fixed income investors. This lack of general availability of investor-management communication raises potential concerns about the application of Regulation FD to the publicly-traded corporate debt market. We have informally discussed this matter with U.S. Securities and Exchange Commission representatives but have not received a clear response. We note that the language of Regulation FD refers to "securities," not specifically equity or debt instruments. Specifically, item (a) of 243.100 *General rule regarding selective disclosure* states that "whenever an issuer, or any person acting on its behalf, discloses any material nonpublic information regarding that issuer or its securities…, the issuer shall make public disclosure of that information."

dictionary words include “day”, “week”, “month”, and “short-run”, while examples of long-term dictionary words include “year”, “annual”, and “long-run” (see Appendix 2, Panels B and C). To measure financially-related words, we follow Matsumoto et al. (2011) and use their dictionary (see Appendix 2, Panel D). Financially-related word examples include “accounting”, “dollar”, “asset”, “liquidity”, “payment”, and “reserve”.[5] Last we follow Zhou (2018) to determine how many numbers and numeric words (e.g. “ten”, “twenty”, etc.) are mentioned. A number is included when it is preceded by a space or a dollar sign and not within the range from 1950 until 2030 to exclude the mention of years. We then convert the quantity of numbers and numeric phrases into a percentage by dividing it by the total words and numbers.

d) Discussion Tone: We use the Loughran and McDonald (2011) dictionary to count the positive and negative tone words for the Q&A session. Net tone equals positive words less negative words.

5.2.2. Results. Table 5 presents the results of our content analysis. We provide the means and medians for each of the three samples: i) FI calls by publicly-traded firms, ii) earnings calls by a matched set of publicly-traded firms, and iii) FI calls by private firms. We also provide tests of differences. Our discussion focuses mainly on the comparison of the matched sample of FI and earnings calls for publicly-traded firms in columns 1 to 6.

Panel A shows that FI calls are significantly shorter in both the presentation and Q&A sections relative to earnings calls. This pattern is consistent with FI calls offering incremental information to the marketplace and typically occurring after the earnings announcement (and hence after the earnings conference call) as we discussed above.

[5] The only adjustment we make is to use the stem of the word and not the complete words. For example, Matsumoto et al. (2011) include the complete words “borrowed”, “borrowing”, and “borrowings”, while we simple search for the stem “borrow”.

From the first two rows of Panel B we observe that FI calls contain more fixed-income content than earnings calls consistent with H2a. The presentation section of FI calls contain a mean 1.39% of fixed income words, compared with the mean for earnings calls of 0.77%. The difference of 0.62% is both statistically significant and economically significant at 16 additional words per transcript.[6] Results for Q&A sessions are similar but of reduced magnitude. We note that the percentage levels of these words are consistent with the percentage levels of word dictionaries used to measure other constructs, such as tone, uncertainty, litigiousness, and praise.[7]

We further refine these analyses by examining only the debt-equity conflict specific words of De Franco et al. (2014) in the last two rows of Panel B. FI call presentation and Q&A sections have significantly more debt-equity conflict words than earnings conference calls, which provides evidence to further support H2a.[8] Overall, the results in Panel B support the idea that FI calls address topics that are important for creditors whose interests may not be aligned with shareholders.

Panel C provides the results of the three dimensions we use to test H2b. The first two rows provide no support for the first dimension of of H2b—a shorter horizon. The presentation and the Q&A parts of the FI calls include short-term words, such as daily, monthly, and short-duration to

[6] The 16 words is calculated as the mean difference in percentage (0.62%) multiplied by the public FI call presentation total words (2,534).

[7] For example, based on the descriptive statistics from Loughran and McDonald (2011) and Loughran and McDonald (2013), we provide mean values of their word lists. The former (latter) study shows that their sample of 10-K filings (initial IPO filings) contains: 1.39% (1.41%) negative words, 0.75% (0.97%) positive words, 1.20% (1.31%) uncertainty words, 1.10% (0.75%) litigious words, 0.26% (0.53%) strong modal words, and 0.43% (0.64%) weak modal words. As an additional example, Milian and Smith (2017) develop a short list of customized dictionary of "analysts' praise of management" and find that praise words comprise 0.09% of analysts' words spoken during earnings calls.

[8] As a benchmark, De Franco et al. (2014) report that each debt analysts' reports mention a mean 3.5 (median 3.0) debt-equity conflict-event words per report, while in our sample, for each fixed income call, these conflict-event words are mentioned a mean 10.5 (median 5.6) times. A caveat of this comparison, however, is that it is possible that debt analysts' reports are shorter than conference call transcripts, which could explain why we have more debt-equity conflict words per call than they do per report. While De Franco et al. (2014) study the relative frequency of debt-equity conflict events in debt analysts' reports, they do not provide information on the word length of each report.

a lesser degree than in earnings calls, which is inconsistent with the idea that investors have a shorter horizon and opposite to our prediction. The long-term word usage in the second and third rows provide no clear evidence in favor or against our hypotheses. The other two measures do provide support for H2b. For financial terms, like accounting related items, managers present information that includes more of these words in FI calls than in earnings calls. For example, the mean number of financial words in the FI call presentation is 2.90%, while it is 2.24% for earnings calls.[9] The mean difference of 0.66% represents an approximately 29% higher level of financial words used by managers in FI call presentations compared with those of earnings calls.[10] The last two rows indicate that managers provide more quantitative information, such as the results of periodic reporting of accounting and operating numbers, to FI call attendees in both the

[9] As our financial term dictionary follows Matsumoto et al. (2011), we compare our percentage of financial term word usage to that of their analysis (see their footnote #33). Our results are generally in line with theirs. We find in our sample that financial terms are used a mean 2.9% and 2.2% in the presentation parts of FI calls and earnings calls, respectively. Matsumoto et al. (2011)'s corresponding number is 3.9%. Similarly, for the Q&A part, our mean percentages are 1.3% and 1.2%, while Matsumoto et al. (2011)'s corresponding number is 1.7%. A caveat of this comparison is that our sample of calls is limited to firms with a FI call, which we know from the determinants analysis are larger and have less growth options, while their sample represents the broader population of public firms. Their sample also predates ours.

[10] We note that the words in our financial dictionary are not mutual exclusive with the words in our fixed-income dictionary. The advantage of our financial dictionary is that it directly follows the dictionary of Matsumoto et al. (2011), which makes it more objective. In addition, even though it contains some fixed-income words, the use of financial dictionary words still represents a good measure of our construct—the discussion of current-period information. To provide some perspective on the importance of fixed-income words to the financial dictionary, untabulated descriptive statistics show that fixed-income words represent 26% and 30% of financial words for the presentation and Q&A parts, respectively of FI calls and 18% and 19% of financial words for the presentation and Q&A parts, respectively of earnings calls.

presentation as well as the Q&A parts.[11] Overall, our results provide mixed support for the idea that FI calls provide more current information.[12]

Panel D shows that FI calls have less positive tone than earnings calls for both the presentation and Q&A parts of the call. FI calls also have more negative tone words for the Q&A part but not the presentation part.[13] We focus on net tone for our inferences. Consistent with H2c, net tone for the presentation part is significantly less positive and net tone for the Q&A part is significantly more negative for FI calls relative to earnings calls. As these tone measures are more established in the literature, we can compare the magnitude of our differences in net tone with other studies that use these same measures to gauge the economic significance of our results. For example, Rogers et al. (2011) find a 0.2% difference in net tone between earnings conference calls of firms who are sued by shareholders and a matched sample. As another example, Levy, Shalev, and Zur (2018) find differences of net tone that range from 0.1% to 0.4% in earnings calls for the change in CFOs and CEOs language before and after a change in corporate officers' litigation risk. As our difference in net tone of 0.4% is of a comparable magnitude to these studies, we argue that our economic significance is also similar. In sum, these tone results provide support for the idea

[11] To provide small-sample evidence that participants who discuss numbers in conference calls are mostly providing short-term and financial/accounting-orientated information as opposed to long-term information, we conduct the following analysis. We randomly choose 10 conference calls (five FI Calls and five Earnings Calls) and manually read the text of each call. We identify 1,308 numbers used in the calls and then assign each number to one of three non-mutually exclusive categories. Numbers that do not have a meaningful interpretation are not assigned to a category. Examples include "turning to slide 10" or "I have 2 questions." The three categories and their percentage of total numbers are: (1) Current/Past numbers refer to events happened in the past or a benchmark target for the past fiscal period (63.5%); (2) Financial/Accounting numbers describe financial statement items or financial ratios, including both levels and changes (66.4%); and, (3) Future numbers refer to future forecasts or long-run targets (15.1%). In addition, 74.8% of numbers discussed are classified as Current/Past or Financial/Accounting. The first two categories, which support our assertion, are far more frequent than the third category, which contradicts it.

[12] A more nuanced potential interpretation of our Table 5, Panel C findings is that debt investors do demand current period financial and quantitative information but that the reduced use of short-term words implies that they do not necessarily have a myopic view of this information. Brochet et al. (2015), who develop the short-term and long-term words dictionaries that we use in our tests, link the use of their shorter-horizon word measure to short-termism and find that their measure is associated with earnings and real activities management.

[13] The mean percentage of negative words for FI calls relative to earnings calls is higher for the presentation part, which is not what we would have expected. The medians, however, are not significantly different between the two types of calls.

that the asymmetry of returns faced by debt investors leads them to demand negative news to a greater degree. It also corroborates the determinants analysis in the previous section in which firms with losses are more likely to hold FI calls.

Columns 7 to 10 display the content analysis results for private and subsidiary firms. These firms typically do not have earnings calls like public firms, therefore an FI call has a multipurpose role of providing general firm information, such as earnings, as well as debt-related information. It is hence more difficult to predict what to expect for these calls along the dimensions we measure and so we refrain from making any inferences in terms of our hypotheses but do provide some highlights. We observe these private calls have lengths that are more similar to FI calls for public firms and shorter than earnings calls. Private FI call presentations also discuss fixed income subjects to a greater degree than earnings calls. Not surprisingly, given the absence of publicly-traded equity for these firms, there is little discussion of equity-debt conflicts. Compared with the FI and earnings calls of public firms, private firm FI calls tend to use more of both short-term and long-term words and use less quantitative words. Private firm FI calls have a Q&A net tone level similar to that of earnings calls and we do not observe a more negative tone as we do for the FI calls of publicly-traded firms.

5.3. FI Call Participant Analysis

5.3.1. Measures. As the last part of our textual analysis, we identify all management and analyst participants on the call. We identify managers by their titles. We further categorize analysts by type (i.e., sell-side, buy-side, and buy-side subtypes) using the identification methodology of Call et al. (2019).

5.3.2. Results. Table 6 presents the results. Again, we mainly focus our discussion on the comparison of the matched sample of FI and earnings calls for publicly-traded firms in columns 1

to 3. In this table we present only mean values as medians are less applicable in the context of our dichotomous or discrete variables. From Panel A, we observe that on average, 0.33 more managers participate on earnings calls than FI calls. Compared with earnings calls, CEOs and CFOs participate less frequently in FI calls. This difference is particularly dramatic for CEOs, who appear on 74.1% of earnings calls but only 22.5% of FI calls. In support of H3a, Chief Accounting Officers (CAOs—which includes principal accounting officers and controllers) and Treasurers participate more often on FI calls than for earnings calls. For example, CAOs and Treasurers appear on 9.0% and 60.8%, respectively, of FI calls but only 2.4% and 7.0%, respectively, of earnings calls. Compared with CFOs, CAOs are more deeply involved in day-to-day accounting issues and financial reporting of the firm (Mitsuda 2019). Corporate Treasurers support the CFO function by focusing specifically on areas such as liquidity and financial risk management (Polak et al. 2011). These results suggest that FI call participants value more granular accounting and corporate liquidity information, respectively, than participants of earnings conference calls. In the latter two columns, we observe the breakdown of manager participants for the FI calls of private firms. These are almost always led by CFOs (97.1% of calls). CEOs appears on 44.7% of calls, which is a similar frequency to that of CAOs and Treasurers, which are 43.7% and 40.8%, respectively.

In terms of analysts, Panel B shows that fewer than half the number of analysts participate on FI calls relative to earnings calls for publicly-traded firms. This smaller number is likely driven by the much larger population of equity sell-side analysts compared with debt sell-side analysts. Buy-side analysts are more than five times more likely to appear on FI calls than earnings calls, which supports H3b and the idea that a lack of sell-side analysts creates demand and leaves more opportunities for buy-side analysts to ask questions. Unlike our earnings call sample in column 2

and the earnings call participant analysis of Call et al. (2019), we do not find that hedge funds make up the majority of buy-side appearances on FI calls. Rather, on FI calls, we find that insurance and mutual fund analysts represent the majority of buy-side analyst appearances. Insurance company analysts rarely appear on earnings conference calls but appear with significantly greater frequency on FI calls likely because their firms almost exclusively invest in fixed income instruments. For private firms in column 4, hedge funds appear more frequently than for public firms. We also do not see the same level of insurance analysts as we do for public FI calls, possibly because the debt securities of private firms are less attractive or not suitable for insurance firms.[14]

Overall, these differences in participants between FI and earnings calls that we observe in Table 6 along with the differences in fixed income discussions documented in Table 5 are consistent with the idea that FI investors differ from equity investors and that managements' decisions to host a FI call is motivated by the desire to serve the different needs of these investors.

6. Market Reactions

To determine whether FI calls provide information to public investors we test whether FI calls evoke short-window reactions in both the bond and equity markets.

6.1. Bond Market Event Study

We test whether trading volume and the number of trades differ between the event window and non-event window. Volume-based metrics not only capture the common movement of opinion

[14] The National Association of Insurance Commissioners (NAIC) that regulates insurance companies assigns each security a NAIC designation, which is a measure for credit quality. These designations are used to set risk-based capital requirements. Since securities from private firms are generally riskier, investing in these securities will potentially increase capital requirements for insurance companies. In addition, the pricing for these private-firm securities may need to be specially priced by NAIC. In contrast, the pricing of many other types of securities are priced on a regular basis. For example, prices for publicly-traded bonds are updated monthly (see, for example, https://www.naic.org/documents/svo_AVS_user_guide.pdf.)

but also the information that leads to divergent opinions (Harris and Raviv 1993; Karpoff 1987; Kim and Verrecchia 1991). Measuring the reaction in this way has the additional advantage that we do not need to know whether the information in the call is expected to be positive or negative for investors. We use the three-days centered on the FI call date as the event window and our non-event window is the -30 to +30 days surrounding the FI call date excluding the event window.[15] Following De Franco et al. (2014), we define bond volume as the aggregate total trading volume for all the firm's traded bonds, divided by the sum of the face value of all the firm's outstanding bonds. We also investigate the number of trades at the firm-level during event and non-event windows.

Our sample for these tests includes 257 FI call events. This sample is smaller than our global sample of 1,256 FI calls for the following reasons. In 803 cases, we are unable to match our FI call firms to TRACE. For 187 events we have insufficient data to calculate our bond measures for both the event and non-event windows. For example, following Bessembinder et al. (2009), we require each FI call event to have non-problematic bond transaction information from TRACE (e.g., no trades that are subsequently canceled). To mitigate the effects of confounding events, we search for firm-specific news in Capital IQ that occurs on a day that falls within the -30 to +30 days surrounding the FI call date. Example news events include credit rating changes, earnings announcements, operation expansion, new partnership announcements, and the release of filings such as 10-Ks, 10-Qs, and 8-Ks. We remove trading in the three-day window surrounding dates with firm-specific news from our sample before we calculate the average daily trading measures for the event and non-event periods. We lose an additional nine FI call events as they do not have

[15] In untabulated robustness tests, we find our event-study results and inferences are the same if we use a five-day event window centered on the FI call day.

valid trading data for both the event window and the non-event window after removing confounding events.

The first two rows of Panel A of Table 7 reports the results of our bond event-study tests. Bond investors trade more during the three-day event window compared with the non-event window. Both the differences in the daily volume and the daily number of trades are statistically significant at the 1% level. About 0.05% more of the total value of the company's outstanding bonds are traded daily during the event window. Given that the average total trade value is 0.19% per day for the non-event window, this difference represents a 26% increase during the event window. Considering that the average total debt outstanding in our sample is about $25 billion, this increase translates into about $12.5 million more trading of debt outstanding per day during the event window. About 3.14 more trades exchange hands daily (a 13% increase) during the event period compared with the non-event window.[16]

Next, we separately conduct our tests for public and private FI calls. Panel A shows that our main inferences are similar when we examine the FI calls of public and private firms separately—higher bond market trading reactions for event than for non-event periods.[17] Based on the results in this panel we conclude that FI calls are informative to bond investors.[18]

6.2. Equity Market Event Study

We next examine whether FI calls lead to equity market reactions. It is possible that the FI

[16] Our sample includes many financial firms. To mitigate the concern that these financial firms are driving our bond event study results, we conduct untabulated tests for the sample excluding financial firms. The results with and without financial firms are similar.

[17] Although we find that the non-event to event percentage increases in our bond trading measures are higher for private firms (0.08%) compared with those of public firms (0.01%), an untabulated test indicates that the differences are not statistically significant.

[18] In untabulated analyses, we also investigate whether the absolute value of bond returns during the event window is significantly different from the absolute value of bond returns during the non-event window. Our tests, however, provide no evidence of a difference in returns. We are hesitant in making a strong inference from this lack of result given the problems in measuring bond returns, such as irregular and often infrequent trading.

call information for public firms will also be informative for equity investors. As residual holders of firm value, information that affects the firm's debt value can lead to changes in equity values. For example, Johnston, Markov, and Ramnath (2009) find that communication from debt analysts could potentially provide insights for the appropriateness and prediction of future rating changes. In addition, participants may discuss firm performance in the context of a firm's ability to meet debt obligations. This type of financial information could update shareholders, particularly when there is no other news event at the time. Furthermore, as far as we understand, while targeted at fixed-income investors, these calls are not necessarily restricted to debtholders and could include shareholders. Last, given the higher liquidity of equity markets compared with bond markets, an information content test can be more powerful in the equity setting. For example, it is common for researchers to study the equity market reaction to a debt market event (Ederington and Goh 1993; Parrino and Weisbach 1999; Alexander, Edwards, and Ferri 2000). One reason is that debt price data is limited and debt and equity returns often co-move in the same direction (Jorion, Liu, and Shi 2005; Beaver, Shakespeare, and Soliman 2006; Johnston, Markov, and Ramnath 2009).

To determine our sample for these equity market tests, we follow an analogous process to that of the bond event study, with requirements that our global sample merges with CRSP, we have data to calculate event and non-event trading volume and returns, and we exclude confounding events. Our sample consists of 185 FI call events. We have fewer observations with available data for this equity event study than we do for our bond event study (257 calls) because the bond event study includes private firms. However, our equity sample is larger than the sample of public FI calls with available data (138) because public firms can have illiquid bonds but still have actively-traded equity.

Panel B of Table 7 shows that investors in the equity market also react to fixed income

calls. On average, 0.31% more shares of stock are traded daily during the event window than the non-event window. Given the average non-event window trading volume is 1.25% of total outstanding shares per day, investors trade 25% more shares surrounding fixed income call dates. Investors also experience a 24 bps increase (a 19% increase) in absolute value of equity returns per day during the event window compared with the non-event window.[19]

Our equity market reaction results in this section combined with the bond market reactions discussed above indicate that fixed income calls convey material information to public investors and that these investors trade on such information.[20]

7. Conclusion

We investigate the determinants and informational role of fixed income conference calls. We establish several findings consistent with this unique debtholder-oriented voluntary disclosure meeting the different informational demands of debtholders compared with equity holders. First, we find that fixed income calls are more likely to occur for firms with more and varied debt, with lower intangible assets, greater book-market ratios, with negative news, and that lack publicly-traded equity. Second, in a content analysis, compared with a matched sample of firm-year earnings conference calls, we find that fixed income calls discuss fixed income subjects, in particular debt-equity conflict events such as share repurchases, to a greater degree. Managers use

[19] In an untabulated analysis we calculate equity returns for a small sample of 19 FI call events with no confounding events in the United Kingdom and Germany. The absolute value of the cumulative abnormal returns in the short event window are positive and statistically significant at the 1% level. These United Kingdom and Germany equity market reaction results corroborate our tabulated bond and equity market results.

[20] These public investor results motivated us to conduct an untabulated test to determine whether fixed income calls have any influence on firms' loan spreads. Using the methodology in Francis et al. (2017) to measure loan spreads, our results provide no evidence that FI calls are related with firms' loan pricing. On the one hand, firms raise capital not only through issuing bonds, but also by privately borrowing from banks. FI calls can potentially provide relevant information to banks, decreasing their information acquisition or processing costs or reducing the uncertainty of predicting loan default, which thus could affect firms' loan spreads. On the other hand, banks may have private information that subsumes the information in FI calls. While our lack of results is more consistent with this latter explanation, we cannot rule out the idea that banks listen in to FI calls and use information in FI calls in ways other than setting loan prices.

fewer short-horizon words but present more financial information as part of the call and discuss more quantitative information. These calls also have a more negative tone. FI call participants also differ from those of traditional earnings calls. We document greater participation of Chief Accounting Officers and Treasurers, as well as analysts at insurance companies, who mainly invest in debt. Last, we show that bond and equity markets react to FI calls, which supports the idea that FI calls are informative to public investors. Overall, our results suggests that when firms hold FI calls they can better address the specific informational needs of their creditors.

Our results contribute to the broader voluntary disclosure literature. While firms typically disclose information with little discrimination between different stakeholders, FI calls, that directly target debt investors, are novel. We also contribute to the literature on how debt investors react to corporate disclosures by providing initial evidence of the information role of FI calls to debt investors.

REFERENCES

Alexander, Gordon J., Amy K. Edwards, and Michael G. Ferri. 2000. "The Determinants of Trading Volume of High-Yield Corporate Bonds." *Journal of Financial Markets* 3(2):177–204.

Asquith, Paul and Thierry A. Wizman. 1990. "Event Risk, Covenants, and Bondholder Returns in Leveraged Buyouts." *Journal of Financial Economics* 27(1):195–213.

Badertscher, Brad A., Dan Givoly, Sharon P. Katz, and Hanna Lee. 2019. "Private Ownership and the Cost of Public Debt: Evidence from the Bond Market." *Management Science* 65(1): 301–306.

Badoer, Dominique C. and Christopher M. James. 2016. "The Determinants of Long-Term Corporate Debt Issuances." *The Journal of Finance* 71(1):457–92.

Barclay, Michael J. and Clifford W. Smith JR. 1995. "The Maturity Structure of Corporate Debt." *The Journal of Finance* 50(2):609–31.

Beaver, William H., Catherine Shakespeare, and Mark T. Soliman. 2006. "Differential Properties in the Ratings of Certified versus Non-Certified Bond-Rating Agencies." *Journal of Accounting and Economics* 42(3):303–34.

Bessembinder, Hendrik, Kathleen M. Kahle, William F. Maxwell, and Danielle Xu. 2008. "Measuring Abnormal Bond Performance." *The Review of Financial Studies* 22(10):4219–58.

Billett, Matthew T., Tao-Hsien Dolly King, and David C. Mauer. 2004. "Bondholder Wealth Effects in Mergers and Acquisitions: New Evidence from the 1980s and 1990s." *The Journal of Finance* 59(1):107–35.

Bowen, Robert M., Angela K. Davis, and Dawn A. Matsumoto. 2002. "Do Conference Calls Affect Analysts' Forecasts?" *The Accounting Review* 77(2):285–316.

Brochet, Francois, Maria Loumioti, and George Serafeim. 2015. "Speaking of the Short-Term: Disclosure Horizon and Managerial Myopia." *Review of Accounting Studies* 20(3):1122–63.

Brochet, Francois, Gregory S. Miller, Patricia Naranjo, and Gwen Yu. 2018. "Managers' Cultural Background and Disclosure Attributes." *The Accounting Review* 94(3):57–86.

Brown, Lawrence D, Andrew C Call, Michael B Clement, and Nathan Y Sharp. 2015. "Inside the 'Black Box' of Sell-Side Financial Analysts." *Journal of Accounting Research* 53 (1): 1–47.

Brown, Stephen, Stephen A. Hillegeist, and Kin Lo. 2004. "Conference Calls and Information Asymmetry." *Journal of Accounting and Economics* 37(3):343–66.

Bushee, Brian J., Dawn A. Matsumoto, and Gregory S. Miller. 2003. "Open versus Closed Conference Calls: The Determinants and Effects of Broadening Access to Disclosure." *Journal of Accounting and Economics* 34(1):149–80.

Bushee, Brian J., Dawn A. Matsumoto, and Gregory S. Miller. 2004. "Managerial and Investor

Responses to Disclosure Regulation: The Case of Reg FD and Conference Calls." *The Accounting Review* 79(3):617–43.

Call, Andrew C., Nathan Y. Sharp, and Thomas D. Shohfi. 2019. "Which Buy-Side Institutions Participate in Public Earnings Conference Calls? Implications for Capital Markets and Sell-Side Coverage." *Working Paper, Arizona State University*.

Colla, Paolo, Filippo Ippolito, and Kai Li. 2013. "Debt Specialization." *The Journal of Finance* 68(5):2117–41.

Datta, Sudip, Mai Iskandar-Datta, and Ajay Patel. 1999. "Bank Monitoring and the Pricing of Corporate Public Debt." *Journal of Financial Economics* 51(3):435–49.

Davis, Angela K., Weili Ge, Dawn Matsumoto, and Jenny Li Zhang. 2015. "The Effect of Manager-Specific Optimism on the Tone of Earnings Conference Calls." *Review of Accounting Studies* 20(2): 639-673.

Ederington, Louis H. and Jeremy C. Goh. 1993. "Is a Bond Rating Downgrade Bad News, Good News, or No News for Stockholders?" *The Journal of Finance* 48(5):2001–8.

Fortin, Steve and Jeffrey A. Pittman. 2007. "The Role of Auditor Choice in Debt Pricing in Private Firms*." *Contemporary Accounting Research* 24(3):859–96.

Francis, Bill B., Delroy M. Hunter, Dahlia M. Robinson, Michael N. Robinson, and Xiaojing Yuan. 2017. "Auditor Changes and the Cost of Bank Debt." *The Accounting Review* 92(3): 155-184.

De Franco, Gus, Florin P. Vasvari, Dushyantkumar Vyas, and Regina Wittenberg-Moerman. 2014. "Debt Analysts' Views of Debt-Equity Conflicts of Interest." *The Accounting Review* 89(2):571–604.

De Franco, Gus, Florin P. Vasvari, and Regina Wittenberg-Moerman. 2009. "The Informational Role of Bond Analysts." *Journal of Accounting Research* 47(5):1201–48.

Frankel, Richard, Marilyn Johnson, and Douglas J. Skinner. 1999. "An Empirical Examination of Conference Calls as a Voluntary Disclosure Medium." *Journal of Accounting Research* 37(1):133–50.

Gelb, David S. 2002. "Intangible Assets and Firms' Disclosures: An Empirical Investigation." *Journal of Business Finance & Accounting* 29(3-4):457–76.

Green, T. Clifton. 2004. "Economic News and the Impact of Trading on Bond Prices." *The Journal of Finance* 59(3):1201–33.

Green, T. Clifton, Russell Jame, Stanimir Markov, and Musa Subasi, 2014. "Broker-hosted investor conferences." *Journal of Accounting and Economics* 58, 142–166.

Green, T. Clifton, Russell Jame, and Brandon Lock. 2018. "Executive Extraversion: Career and Firm Outcomes." *The Accounting Review* 94(3):177–204.

Gurun, Umit G., Rick Johnston, and Stanimir Markov. 2015. "Sell-Side Debt Analysts and Debt Market Efficiency." *Management Science* 62(3):682–703.

Hackbarth, Dirk, Christopher A. Hennessy, and Hayne E. Leland. 2007. "Can the Trade-off Theory Explain Debt Structure?" *The Review of Financial Studies* 20(5):1389–1428.

Harris, Milton and Artur Raviv. 1993. "Differences of Opinion Make a Horse Race." *The Review of Financial Studies* 6(3):473–506.

Hobson, Jessen L., William J. Mayew, and Mohan Venkatachalam. 2012. "Analyzing Speech to Detect Financial Misreporting." *Journal of Accounting Research* 50(2):349–92.

Hollander, Stephan, Maarten Pronk, and Erik Roelofsen. 2010. "Does Silence Speak? An Empirical Analysis of Disclosure Choices During Conference Calls." *Journal of Accounting Research* 48(3):531–63.

Investment Company Factbook. 2019. Investment Company Institute, Washington D.C., 59th Edition.

Johnston, Rick, Stanimir Markov, and Sundaresh Ramnath. 2009. "Sell-Side Debt Analysts." *Journal of Accounting and Economics* 47(1):91–107.

Jorion, Philippe, Zhu Liu, and Charles Shi. 2005. "Informational Effects of Regulation FD: Evidence from Rating Agencies." *Journal of Financial Economics* 76(2):309–30.

Jung, Kooyul, Yong-Cheol Kim, and RenéM. Stulz. 1996. "Timing, Investment Opportunities, Managerial Discretion, and the Security Issue Decision." *Journal of Financial Economics* 42(2):159–85.

Karpoff, Jonathan M. 1987. "The Relation between Price Changes and Trading Volume: A Survey." *Journal of Financial and Quantitative Analysis* 22(1):109–26.

Katz, Sharon P. 2009. "Earnings Quality and Ownership Structure: The Role of Private Equity Sponsors." *The Accounting Review* 84(3), 623–658.

Kerr, Jon N. and N. Bugra Ozel. 2015. "Earnings Announcements, Information Asymmetry, and Timing of Debt Offerings." *The Accounting Review* 90(6):2375–2410.

Kim, Oliver and Robert E. Verrecchia. 1991. "Trading Volume and Price Reactions to Public Announcements." *Journal of Accounting Research* 29(2):302–21.

Kimbrough, Michael D. 2005. "The Effect of Conference Calls on Analyst and Market Underreaction to Earnings Announcements." *The Accounting Review* 80(1):189–219.

Kimbrough, Michael D. and Henock Louis. 2011. "Voluntary Disclosure to Influence Investor Reactions to Merger Announcements: An Examination of Conference Calls." *The Accounting Review* 86(2):637–67.

Krinsky, Itzhak and Jason Lee. 1996. "Earnings Announcements and the Components of the Bid-Ask Spread." *The Journal of Finance* 51(4):1523–35.

Larcker, David F. and Anastasia A. Zakolyukina. 2012. "Detecting Deceptive Discussions in Conference Calls." *Journal of Accounting Research* 50(2):495–540.

Levy, Hagit, Ron Shalev, and Emanuel Zur. 2018. "The Effect of CFO Personal Litigation Risk on Firms' Disclosure and Accounting Choices." *Contemporary Accounting Research*

35(1):434–63.

Li, Feng, Michael Minnis, Venky Nagar, and Madhav Rajan. 2014. “Knowledge, Compensation, and Firm Value: An Empirical Analysis of Firm Communication.” *Journal of Accounting and Economics* 58(1):96–116.

Loughran, Tim and Bill McDonald. 2011. “When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks.” *The Journal of Finance* 66(1):35–65.

Loughran, Tim and Bill McDonald. 2013. “IPO First-Day Returns, Offer Price Revisions, Volatility, and Form S-1 Language.” *Journal of Financial Economics* 109(2):307-326.

Matsumoto, Dawn, Maarten Pronk, and Erik Roelofsen. 2011. “What Makes Conference Calls Useful? The Information Content of Managers’ Presentations and Analysts’ Discussion Sessions.” *The Accounting Review* 86(4):1383–1414.

Maxwell, William F. and Ramesh P. Rao. 2003. “Do Spin-Offs Expropriate Wealth from Bondholders?” *The Journal of Finance* 58(5):2087–2108.

Maxwell, William F. and Clifford P. Stephens. 2003. “The Wealth Effects of Repurchases on Bondholders.” *The Journal of Finance* 58(2):895–919.

Mayew, William J. 2008. “Evidence of Management Discrimination Among Analysts during Earnings Conference Calls.” *Journal of Accounting Research* 46(3):627–59.

Mayew, William J. and Mohan Venkatachalam. 2012. “The Power of Voice: Managerial Affective States and Future Firm Performance.” *The Journal of Finance* 67(1):1–43.

Milian, Jonathan A., and Antoinette L. Smith. 2017. "An Investigation of Analysts' Praise of Management during Earnings Conference Calls." *Journal of Behavioral Finance* 18(1): 65-77.

Mitsuda, Steven. 2019. “The Effect of Chief Accounting Officers on Financial Reporting Quality.” *Working Paper, Stanford University*.

Parrino, Robert and Michael S. Weisbach. 1999. “Measuring Investment Distortions Arising from Stockholder–bondholder Conflicts.” *Journal of Financial Economics* 53(1):3–42.

Polak, Petr, David C. Robertson, and Magnus Lind. 2011. “The New Role of the Corporate Treasurer: Emerging Trends in Response to the Financial Crisis.” *International Research Journal of Finance and Economics*.

Rogers, Jonathan L., Andrew Van Buskirk, and Sarah L. C. Zechman. 2011. “Disclosure Tone and Shareholder Litigation.” *The Accounting Review* 86(6):2155–83.

Shivakumar, Lakshmanan, Oktay Urcan, Florin P. Vasvari, and Li Zhang. 2011. “The Debt Market Relevance of Management Earnings Forecasts: Evidence from before and during the Credit Crisis.” *Review of Accounting Studies* 16(3):464.

SIFMA. 2019. “Capital Markets Fact Book 2019.” Retrieved (https://www.sifma.org/wp-content/uploads/2019/09/2019-Capital-Markets-Fact-Book-SIFMA.pdf).

Tasker, Sarah C. 1998. “Bridging the Information Gap: Quarterly Conference Calls as a Medium

for Voluntary Disclosure." *Review of Accounting Studies* 3(1):137–67.

The National Investor Relations Institute. 2016. "NIRI Earnings Process Practices Research Report." Retrieved (https://www.niri.org/NIRI/media/Protected-Documents_ExcludeGlobalSubs/Analytics Reports/Analytics_Guidance/NIRI-Earnings-Process-Practices-Report-2016.pdf).

Vig, Vikrant. 2013. "Access to Collateral and Corporate Debt Structure: Evidence from a Natural Experiment." *The Journal of Finance* 68(3):881–928.

Zhou, Dexin. 2018. "Do Numbers Speak Louder Than Words?" *Available at SSRN 2898595*.

APPENDIX A
Variable Definitions

Variable	Definition
BM	Book value equity over market value equity for public firms.
Debt to Assets	Total debt divided by total assets from Compustat.
Event	Indicator variable that equals one if firm *i* holds a fixed income call in year *t*, zero otherwise.
Financial	Indicator variable that equals one if the two-digit SIC code of firm *i* equals 60-69, zero otherwise.
Foreign	Indicator variable that equals one if firm *i* is a foreign firm, zero otherwise.
Hitech	Indicator variable that equals one if the two-digit SIC code of firm *i* equals 28, 35, 36, 73, or 87, zero otherwise.
Intangible	Total intangible assets divided by total assets.
Loss	Indicator variable that equals one if net income is negative, zero otherwise.
Num Debt Type	Number of debt types issued by firm *i* from Capital IQ.
Private	Indicator variable that equals one if firm *i* has no publicly traded equity, zero otherwise
Rated	Indicator variable that equals one if firm *i* is rated by Standard & Poor's, zero otherwise.
Regulated	Indicator variable that equals one if the two-digit SIC code of firm *i* equals 48 or 49, zero otherwise.
Sale Growth	One-year sales growth.
Size	Natural logarithm of total assets.

APPENDIX B
Textual Analysis Dictionaries

This table displays the dictionaries we use in section 5. Panel A reports the fixed income and debt-equity conflict words. Debt-equity conflict words are bolded and in italics. Panels B and C report the short-term words and long-term words, respectively. Panel D reports the financial words.

Panel A. Fixed Income and Debt-Equity Conflict Words

accru	***covenant***	lend	redemption
agency	coverage	***leverage***	refinance
asset sale	credit	libor	repo
basis point	debenture	loan	***repurchas***
bip	debt	***m&a***	sinking
bond	default	maturity	sovereign
borrow	discount	***mbo***	***spinoff***
bps	***dividend***	mbs	spread
bullet	duration	moody	standard & poor
buyback	***equity focus***	premium	standard and poor
callable	euribor	prepaid	structur
capex	***event risk***	prepay	swap
capital expenditure	fitch	prime	term
collateral	flation	principal	treasur
convertible	indenture	putable	yield
convex	interest	rating	
coupon	***lbo***	redeem	

Panel B. Short-Term Words

daily	quarter	short term	short-term
day	short run	short-run	week
month			

Panel C. Long-Term Words

annual	long term	long-term	looking ahead
long run	long-run	look ahead	outlook

(Continued)

APPENDIX B (Continued)
Textual Analysis Dictionaries

Panel D. Financial Words

accounting	debt	income	receivable
accrual	deferral	interest	redeem
accrue	deposit	investment	refinanc
allowance	depreciation	lease	rent
amortiz	derivative	leasing	repurchas
asset	dividend	lend	reserve
bond	dollar	leverage	revenue
borrow	earning	liabilit	roa
budget	ebit	liquidity	roe
buyback	eps	loan	roi
capex	equit	loss	sale
capital	euro	margin	securit
cash	expenditure	obligation	selling
cent	expense	payable	shares
convertible	financ	payment	swap
cost	gain	pound	tax
covenant	goodwill	prepaid	warrant
currenc	hedg	prepay	
debenture	impair	profit	

TABLE 1
Descriptive Statistics

This table provides summary descriptive statistics for our global sample of 1,256 fixed income calls. Panel A reports the geographic distribution. Panel B presents the number of fixed income calls across years. Panel C partitions the fixed income calls distribution into public firms and private firms. Panel D describes the industry distribution in which we define each industry by 2-digit SIC code.

Panel A. Geographic Summary

Country	*N*	Country	*N*	Country	*N*
United States	672	Cayman Islands	9	China	3
United Kingdom	300	Australia	7	Cyprus	3
Canada	43	Morocco	7	Denmark	3
Germany	33	Bermuda	6	Indonesia	3
Norway	22	Hong Kong	6	Latvia	3
Sweden	21	Ireland	6	Singapore	3
Israel	13	France	5	Brazil	2
Netherlands	13	India	5	Kazakhstan	2
Switzerland	12	Jersey	5	Spain	2
Luxembourg	11	South Africa	5	Turkey	2
Poland	10	Finland	4	Other	15

Panel B. Year Summary

Year	*N*
2009	3
2010	6
2011	14
2012	101
2013	166
2014	220
2015	217
2016	167
2017	133
2018	120
2019	109

Panel C. Fixed Income Call Frequency Per Year by Structure of Ownership

	Number of		FI Calls per Firm Year			
	Firm-Years	Calls	Mean	25% Percent	Median	75% Percent
All	652	1,256	1.93	1	1	3
Private	333	694	2.07	1	2	3
Public	319	562	1.77	1	1	2

(Continued)

TABLE 1 (Continued)
Descriptive Statistics

Panel D. Industry Summary

SIC2	Industry	*N*
73	Business Services	120
60	Depository Institutions	112
67	Holding and Other Investment Offices	92
28	Chemicals and Allied Products	84
61	Nondepository Credit Institutions	75
87	Engineering, Accounting, Research, and Management Services	49
59	Miscellaneous Retail	46
44	Water Transportation	44
20	Food and Kindred Products	41
49	Electric, Gas and Sanitary Services	37
13	Oil and Gas Extraction	36
62	Security & Commodity Brokers, Dealers, Exchanges & Services	27
37	Transportation Equipment	27
54	Food Stores	25
63	Insurance Carriers	24
29	Petroleum Refining and Related Industries	24
30	Rubber and Miscellaneous Plastic Products	23
53	General Merchandise Stores	23
27	Printing, Publishing and Allied Industries	21
34	Fabricated Metal Products	21
65	Real Estate	19
35	Industrial and Commercial Machinery and Computer Equipment	19
12	Coal Mining	17
79	Amusement and Recreation Services	17
33	Primary Metal Industries	15
83	Social Services	15
51	Wholesale Trade - Nondurable Goods	15
56	Apparel and Accessory Stores	12
48	Communications	11
58	Eating and Drinking Places	10
10	Metal Mining	9
41	Local & Suburban Transit & Interurban Highway Transportation	7
47	Transportation Services	7
16	Heavy Construction, Except Building Construction, Contractor	6
36	Electronic & Other Electrical Equipment & Components	6
55	Automative Dealers & Service Stations	6
	Other	35
	Unknown	79

TABLE 2
Timing of Fixed Income Calls Relative to Earnings Announcements

This table shows the timing of fixed income calls relative to earnings announcements. Column 1 reports calendar days in event time where day zero is the day of the earnings announcement. Column 2 reports the number of corresponding fixed income calls and column 3 reports the percentage of total fixed income calls.

Days after the Earnings Announcement	Number of Fixed Income Call	Percentage of Total
(1)	(2)	(3)
-15	0	0.0%
-14	0	0.0%
-13	0	0.0%
-12	0	0.0%
-11	0	0.0%
-10	0	0.0%
-9	1	0.2%
-8	0	0.0%
-7	1	0.2%
-6	2	0.4%
-5	1	0.2%
-4	1	0.2%
-3	0	0.0%
-2	0	0.0%
-1	3	0.5%
0	228	41.5%
1	17	3.1%
2	8	1.5%
3	11	2.0%
4	10	1.8%
5	10	1.8%
6	14	2.6%
7	12	2.2%
8	11	2.0%
9	5	0.9%
10	4	0.7%
11	4	0.7%
12	1	0.2%
13	4	0.7%
14	12	2.2%
15	8	1.5%
In [-15, +15]	368	67.0%
Not in [-15, +15]	181	33.0%
Total	549	100.0%

TABLE 3
Determinants of Holding Fixed Income Calls

This table investigates the determinants of holding fixed income calls at the firm-year level. Panel A shows summary statistics for the FI call treatment sample and each of the three no-FI call control samples. Panel B shows the results of three logit models that predict whether a firm has a FI call, each with a different no-FI call control sample but always with the same FI call treatment sample. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Firm Characteristics

		No-FI Call Sample =		
	FI Call Sample (N = 134) (1)	All (N = 43,336) (2)	Same Industry & Year (N = 14,545) (3)	Same Industry & Year, Closest Size (N = 134) (4)
Debt to Assets	0.45	0.36*	0.34**	0.35***
Num Debt Type	3.96	2.52***	2.55***	3.66
Intangible	0.10	0.15***	0.11	0.09
Sales Growth	4.42%	19.64%**	17.26%*	10.42%
Loss	0.28	0.32	0.30	0.09***
Rated	0.57	0.25***	0.24***	0.51
Private	0.29	0.08***	0.12***	0.08***
Size	10.42	6.70***	7.14***	10.41
Foreign	0.35	0.28*	0.24***	0.51***
Hitech	0.13	0.26***	0.27***	0.13
Financial	0.53	0.24***	0.41**	0.53
Regulated	0.09	0.09	0.17**	0.09

(Continued)

TABLE 3 (Continued)
Determinants of Holding Fixed Income Calls

Panel B. Logit Prediction Models

	No-FI Call Sample =		
	All	Same Industry & Year	Same Industry & Year, Closest Size
	(1)	(2)	(3)
Debt to Assets	1.43***	1.24***	1.27*
	(7.17)	(5.79)	(1.94)
Num Debt Type	0.21***	0.18**	0.26**
	(3.01)	(2.51)	(2.26)
Intangible	-0.73	0.03	0.36
	(-1.24)	(0.05)	(0.36)
Sales Growth	-0.11	-0.08	-0.53
	(-0.50)	(-0.38)	(-1.13)
Loss	0.79***	0.87***	1.23***
	(3.65)	(3.92)	(3.32)
Rated	0.26	0.21	-0.11
	(0.97)	(0.78)	(-0.25)
Private	1.42***	1.26***	1.25***
	(6.53)	(5.55)	(2.87)
Size	0.69***	0.64***	0.03
	(11.07)	(10.07)	(0.34)
Foreign	0.01	-0.03	-0.60**
	(0.06)	(-0.16)	(-2.00)
Hitech	0.20	-0.88***	-0.10
	(0.64)	(-2.62)	(-0.18)
Financial	0.41*	-0.92***	0.01
	(1.68)	(-3.51)	(0.03)
Regulated	-0.79**	-2.18***	-0.44
	(-2.26)	(-5.99)	(-0.82)
Year Fixed Effects	Yes	Yes	Yes
Pseudo R^2 (%)	25.28	24.30	13.31
Observations	43,470	14,679	268

TABLE 4
Fixed Income Calls versus Earnings Calls for Public Firms

This table compares the determinants of holding fixed income calls with the determinants of holding earnings calls. Our sample is restricted to public firm years in which we can identify the incidence of fixed income and earnings calls. Panel A reports the summary statistics and the comparison between firm years with calls and firm years without calls. Panel B shows the results of the logit models that predict whether a firm has a FI call (Column 1) or an earnings call (Column 2). *Z*-statistics for these two columns are reported in parenthesis. Column 3 reports the difference in coefficients. In this column χ^2-statistics are reported in parenthesis. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Firm Characteristics

	FI Call		Earnings Call	
	With (N = 88) (1)	Without (N = 31,328) (2)	With (N = 17,421) (3)	Without (N = 13,995) (4)
Debt to Assets	0.33	0.26**	0.22	0.24***
Num Debt Type	4.38	2.52***	2.69	2.33***
Intangible	0.05	0.15***	0.19	0.10***
Sales Growth	2.04%	18.16%**	16.59%	20.01%***
Loss	0.25	0.27	0.23	0.32***
Rated	0.52	0.24***	0.34	0.12***
Size	11.34	7.05***	7.83	6.13***
Foreign	0.42	0.29***	0.17	0.45***
Hitech	0.07	0.24***	0.28	0.19***
Financial	0.65	0.27***	0.21	0.35***
Regulated	0.09	0.07	0.09	0.05***
BM	1.04	0.86*	0.68	1.09***

(Continued)

TABLE 4 (Continued)
Fixed Income Calls versus Earnings Calls for Public Firms

Panel B. Logit Prediction Models

	FI Call	Earnings Call	Coefficient Differences
	(1)	(2)	(3)
Debt to Assets	2.04***	0.43***	1.61***
	(6.28)	(7.13)	(42.81)
Num Debt Type	0.28***	-0.06***	0.34***
	(2.97)	(-4.40)	(12.16)
Intangible	-3.29***	0.78***	-4.07**
	(-2.69)	(9.75)	(6.19)
Sales Growth	-0.15	0.01	-0.16
	(-0.42)	(0.70)	(0.65)
Loss	1.19***	0.15***	1.04***
	(4.18)	(4.38)	(11.92)
Rated	-0.05	0.20***	-0.25
	(-0.14)	(4.73)	(1.31)
Size	0.94***	0.52***	0.42***
	(10.15)	(56.10)	(14.54)
Foreign	-0.60**	-2.08***	1.48***
	(-2.43)	(-57.48)	(32.89)
Hitech	0.47	0.50***	-0.03
	(0.93)	(13.01)	(0.01)
Financial	0.60*	-1.47***	2.07***
	(1.91)	(-38.31)	(51.62)
Regulated	0.12	-0.14**	0.26
	(0.26)	(-2.30)	(0.29)
BM	0.10	-0.33***	0.43***
	(0.72)	(-17.33)	(16.72)
Year Fixed Effects	Yes	Yes	
Pseudo R^2 (%)	33.13	28.15	
Observations	31,416	31,416	

TABLE 5

Fixed Income Call Content Analysis

This table provides a content analysis of fixed income calls. Columns 1 and 2 present the mean and median of fixed income calls held by public firms. Columns 3 and 4 present the mean and median of earnings calls held by public firms. Columns 7 and 8 present the mean and median of fixed income calls held by private firms. Panel A reports text length, Panel B reports debt discussion, Panel C reports current-period discussions, and Panel D reports discussion tone. Differences are also presented along with *t*-statistics in parenthesis. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Public FI Calls (N = 222)		Public Earnings Calls (N = 625)		Mean Difference	Median Difference	Private FI Calls (N = 103)		Mean Difference	Median Difference
	Mean (1)	Median (2)	Mean (3)	Median (4)	(1) - (3) (5)	(2) - (4) (6)	Mean (7)	Median (8)	(1) – (7) (9)	(2) – (8) (10)
Panel A. Length										
Presentation Total Words	2,534	2,330	4,009	3,829	-1,475*** (-8.19)	-1,499*** (-11.64)	2,502	2,224	32 (0.11)	106 (1.58)
Q&A Total Words	3,006	3,058	6,309	6,408	-3,303*** (-16.76)	-3,350*** (-14.87)	3,902	3,398	-895*** (-3.12)	-340* (-1.92)
Panel B. Debt Discussion										
Presentation Fixed Income %	1.39%	1.36%	0.77%	0.69%	0.62%*** (14.90)	0.67%*** (11.72)	0.99%	0.77%	0.40%*** (4.80)	0.59%*** (4.83)
Q&A Fixed Income %	0.74%	0.68%	0.48%	0.46%	0.26%*** (9.28)	0.22%*** (7.77)	0.37%	0.24%	0.36%*** (6.62)	0.44%*** (7.10)
Presentation Conflict %	0.26%	0.16%	0.14%	0.10%	0.12%*** (7.61)	0.06%*** (5.44)	0.07%	0.04%	0.19%*** (6.31)	0.11%*** (7.61)
Q&A Conflict %	0.13%	0.06%	0.09%	0.06%	0.04%*** (3.17)	0.00% (0.80)	0.05%	0.03%	0.07%*** (3.40)	0.03%*** (2.88)

(Continued)

TABLE 5 (Continued)
Fixed Income Call Content Analysis

	Public FI Calls (N = 222)		Public Earnings Calls (N = 625)		Mean Difference (1) – (3)	Median Difference (2) – (4)	Private FI Calls (N = 103)		Mean Difference (1) – (7)	Median Difference (2) – (8)
	Mean (1)	Median (2)	Mean (3)	Median (4)	(5)	(6)	Mean (7)	Median (8)	(9)	(10)
Panel C. Current Period Discussion										
Presentation Short-Term %	0.63%	0.36%	0.95%	0.91%	-0.32%*** (-6.09)	-0.55%*** (-6.66)	1.14%	1.14%	-0.51%*** (-6.62)	-0.78%*** (-7.09)
Q&A Short-Term %	0.20%	0.16%	0.32%	0.28%	-0.12%*** (-6.49)	-0.12%*** (-7.87)	0.36%	0.33%	-0.16%*** (-5.37)	-0.17%*** (-5.32)
Presentation Long-Term %	1.06%	1.02%	1.06%	1.00%	0.00% (0.09)	0.02% (0.21)	1.15%	1.04%	-0.09% (-1.31)	-0.02% (-1.16)
Q&A Long-Term %	0.42%	0.36%	0.45%	0.43%	-0.03% (-1.21)	-0.07%*** (-3.29)	0.54%	0.51%	-0.11%*** (-2.81)	-0.15%*** (-3.78)
Presentation Financial %	2.90%	2.89%	2.24%	2.25%	0.66%*** (9.70)	0.64%*** (8.79)	2.29%	2.28%	0.61%*** (5.41)	0.61%*** (5.61)
Q&A Financial %	1.27%	1.27%	1.19%	1.18%	0.08%* (1.86)	0.09%** (2.00)	0.89%	0.74%	0.38%*** (4.90)	0.53%*** (5.92)
Presentation Quantitative %	1.32%	1.26%	0.95%	0.78%	0.37%*** (7.28)	0.42%*** (7.45)	0.64%	0.63%	0.68%*** (9.46)	0.63%*** (8.93)
Q&A Quantitative %	0.48%	0.42%	0.42%	0.36%	0.06%*** (2.65)	0.06% (1.46)	0.25%	0.17%	0.23%*** (5.39)	0.26%*** (6.50)

(Continued)

TABLE 5 (Continued)
Fixed Income Call Content Analysis

	Public FI Calls (N = 222)		Public Earnings Calls (N = 625)		Mean Difference (1) – (3)	Median Difference (2) – (4)	Private FI Calls (N = 103)		Mean Difference (1) – (7)	Median Difference (2) – (8)
	Mean (1)	Median (2)	Mean (3)	Median (4)	(5)	(6)	Mean (7)	Median (8)	(9)	(10)
Panel D. Discussion Tone										
Presentation Positive %	1.77%	1.64%	2.02%	2.01%	-0.26%*** (-5.12)	-0.37%*** (-5.76)	1.44%	1.30%	0.32%*** (3.96)	0.34%*** (4.04)
Q&A Positive %	0.80%	0.75%	1.09%	1.09%	-0.29%*** (-9.67)	-0.34%*** (-9.55)	1.03%	1.01%	-0.23%*** (-3.99)	-0.26%*** (-4.24)
Presentation Negative %	0.88%	0.87%	0.97%	0.88%	-0.09%** (-2.44)	-0.01% (-1.09)	0.88%	0.81%	-0.01% (-0.16)	0.06% (0.42)
Q&A Negative %	1.17%	1.11%	1.06%	1.01%	0.11%*** (3.54)	0.10%*** (4.55)	1.02%	1.04%	0.15%** (2.39)	0.07%*** (2.91)
Presentation Net Tone %	0.89%	0.78%	1.06%	1.11%	-0.17%** (-2.48)	-0.33%*** (-3.44)	0.56%	0.54%	0.33%*** (3.20)	0.24%*** (2.63)
Q&A Net Tone %	-0.37%	-0.37%	0.03%	0.07%	-0.40%** (-8.53)	-0.44%*** (-8.75)	0.01%	0.00%	-0.38%** (-4.48)	-0.37% (-5.43)

TABLE 6
Fixed Income Call Participants

This table describes fixed income call participants. Column 1 presents fixed income calls held by public firms. Column 2 presents earnings calls held by public firms. Column 4 presents fixed income calls held by private firms. Panel A provides the frequency that different managers appear and Panel B provides the average number of analysts participating in the call. Differences are also presented along with *t*-statistics in parenthesis. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Public FI Calls (N = 222) Mean (1)	Public Earnings Calls (N = 625) Mean (2)	Mean Difference (1) – (2) (3)	Private FI Calls (N = 103) Mean (4)	Mean Difference (1) – (4) (5)
Panel A. Managers					
Total	2.66	2.99	-0.33***	2.94	-0.28**
			(-3.50)		(-2.26)
CEO Appears	22.52%	74.08%	-51.56%***	44.66%	-22.14%***
			(-15.22)		(-4.16)
CFO Appears	63.06%	73.12%	-10.06%***	97.09%	-34.03%***
			(-2.83)		(-6.94)
CAO Appears	9.01%	2.40%	6.61%***	43.69%	-34.68%***
			(4.29)		(-7.92)
Treasurer Appears	60.81%	7.04%	53.77%***	40.78%	20.03%***
			(20.66)		(3.42)
Panel B. Analysts					
Total	4.06	9.07	-5.01***	4.80	-0.74*
			(-16.50)		(-1.84)
Buy-Side Analysts	0.91	0.16	0.75***	0.89	0.02
			(12.99)		(0.12)
Hedge Fund Analysts	0.08	0.08	0.00	0.33	-0.25***
			(0.13)		(-5.14)
Mutual Fund Analysts	0.36	0.02	0.34***	0.27	0.09
			(12.02)		(1.13)
Insurance Analysts	0.34	0.00	0.34***	0.08	0.28***
			(15.12)		(4.66)

TABLE 7
Fixed Income Call Event Study

This table examines the information role of fixed income calls for both bond and equity markets. In Panel A, we present bond market daily volume and number of trades across event days and non-event days for all firms as well as for private firms and public firms. In Panel B, we report equity market daily volume and absolute return tests for public firms. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Bond Event Study

	Event window Daily Average (1)	Non-event window Daily Average (2)	Mean Difference (3)	*T*-statistic (4)
All FI Calls (*N* = 257)				
Volume	0.24%	0.19%	0.05%***	4.18
Number of trades	26.88	23.75	3.14***	3.83
Public FI Calls (*N* =138)				
Volume	0.12%	0.11%	0.01%**	2.11
Number of trades	42.58	38.27	4.31***	2.97
Private FI Calls (*N* = 119)				
Volume	0.37%	0.29%	0.08%***	3.78
Number of trades	8.68	6.91	1.78***	3.37

Panel B. Equity Event Study

	Event window Daily Average (1)	Non-event window Daily Average (2)	Mean Difference (3)	*T*-statistic (4)
Public FI Calls (*N* = 185)				
Volume	1.56%	1.25%	0.31%***	3.81
Absolute value of return	1.50%	1.26%	0.24%***	3.12