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TWENTY-FIVE YEARS (1998-2023) OF EARNINGS CONFERENCE CALLS: A BIBLIOMETRIC REVIEW FOCUSING ON ARTIFICIAL INTELLIGENCE

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Abstract

Earnings conference calls serve as vital financial communication practice for investors to understand public companies' strategies. This paper examines the intellectual landscape of the reference literature using bibliometrics. Based on an analysis of 14,437 articles from 1998 to 2023, including citation, keyword co-occurrence, and publication analyses, it identifies leading authors, themes, and topics. Additionally, a snowball search retrieves 72 conference call-related papers, showing the evolution from phone calls to videocasts. Findings reveal that earnings call research focuses on corporate governance across four categories: capital markets, sustainability, corporate governance, and stakeholder environment. The review emphasises the importance of management's attention to sustainability and market reactions. This research aims to establish the connection between historical research and the potential of artificial intelligence to enhance research outcomes. It proposes future research utilizing Artificial Intelligence (AI) for advanced text, voice, and image analysis, particularly focusing on videocasts. The paper presents a comprehensive bibliometric review of Earnings Conference Calls literature, tracing its evolution and identifying prospects for AI integration.

Keywords: Artificial Intelligence; Bibliometric analysis; Earnings disclosure; Earnings Calls; Financial Communication.

1. INTRODUCTION

In capital markets, information is the lifeblood of investment. Market investors rely on transparent and consistent corporate disclosures to make informed strategic and tactical asset allocation decisions (Bravo & Silva, 2006; Simões et al. 2021). Earnings disclosure with Conference calls¹ is an essential part of this dynamic (Healy & Palepu, 2001). A common tool senior management uses to engage stakeholders and notable for its spontaneous approach and use of multimedia. These earnings calls attract investor attention, prompting them to decipher subtle cues and extract insights. Notably, public companies listed on stock exchanges routinely host quarterly earnings and conference calls, adding a structured rhythm to information dissemination.

Previous reference academic literature researched the effects of the earnings calls considering management decisions to make voluntary disclosures to facilitate “clarity and understanding” to investors and avoid the under-pricing of a firm’s stock in the market (Graham et al., 2005). Over the past quarter-century, Earnings Calls research has undergone a remarkable evolution, progressing from simple disclosure regulation to contemporary videocasts. The research conducted in this field has evolved in tandem with this technological advancement, addressing the changing landscape of communication methods and the emerging gaps and future inquiries stemming from these advancements, applying artificial intelligence tools, like natural language processing (NLP) and text mining techniques together with machine learning methods (e.g. sentiment analysis) (Druz et al., 2020) and other tools, like audio and image recognition (Aromi & Clements, 2021; Fiset et al., 2021; Mayew & Venkatachalam, 2012). Against this background, this paper seeks to delineate the landscape of earnings calls through a bibliometric examination, elucidating present perspectives and charting future avenues for research using artificial intelligence tools. The subsequent sections of this paper are structured as

¹ For clarity, throughout this paper, "Earnings Calls" will denote Earnings Disclosure with Conference Calls. The research integrates references to both Earnings Disclosure and Earnings Conference Calls, illustrating their strong interconnectedness.

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follows: Section 2 presents a systematic review of Earnings Disclosure with Conference Calls. Section 3 details the bibliometric methodology used. Section 4 outlines the bibliometric findings. Section 5 introduces new research on conference calls with artificial intelligence. Section 6 suggests directions for future research. Finally, Section 7 provides the conclusion of this study.

2. SYSTEMATIC REVIEW ON EARNINGS DISCLOSURE WITH CONFERENCE CALLS

Publicly traded companies must adhere to regulations by Exchange Commissions to keep their securities listed. Key regulatory obligations include the timely release of Annual Reports and Quarterly Earnings Releases, referred to here as Earnings Calls. Since the SEC² implemented Regulation Fair Disclosure (Reg FD) in 2000, companies typically conduct conference calls after these disclosures. This regulation prohibits selective information disclosure, ensuring simultaneous public release, and aims to address information asymmetry, underscoring the SEC's commitment to protecting investors.

Disclosure is public information about a company's financial condition and business, helping investors make informed decisions (SEC). Earnings Disclosure occurs quarterly in most markets. Financial reporting and disclosure are key to communicating performance and governance to investors (Healy & Palepu, 2001). Corporate governance ensures that managers' interests align with those of shareholders, focusing on the board-manager-shareholder relationship (Armstrong et al., 2010). Firms disclose information through financial reports, press releases, and financial analysts (Healy & Palepu, 2001). Earnings conference calls are significant in capital markets, typically hosted by larger, more profitable companies closely followed by analysts (Frankel et al., 1999). These events often see higher volatility in return, trading volume, and stock price reactions (Bowen et al., 2002; Matsumoto et al., 2011). Managers use these calls to communicate performance and prospects beyond financial statements, aiding efficient capital allocation (Tasker & Johnson, 1998). However, increased disclosure through these calls has raised concerns among accountants and auditors.

The use of big data analytics and social media enables real-time interactions between corporations and stakeholders (Albarrak et al., 2020). Disclosure study methodologies have evolved, incorporating natural language processing (NLP), machine learning, and artificial intelligence techniques since the late 1990s. Recent research uses advanced NLP and text-mining tools (Fisher et al., 2016). Linguistic cues in conference calls, such as managerial tone, influence investor behaviour, and earnings forecasts (Druz et al., 2020). Voice technology analyses vocal cues for insights beyond quantitative data (Mayew & Venkatachalam, 2012). Technological advances also include the analysis of facial expressions in video calls (Aromi & Clements, 2021; Flam et al., 2020). Integrating sustainability into management strategy is crucial, with research linking earnings calls to sustainability performance (Delisle et al., 2021). Firms with strong sustainability practices show a more positive management tone, indicating transparency and effective incorporation of soft information into stock prices (Hsu et al., 2019). Text mining analyses the correlation between sustainability themes in conference calls and stock performance, emphasising its role in evaluating firm information asymmetry (Krüger, 2015).

3. BIBLIOMETRIC SEARCH

Earnings Conference Calls are a finance communication tool in the Earnings Disclosure process from public companies. With the purpose of better understanding, the process was necessary to filter all the disclosure processes involved and Scopus is ideal for that. Based on the search methodology developed by Kumar et al. (2021) and further refined by Srivastava & Anand (2023), this approach involves several steps: conducting a database search on Scopus, filtering for scholarly publications, applying subject-specific filters, and using specific keywords. We then conducted a database inquiry with scholarly, language, and subject filters to identify relevant articles (see Table 1). Scopus is historically used for its extensive coverage, preferred due to its broader scope and consistent quality (Donthu et al., 2021).

To go deep on Earnings Calls and understand the trends, specifically related to artificial intelligence, we decided to conduct snowball research about conference calls, using the paper as reference: "When Managers Change Their Tone, Analysts and Investors Change Their Tune" (Druz et al., 2020). The paper finds a correlation between tone and stock market performance using sentiment analysis and event study. We found 72 papers directly connected to conference call subjects. The results from this methodology will be presented specifically in Section 5.

Getting the benefit from both search methodologies, our objective is to investigate the following research questions: (i) What categories characterise the research trajectory on earnings calls?; (ii) What are the main papers in the domain of earnings calls research?; (iii) What prevalent methodologies are discernible within the landscape of earnings calls research?; (iv) Who are the foremost contributors in terms of authors, institutions and countries engaged in earnings calls

² Since 2000, following the SEC's Regulation Fair Disclosure, conference calls after earnings disclosures have become common. The SEC, which enforces securities laws to protect investors, aimed to prevent selective disclosure and promote transparency, making these calls a standard practice for public companies.

research?; and (v) What prospects for future investigation emerge within earnings calls research, especially artificial intelligence?

The data analysis will be developed with Scopus and VOSviewer graph tools to conduct a comprehensive visualization. The integration of these tools is meticulously documented through precise referencing in the tables and figures presented in Section 4 of the paper.

Using Scopus, the first keywords were derived from previous research references, focussing on corporate disclosure (Srivastava & Anand, 2023). The search spanned 1998-2023, yielding 14,437 Scopus documents. We then filtered subjects to "business, management, and accounting," "economics, econometrics, and finance," "social sciences," and "decision sciences," reducing the pool to 9,464 articles. Further focussing on earnings disclosure and earnings calls-related terms narrowed this to 7,798 articles. Additional refinements using terms like "earnings call" and "analyst perception" reduced the number to 2,236 articles for bibliometric review. Finally, after excluding non-essential keywords, 351 papers remained for analysis.

| Filtering Criteria | Reject | Accept |
|---|--------|--------|
| (KEY (corporate AND disclosure) OR KEY (corporate AND transparency) OR KEY (corporate AND reporting) OR KEY (firm AND disclosure) OR KEY (firm AND transparency) OR KEY (company AND disclosure) OR KEY (company AND transparency) OR KEY (financial AND disclosure) OR KEY (non-financial AND disclosure) OR KEY ("corporate" AND "voluntary disclosure") OR KEY ("company" AND "voluntary disclosure") OR KEY ("firm" AND "mandatory disclosure") OR KEY ("corporate" AND "mandatory disclosure") OR KEY ("company" AND "mandatory disclosure") OR KEY ("corporate" AND "disclosure quality") OR KEY ("accounting" AND "disclosure") OR KEY ("firm" AND "voluntary disclosure") OR KEY (voluntary AND disclosure) OR TITLE-ABS-KEY (mandatory AND disclosure) OR KEY (disclosure AND quality) OR KEY (accounting AND disclosure)) AND PUBYEAR > 1997 AND PUBYEAR < 2024 | | 14,437 |
| AND (LIMIT-TO (SUBJAREA,"BUSI") OR LIMIT-TO (SUBJAREA,"ECON") OR LIMIT-TO (SUBJAREA,"DECI") OR LIMIT-TO (SUBJAREA,"SOCI")) | 4,973 | 9,464 |
| AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (DOCTYPE , "ar")) | 1,666 | 7,798 |
| AND ("earnings management" OR "earnings call" OR "quarterly calls" OR "earnings conference call" OR "earnings presentation" OR "earnings announcement" OR "quarterly results" OR "earnings report" OR "earnings release" OR "earnings results" OR "analyst perception" OR "investor perception") | 7,317 | 2,236 |
| REMOVED THE WORDS: ("earnings management" OR "earnings presentation" OR "earnings announcement" OR "quarterly results" OR "earnings report" OR "earnings release" OR "earnings results") | 1,885 | 351 |

Table 1. Earnings Calls Articles filtering criteria with Scopus Database

4. BIBLIOMETRIC FINDINGS

The temporal trend of publications serves as a barometer for gauging the evolutionary trajectory of a scholarly field and the burgeoning interest among researchers over time. There is increasing scholarly attention observed after 2008, indicative of the expanding domain of inquiry. While the initial phase exhibited some research (117 documents between 2000-2007), a notable uptick occurred in the wake 2007–2008 financial crisis (477 documents between 2009-2015). We examine earnings calls research using cluster formations in co-occurrence keywords (Figure 1). Setting a minimum size of 63 keywords, we identified four primary clusters. Cluster 1 – Disclosure (red nodes), centred on disclosure (Graham et al., 2005). Keywords included financial analysts, who write reports on earnings disclosures, and investor relations, helping companies communicate strategy to capital markets. Cluster 2 – Sustainability (green nodes), with 138 items, focused on CSR/Sustainability (Dhaliwal et al., 2011), including concerns like environmental and carbon disclosure, and the integration of technology in sustainability reports. Cluster 3 – Governance (blue nodes), centred on Corporate Governance (Fields et al., 2001), with keywords such as audit and risk management committees, highlighting internal corporate governance practices. Cluster 4 – Stakeholder (yellow nodes) explored capital market reactions using stakeholder (Frias-Aceituno et al., 2013), event studies, and regression analysis to research the relationship between market performance and Earnings Calls disclosure procedures.

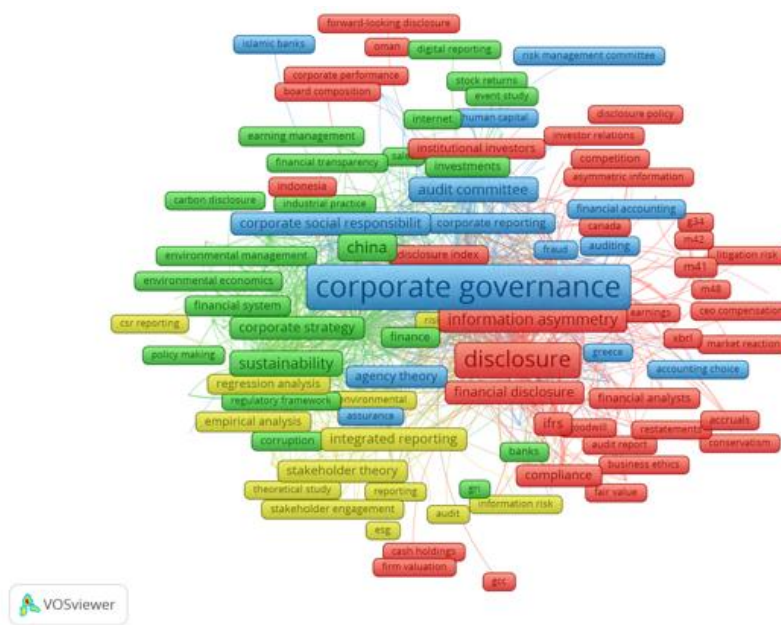


Figure 1. Earnings Calls Research co-occurrence clusters 1998-2023

Publication metrics serve as benchmarks for identifying influential academic studies and highlighting foundational contributions. Notable work in earnings and calls research includes “The Economic Implications of Corporate Financial Reporting” (Graham et al., 2005). Significant attention is also given to “Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting” (Dhaliwal et al., 2011), emphasising the importance of Corporate Social Responsibility (CSR) in this field that further developed to sustainability (Table 2 and Figure 2).

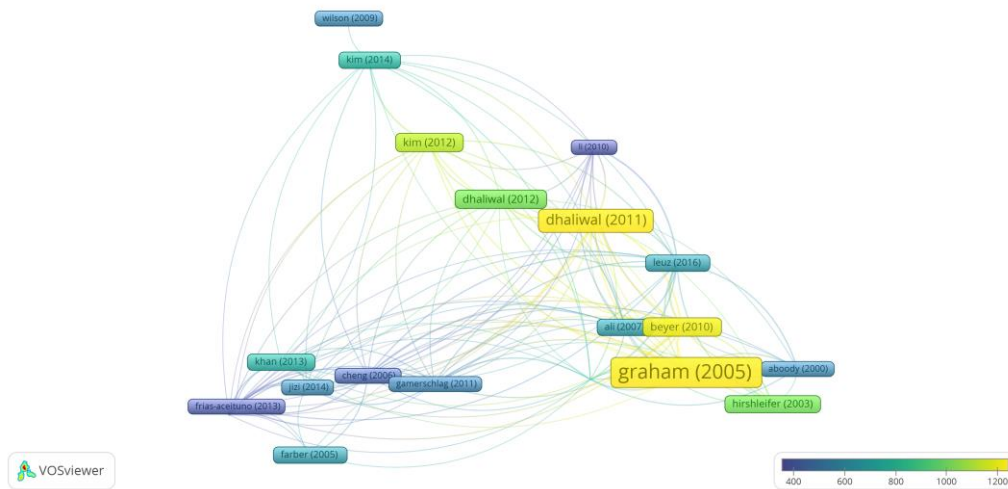


Figure 2. Earnings Calls Bibliographic coupling analysis 1998-2023

| Rank | Author (year) | Methodology/Dataset | Dataset | Findings | Citations |
|------|------------------------|---------------------------|---------------------------------------|---|-----------|
| 1 | Graham et al. (2005) | Pearson correlation | Survey results | Managers sacrifice long-term value to smooth earnings | 3457 |
| 2 | Dhaliwal et al. (2011) | Logistic regression model | CSR Reports and Financials | Managers report CSR after a high cost of equity year | 2014 |
| 3 | Beyer et al. (2010) | Time series regression | Stock returns and Analysts' forecasts | Earnings forecasts explain the stock price variation | 1161 |
| 4 | Kim et al. (2012) | Multiple regression | Public CSR documents and financials | Sustainable companies have more corporate governance | 1087 |
| 5 | Dhaliwal et al. (2012) | Regression analysis | CSR reports and analyst forecasts | Sustainable companies reduce analyst forecast error | 990 |

Table 2. Methodology and Performance from Highly Cited Earnings Calls Research.

Table 2 summarises influential academic papers in the field, highlighting various research methodologies and datasets. Graham et al. (2005) used qualitative surveys, interviews, and Pearson correlation analysis in "The economic implications of corporate financial reporting." Dhaliwal et al. (2011) applied logistic regression in "Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting." Beyer et al. (2010) utilized time series regression in "The financial reporting environment: Review of the recent literature".

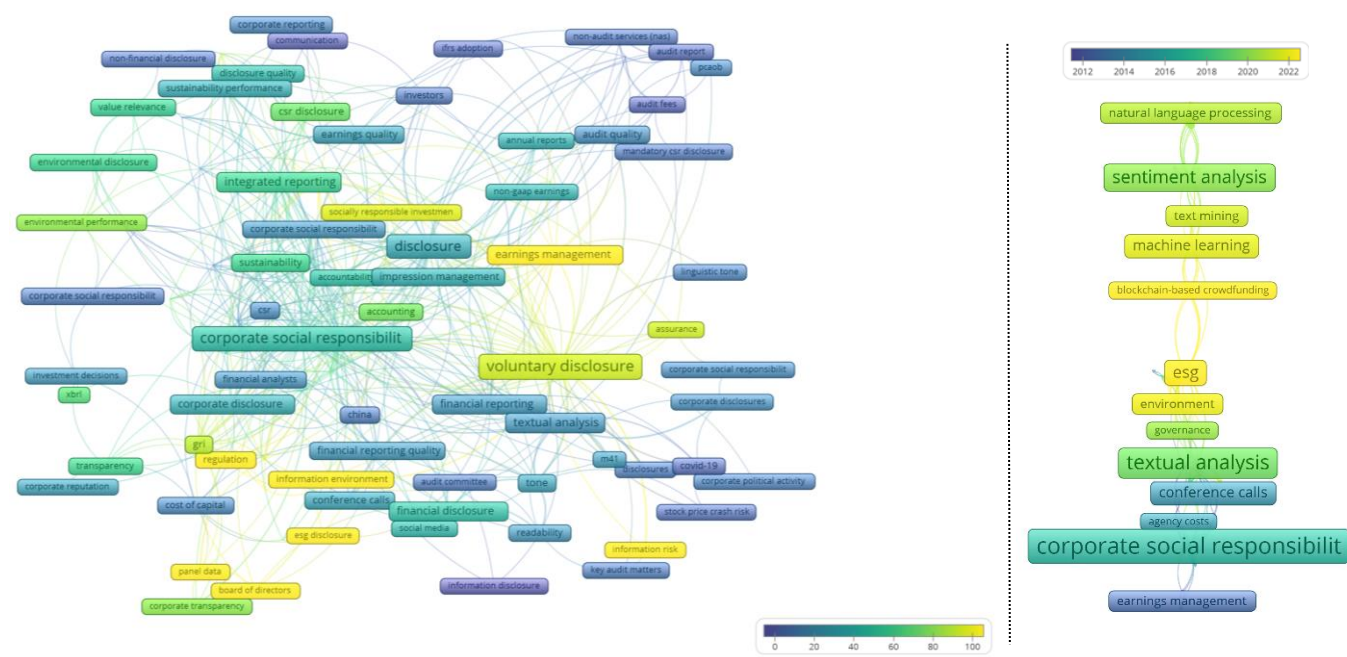
The source of publication serves as a critical indicator of a journal's standing and its role in advancing research within a particular academic domain. As delineated in Table 2, it in the realm of earnings and calls studies, Sustainability (Switzerland) emerges as the frontrunner, boasting a substantial publication count of 84 articles, followed by Corporate Governance Bingley and Journal of Accounting and Economics.

The quantity of articles originating from an academic institution serves as a metric of its research involvement and illustrates its scholarly output and influence within the academic domain. The University of Portsmouth (n = 31 articles) emerges as the leading contributor in the discourse on earnings calls research, with a strong focus on sustainability, followed by Universiti Utara Malaysia and the University of Sfax.

The quantity of scholarly articles originating from a nation serves as a barometer of its research contributions. The United States (with 624 articles) emerges as the foremost contributor to corporate disclosure research, succeeded by China (259 articles) and the United Kingdom (246 articles). This trend correlates logically with major stock exchanges situated in these respective countries, such as the NYSE, Hong Kong Stock Exchange and London Stock Exchange.

5. EARNINGS CALLS RESEARCH FOCUSED ON ARTIFICIAL INTELLIGENCE

Earnings Calls have been a key communication channel for CEOs and C-level executives of public companies since the 2000s, with thousands of events annually across the globe. Originally phone calls, these transitioned to videocast formats post-2020. The research employed a targeted search on Scopus utilizing key terms frequently associated with conference calls, excluding not direct related terms. This approach yielded 351 relevant papers (see Table 1). This resulted in the Figure 3 VOSviewer chart. To go deep into the specific theme of Earnings Calls inside the Earnings Disclosure universe and find the artificial intelligence trends, we also decided to implement a snowball search, using the study by Druz et al. (2020) as a foundational reference, which resulted in the identification of an additional 72 papers (Figure 4).



Figures 3 and 4. Earnings Calls co-occurrence analysis with Scopus (Left) / Snowball (Right) & VOSviewer .

The link between a company's value creation and its strategy communication is critical for success. The high occurrence words “voluntary disclosure” and “transparency” (Figure 3) corroborates the interest in this subject in the conference call. Transparency in this communication is highly valued by investors (Damodaran, 2006). Unlike other information, conference calls allow investors to ask unscripted questions, prompting spontaneous responses from management. These interactions can reveal insights into the market. Management can control every piece of information they provide to the

capital markets, except for conference calls and related events. Investor community can ask questions unplanned by the management. This become a challenge for the management, who will use the knowledge to answer online and will have an unplanned answer with words, voice, and facial expressions that can present a new clue to the market. Earlier studies showed that stock market participants react to conference calls (Bowen et al., 2002; Bushee et al., 2004; Frankel et al., 1999); indeed, they react even during calls (Matsumoto et al., 2011). Table 3 shows the main methods and datasets used in the initial stage of research.

| Author (year) | Dataset | Method |
|-----------------------|------------------------------|---------------------------|
| Frankel et al. (1999) | Calls data and stock trade | Probit regression model |
| Bowen et al. (2002) | Calls data and Forecasts | Linear regression model |
| Bushee et al. (2003) | Stock trade and Analyst info | Logistic Regression model |
| Brown et al. (2004) | Stock trade and CRSP | Linear Regression model |

Table 3. Conference Calls initial stage research. Source: Scopus.

In Figure 4, the VOSviewer analysis from the snowball sampling validates the growing interest in specific topics. By examining the colour timeline, we observe a significant increase in terms related to Artificial Intelligence after 2020. These include "natural language processing", "sentiment analysis", "text mining", "machine learning", and "textual analysis". We can also view "Tone" and "Linguistic Tone" on Figure 3 which suggests a keen interest in understanding the nuances of linguistic expression and sentiment analysis, particularly within corporate communications and investor relations. It underscores the significance of tone and language choice in conveying information and shaping perceptions among stakeholders (Caglio et al., 2020; Druz et al., 2015, 2020).

Upon conducting a comprehensive review of the literature via Scopus and complementing it with a snowball search methodology, we identified a notable research gap in the domain of conference calls. Specifically, while video conference calls have become increasingly prevalent in the earnings disclosure process, our analysis revealed that the existing literature, as visualized through various bibliometric maps, lacks terms associated with facial expressions or vocal tone. Given the advancements in artificial intelligence and computer science, this literature review highlights a significant opportunity to leverage these technologies to analyze video content in earnings disclosures. Additionally, the study by Druz et al. (2020) underscores an intriguing challenge, noting the rapid evolution of natural language processing and indicating that the last extensive research on managerial tone was conducted in 2020. This further suggests the need for updated studies incorporating the latest artificial intelligence techniques to enhance our understanding of non-verbal communication in financial disclosures. Table 4 presents unique research on this front in the last few years that can be inspirational for future research:

| Author (year) | Dataset | Method |
|------------------------------|------------------------------|---------------------------------|
| Mayew & Venkatachalam (2012) | Audio data and financials | Layered Voice Analysis - (LVA™) |
| Druz et al. (2020) | Transcripts | Sentiment Analysis |
| Fiset et al. (2021) | CEO Letters (Text and photo) | Deep machine learning |
| Aromi & Clements (2021) | CEO Photos and Macro index | Python package: FER |

Table 4. Publication Dataset and Method for Conference Calls. Source: Scopus.

Higher levels of positive (negative) affect, as operationalised via higher levels of excitement (cognitive dissonance) became possible to measure by proprietary Layered Voice Analysis (LVA™) software and similar technologies, delivering good (bad) news about future firm performance. That is, investors respond to the information contained with positive and negative affect as evidenced by the stock returns surrounding the conference call. The research found that effects are most pronounced when analysts scrutinize managers during conference calls, particularly when firms miss analyst earnings estimates. More positive (negative) effects predict two-quarters of future earnings (Mayew & Venkatachalam, 2012). It presents evidence that managerial vocal cues contain useful information about the fundamentals of a firm, incremental to both quantitative earnings information and qualitative "soft" information conveyed by linguistic content.

Additionally, the sophisticated evolution of capital markets and technology brought the potential to find the correlation between the linguistic tone of the CEO and the decisions taken by investors during the conference calls (Druz et al., 2020). The study also made a provocative call to academia, suggesting that shortly, more extensive analyses should explore the insights managers consciously or inadvertently provide to the investment community through their speeches. This should motivate analysts and their employers to delve deeper into behavioural finance investigations. The research

anticipates that advancements in machine learning tools (including model combinations³) and coding will uncover novel insights for public companies.

Technological advances have increased the availability of video in addition to audio. Exploring facial expressions as another channel of non-verbal managerial communication in financial markets is a fruitful avenue for future research. The synergy between speech, voice tone, and facial expression has become increasingly pronounced, particularly with the surge in videocasts usage after 2020 during the pandemic. Some studies have delved into the informational content of facial expressions among diverse economic actors concerning the business cycle's state (Aromi & Clements, 2021; Fiset et al., 2021). Emotional indices were developed using facial recognition technology and artificial intelligence tools applied to media photographs. The findings showed correlations between emotions and fluctuations in current economic conditions and anticipated future activities. Positive emotions like happiness increased as economic conditions improved, while negative emotions such as anger, sadness, and fear decreased. There has been no specific research on earnings calls and facial expressions, so the potential finding will represent a contribution to the academy.

In Figure 5 we highlight in blue the methods used in the last 25 years, with the authors' references in grey bars. We notice a huge opportunity from Artificial Intelligence checking the facial expression, voice nuances, and NLP technology evolution to reach a complete perception diagnostic of these Earnings Calls shown in the horizontal arrows.

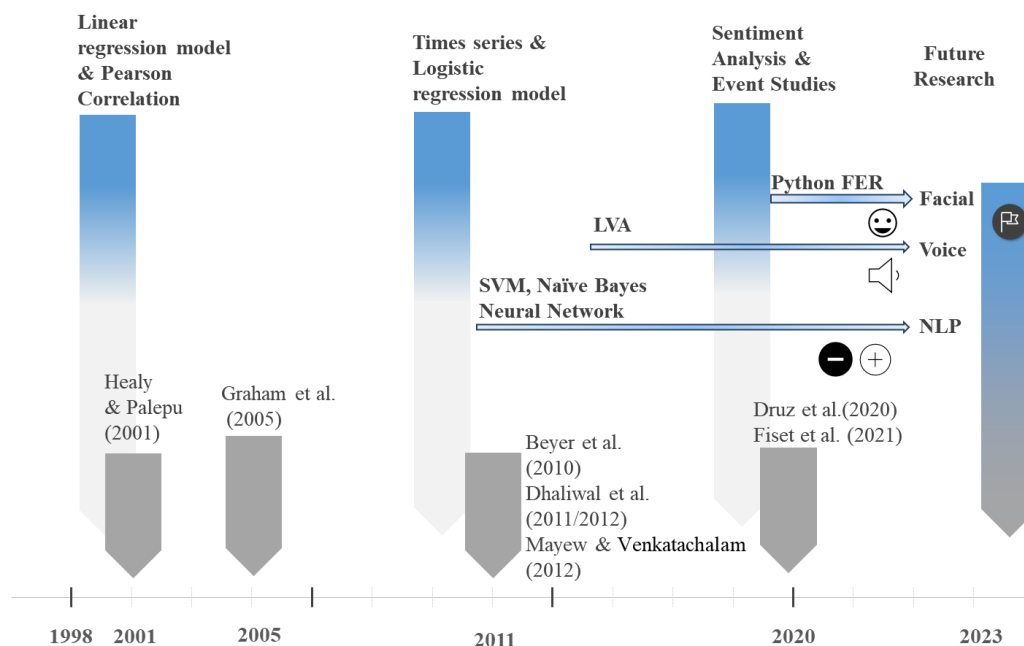


Figure 5. 25 Years of Earnings Calls

6. SUGGESTIONS FOR FUTURE RESEARCH

The findings of our research shed light on the evolving landscape of corporate governance practices, particularly on Earnings Calls (Figure 6). Notably, our study observed a significant focus on corporate governance principles during these events, indicating a growing awareness and emphasis on transparency, accountability, and shareholder engagement within corporate entities.

³ See, for instance, Bravo (2022) Bravo et al. (2021, 2022 2023)

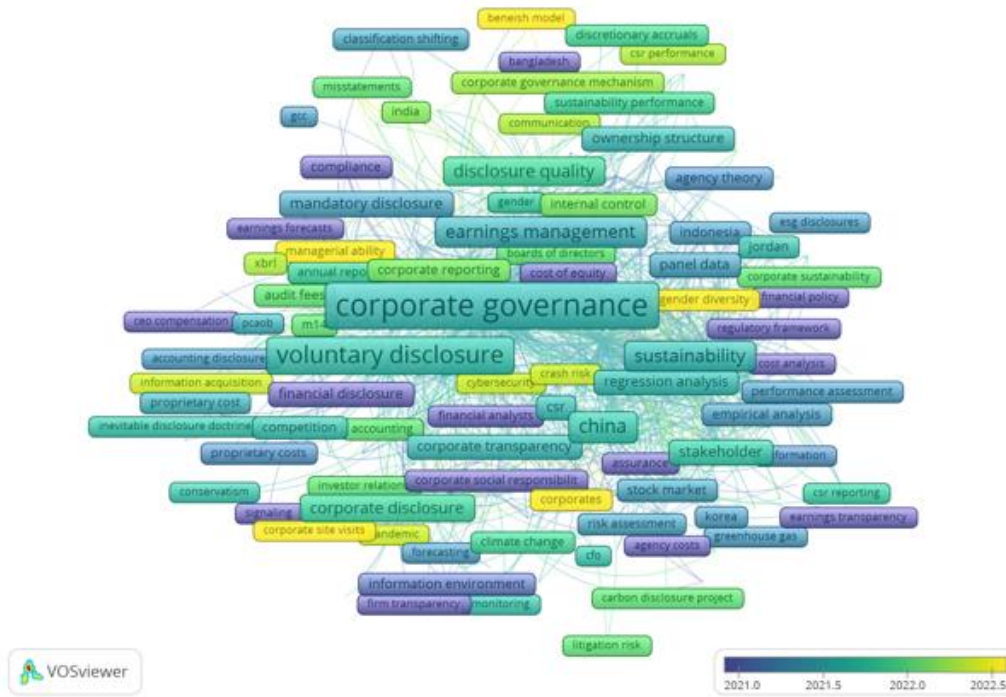


Figure 6. Earnings Calls Research 2020-2023

One notable development in our research is the adoption of new technology tools for information disclosure, particularly videocasts. This innovative medium offers a dynamic platform for companies to engage with stakeholders, providing a richer experience than traditional methods. Alongside this advancement, we've seen the rise of artificial intelligence tools, rapidly transforming corporate operations. Since the SEC's Regulation Fair Disclosure in 2000, many studies have focused on earnings conference calls, including video conferences. Future research should address the connection between narrative senses - words, voice, and facial expressions - and company strategy messages, particularly concerning sustainability. It could compare key indicators of major public companies linked to earnings announcements: stock performance, analyst recommendations, and previews. This research could fill gaps in existing literature and offer insights for companies, investors, and academics interested in understanding the complex dynamics between corporate strategy communication and stock performance. By exploring the connection between video conference calls and sustainability narratives, a more comprehensive view of their influence on capital markets can be gained.

Looking ahead, future research in this domain presents a compelling opportunity to explore the intersections of corporate governance, technological innovation, and investor perceptions. Key areas for further investigation include Environmental, Social, and Governance factors, gender diversity, climate change, crash risks, cyber security, and geopolitical risks, with China in particular. One promising avenue for future inquiry is leveraging artificial intelligence tools to enhance our understanding of investor perceptions regarding videocast disclosures (Figure 7). By analysing facial expressions, voice tones, and word choices of management during these presentations, researchers can uncover valuable insights into underlying sentiments, intentions, and potential signals of corporate performance. Understanding the nuances behind these non-verbal cues and linguistic patterns can provide deeper insights into management's communication strategies, their alignment with corporate governance principles, and their impact on investor decision-making processes. Moreover, by integrating artificial intelligence-driven sentiment analysis and natural language processing techniques, researchers can develop more sophisticated models for evaluating the effectiveness and credibility of videocast disclosures. Ultimately, by delving into these multifaceted dimensions of corporate communication and governance, future research endeavours have the potential to inform practitioners, policymakers, and investors alike, facilitating more informed decision-making and fostering greater trust and transparency within the corporate landscape.

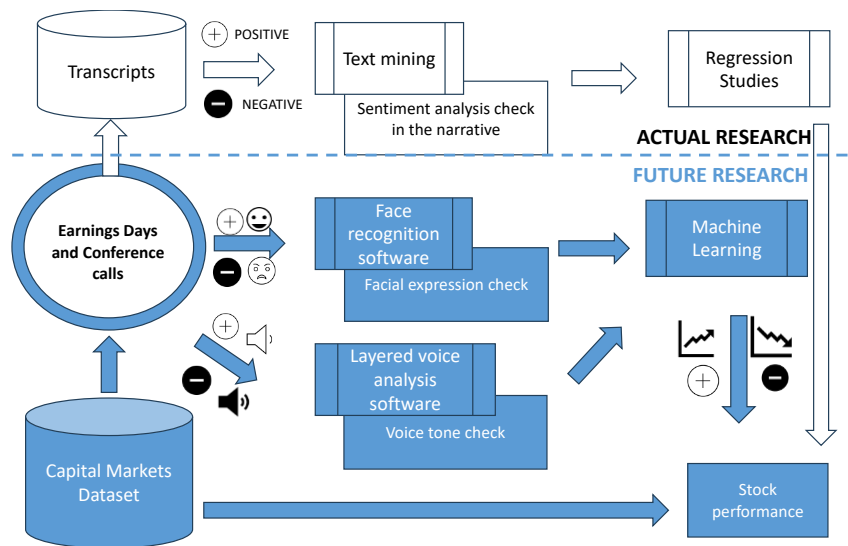


Figure 7. Earnings Calls suggestions for future research.

7. CONCLUSION

In conclusion, the research on earnings disclosures accompanied by conference calls offers significant insights into the communication strategies of publicly traded companies with their stakeholders, especially investors and analysts. Analyzing over 14,000 disclosure documents reveals that earnings calls have become a vital component of corporate governance today, unlike 25 years ago. This evolution underscores the clear benefits these calls provide for capital markets and company stakeholders. Through bibliographic coupling, we identified four major themes in the literature related to disclosure: the role of disclosure in capital markets, sustainability, corporate governance, and stakeholder. The deep dive on Earnings Calls driving the efforts to artificial intelligence gave us a view of emerging trends on videocasts specifically: the huge opportunity to use new tools, namely face recognition, voice analysis, and machine learning techniques to better understand word choices that are revealing new information from the management to investors. We also identified new trends in big data and social media areas.

The limitation of the study lies in the exploration of other search tools, like Web of Science and Google Scholar. Also, will be useful to check with investors how they see the trends of artificial intelligence on Earnings Calls and how they are getting support from the emerging technologies. Furthermore, we have traced the evolution of different disclosure sources and the corresponding theoretical frameworks employed by researchers. This bibliometric review serves as a navigational tool for both scholars and practitioners, offering a comprehensive overview of the field's evolution, progress, and areas requiring further exploration.

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