Essays on Human Capital Management Disclosure

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Abstract

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This dissertation consists of two essays on the newly mandated Human Capital Management (HCM) disclosure introduced by the Securities and Exchange Commission (SEC) in 2020. The SEC adopts a principles-based approach, allowing firms discretion over what to disclose, resulting in significant variation in HCM disclosures. The first essay investigates the role of board Human Resources (HR) governance on HCM disclosure transparency. More companies are renaming their compensation committees as HR committees to reflect a broader responsibility for HCM, and more companies are appointing directors with HR expertise. The results show that board HR governance is positively associated with HCM disclosure transparency, but only when both an HR committee and HR expertise are present. Conversely, when either mechanism exists in isolation, HCM disclosure transparency is lower. These findings suggest that both mechanisms are necessary to promote effective HCM transparency. The results are more pronounced in firms with a Chief Human Resources Officer (CHRO) and firms experiencing employment growth. These findings hold true when using an entropy-balanced sample. The second essay examines the usefulness of HCM disclosure transparency to financial analysts, who play a key role in capital markets. The results show that HCM transparency is associated with higher analyst forecast accuracy but has no significant association with forecast dispersion. This suggests that HCM transparency adds to individual analysts' private information, helping them assess firm value from HCM practices. Furthermore, the second essay identifies which HCM topics are most relevant to analysts. The results reveal that topics related to attraction, retention, development, turnover,

compensation and benefits, diversity, equity, inclusion (DEI), and culture are associated with higher forecast accuracy, particularly when the numerical intensity of these topics is higher. This suggests that not all HCM topics are equally informative, with a clear emphasis on quantitative details that provide analysts with the information needed to evaluate firm value effectively.

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Chapter 1: Introduction

The shift towards a knowledge-based economy has resulted in a greater reliance on intangible assets, leading to increased attention from shareholders, investors, and regulators on the disclosure of these assets (Jeny & Moldovan, 2021; Lev, 2019; Srivastava, 2023). Among the most significant intangibles is human capital (Honigsberg & Rajgopal, 2022; Lev & Schwartz, 1971; Rajan & Zingales, 2001; Zingales, 2000). Human capital is defined as the skills, knowledge, experience, and capabilities that employees bring to an organization. Human capital represents a critical resource that drives innovation, operational efficiency, and long-term value creation for firms (Edmans, 2011; Honigsberg & Rajgopal, 2022). Human capital management (HCM) refers to the policies, practices, and strategies related to attracting, retaining, developing, compensating, and managing a firm's workforce. As traditional physical and financial assets become less dominant in determining a company's competitive advantage, understanding the impact and value of human capital has become more important for both firms and investors. This growing recognition has led to increased emphasis on the transparent disclosure of HCM practices, aimed at providing stakeholders with insights into a company's workforce strategy and its potential influence on performance.

Under U.S. Generally Accepted Accounting Principles (GAAP), firms are required to disclose only the number of employees and salary of the median employee, which previous studies show have no effect on future performance (Rouen, 2020). In comparison, International Financial Reporting Standards (IFRS) requires disclosure of personnel costs, offering investors more detailed insights into how companies invest in their employees, which is valued partially by the capital market (Regier & Rouen, 2023). Ballester et al. (2002) show that only few firms voluntarily disclose personnel costs in the U.S. As a result, the U.S. is significantly lagging behind in

providing meaningful human capital information, leaving investors with limited data about what is potentially a major source of value in today's knowledge-based economy. For instance, employee satisfaction (Edmans, 2011), turnover (Hancock et al., 2013), diversity (Edmans et al., 2024; Fatmy et al., 2022), compensation (Bell et al., 2002; Rayton, 2003), and health and safety (Cohn & Wardlaw, 2016), among others, are related to firm's future performance and value creation. The lack of transparency on HCM creates an information gap for investors, making it challenging to accurately assess the value and strategic importance of a firm's human capital.

Recent years have seen a growing interest in HCM disclosures, a trend described by Georgiev (2021) as the "HCM movement". Starting in 2017, institutional investors increased their calls for transparency and accountability regarding HCM information (BlackRock, 2017; Edkins, 2018). In 2017, BlackRock, the world's largest asset manager, emphasized for the first time HCM as one of its top engagement priorities with public companies.[1] Since then, HCM has remained a key dimension of each of CEO Larry Fink's letters to CEOs and engagement priorities and ranked second only to climate change concerns in terms of prominence (Georgiev, 2021; Sadi, 2023).[2] Specifically, Blackrock encourages firms to increase both qualitative and quantitative HCM disclosure and calls for greater specificity as engagement topics for boards and management teams (Edkins, 2018). In 2017, the same year when Blackrock first highlighted HCM as an area for engagement, the Human Capital Management Coalition (HCMC), a group of public pension funds with $2.8 trillion in assets under management, submitted a rulemaking petition to the SEC to adopt standards requiring HCM disclosure including the topics of workforce demographics, skills and capabilities, health and safety, compensation and incentives, among others (HCMC, 2017). The

[1] Available at https://www.blackrock.com/corporate/investor-relations/2017-larry-fink-ceo-letter
[2] Available at https://www.blackrock.com/corporate/literature/publication/blk-stewardship-priorities-final.pdf

emphasis on HCM is not limited to large institutional players. Smaller investors have been proactive as well, with a notable increase in shareholder proposals related to HCM, focusing on HCM metrics, workplace diversity, and gender pay equity (Treviño et al., 2019).

To respond to investor demands for HCM disclosure, in November 2020, the SEC mandated amendments to Item 101 of Regulation S-K requiring registrants to provide expanded discussions related to HCM in Item 1 of their 10-K filing. In particular, the Final Release requires, "to the extent such disclosure is material to an understanding of the registrant's business taken as a whole, a description of a registrant's human capital resources, including any human capital measures or objectives that the registrant focuses on in managing the business" (SEC, 2020). The SEC follows a principles-based approach in the new requirements rather than rules-based (i.e., prescriptive) disclosure requirements, thus providing firms with discretion over their disclosures and what they consider to be materially relevant to investors.

During the public comment period, there was a general agreement on the need for HCM disclosure. However, opinions vary on the value of the principles-based approach and the optimal scope and format for this new disclosure. Critics believe that without standardized metrics, the principles-based approach may compromise comparability among firms and lead to inadequate disclosures (e.g., CalPERS, 2019; HCMC, 2019). Partly in response to these concerns, the SEC's Final Release states that subjects may include measures and objectives related to the development, attraction and retention of personnel, but these are non-exclusive examples of topics and not disclosure mandates. The SEC even refused to define "human capital", arguing that its meaning may vary across industries and companies and could change over time (SEC, 2020). In 2023, the SEC's Investor Advisory Committee (IAC) issued recommendations to human capital disclosure. They point out that the existing disclosures are inconsistent and lack comparability because the

SEC has not provided disclosure guidelines in its initial 2020 rule (SEC IAC, 2023). To address this, the IAC proposes that the new rule amendments should require the disclosure of employee turnover, detailed compensation costs, and workforce demographics.

In light of these developments, it is important to provide regulators, investors, and practitioners with evidence on the current state of HCM disclosures, particularly the transparency of HCM disclosures, which is of most interest to investors currently. Additionally, understanding the determinants and consequences of HCM disclosures is crucial for identifying best practices and guiding future policy decisions. This thesis provides empirical evidence on a determinant of HCM transparency, board human resources (HR) governance, in the first essay and evidence on the usefulness of HCM transparency for financial analysts in the second essay. By exploring both the factors influencing HCM transparency and its implications for capital market participants, the thesis aims to offer a comprehensive understanding of the informativeness of mandatory HCM disclosures for investment decision-making, as well as the factors that drive variation in HCM transparency.

Given that firms are inconsistent in the placement of HCM disclosures, which makes automatic extraction challenging, I manually collect HCM disclosures from Item 1 of the 10-K reports for S&P 500 firms. Manual extraction also ensures a higher level of accuracy compared to automated methods, particularly given the variability in structure and style across firms. I begin my data collection with firms that filed their 10-K reports on or after November 9, 2020—the effective date of the SEC regulation—up until 2023. Additionally, I manually categorize these disclosures into eight topics, drawing from my reading of the disclosures and insights from prior research to ensure a comprehensive and nuanced classification (Demers et al., 2024b; M. Zhang, 2022). Following prior literature on textual disclosures, textual analysis techniques are employed

to proxy for transparency. Specifically, length, readability, topics, monetary intensity, numerical intensity, and specificity of HCM disclosures are measured to evaluate their transparency.

Descriptive statistics of HCM disclosures reveal significant variation in disclosure characteristics, in terms of length, readability, monetary amounts, numerical intensity, and specificity, consistent with prior research (Bourveau et al., 2023; Demers et al., 2024a; Michaelides & Vafeas, 2023). This variation also extends to the specific topics covered and the textual characteristics of those topics. These differences highlight the inconsistent approaches companies take in disclosing HCM information, both in terms of what they choose to report and how they report it, under the SEC principles-based approach.

The first essay examines the role of board HR governance, specifically HR committee and HR expertise, on HCM disclosure transparency. Institutional investors are increasingly emphasizing the need for board oversight of HCM, alongside their calls for improved HCM disclosures. For instance, BlackRock includes board oversight of HCM an engagement priority, urging boards to review HCM metrics and engage in discussions with management.[3] Similarly, State Street, another major asset manager, announced that it would vote against boards of companies underperforming on HCM matters as part of its efforts to push for accountability (Wigglesworth, 2020). Additionally, recent shareholder proposals are calling for more transparency regarding board oversight of HCM issues (Breheny et al., 2020). These anecdotes show that there is a consensus within the investment community that boards should incorporate HCM governance into their agendas as an essential aspect of corporate oversight. Concurrent with these investors' calls, companies are voluntarily integrating HR into their boards. First, many

[3] Available at https://www.blackrock.com/corporate/literature/publication/blk-commentary-engagement-on-human-capital.pdf

companies are renaming their compensation committees to HR committees (or similar names) to reflect an expanded scope of oversight that includes broader HCM governance beyond executive compensation (Jones et al., 2023). Some committees have even officially amended their charters to explicitly include HCM responsibility. Second, more companies are appointing directors with HR expertise (Caminiti, 2022). The purpose of the first essay is thus to examine whether these two voluntary board changes are substantive and associated with improvements in HCM transparency or are merely symbolic, resulting in no meaningful change in HCM reporting transparency.

From an agency and resource dependence theory perspective, I argue that an HR committee without an HR expert is likely to be associated with negative HCM transparency. When a committee changes its name to reflect expanded responsibilities but retains members without HR expertise, it may lack the competence necessary to effectively address HCM reporting. Additionally, having an HR expert on the board without an established HR committee suggests that the committee may not prioritize HCM within its responsibilities, thereby limiting the expert's influence on HCM reporting. In contrast, I argue that having both an HR committee and an HR expert will positively relate with HCM transparency, as these dual mechanisms provide the board with both a dedicated platform for HCM and the essential skills required to manage it effectively.

The results of the first essay are consistent with my predictions and are summarized in the following fashion. First, the presence of an HR committee without HR expertise relates with lower numerical intensity and lower specificity of HCM disclosures, suggesting that the mere renaming of the committee is largely symbolic and does not promote HCM transparency. Second, the presence of an HR expert without an HR committee is associated with a broader range of topics but lower specificity, suggesting that an HR expert alone lacks the necessary power and platform to effectively influence HCM transparency. Third, the interaction effect of HR committee and HR

expertise relates with higher readability, numerical intensity, and specificity, and firms with both governance mechanisms also have higher scores in these areas compared to those with either an HR committee or HR expert alone. Further, these results are more pronounced when firms have a Chief Human Resource Officer (CHRO) or have employment growth. The results are also robust when using an entropy balanced sample. Overall, this essay provides evidence that recent board changes are related to HCM transparency, but both an HR committee and HR expertise are necessary to achieve better HCM transparency, as either mechanism alone may negatively associate with disclosure transparency.

The second essay explores the usefulness of HCM disclosure transparency to financial analysts. Anecdotal evidence suggests that financial analysts are already incorporating HCM information into their analyses; for example, Calvert Research and Management (Calvert) has developed an in-house proxy for employee turnover, which they actively use in their valuation models (Streur, 2021). A large body of literature shows that HCM practices are significantly related to firm performance and value creation (e.g., Bhattacharya et al., 2005; Cohn & Wardlaw, 2016; Edmans, 2011; Fatmy et al., 2022), suggesting that understanding how firms manage and invest in their human capital provides analyst with essential information for evaluating a firm's worth. As such, HCM transparency should help analysts interpret a firm's HCM practices and relate these practices to future earnings potential. Given their roles as information intermediaries and experts, analysts are well-positioned to interpret HCM information and incorporate it into their forecasts, thereby potentially reducing the information gap that investors face regarding human capital. However, financial analysts may not fully benefit from HCM transparency, as these disclosures are susceptible to social washing—where firms make misleading claims about their HCM

practices—(Baker et al., 2024) and, like other sustainability information, can be challenging to analyze even for experts (Christensen et al., 2022; Regier & Rouen, 2023).

The results of the second essay show that HCM readability, dollar amount intensity, numerical intensity, and specificity are associated with greater analyst forecast accuracy, while length shows no relationship. HCM attributes show no association with analyst forecast dispersion. These findings suggest that HCM transparency relates with better information environment for individual analysts, contributing to their private information and helping them make more accurate earnings forecasts. However, HCM transparency may not necessarily be interpreted consistently by all analysts, which could explain the lack of association on forecast dispersion. Additionally, I examine the informativeness of each HCM topic for financial analysts. The results reveal that not all topics are equally informative. Specifically, only four of the eight topics—attraction, retention, development, and turnover; compensation and benefits; diversity, equity, and inclusion (DEI); and culture—are associated with greater analyst forecast accuracy. Moreover, the numerical intensity of these topics is significantly related to forecast accuracy. These findings suggest that quantitative information regarding how companies attract, retain, and develop employees, turnover metrics, DEI metrics, compensation metrics, and employee engagement metrics are the most useful for analysts.

The rest of the dissertation is organized as follows. The next two chapters present the two essays. The fourth chapter covers the conclusion, limitations, and directions for future research.

Chapter 2: Rhetoric or Real Commitment? The Role of Human Resources Governance on Human Capital Management Disclosure

Abstract

This study examines the role of human resources (HR) governance on the transparency of human capital management (HCM) disclosure following the Securities and Exchange Commission's 2020 disclosure mandate. Results show that the rebranded compensation committee (i.e., HR committee) and HR expertise on the board of directors, individually, are negatively associated with HCM disclosure transparency. However, the interaction and combined effect of both governance mechanisms on HCM disclosure transparency is positive and greater than the individual effect of each. The results are more pronounced for firms with Chief Human Resources Officer and firms experiencing employment growth and are robust when using an entropy balanced sample. This study extends the disclosure literature into the new domain of HCM by examining drivers of the transparency of HCM disclosure. Additionally, the study contributes to the corporate governance literature by exploring the evolving role of board composition and the impact of the compensation committee on HCM transparency. From a regulatory perspective, this study aims to inform ongoing policy discussions about the board of directors' role in overseeing HCM.

Keywords: human capital, human capital management disclosure, board of directors, board expertise, human resources, compensation committee.

2.1. Introduction

Human capital–the collective skills, knowledge, and experiences of employees—is considered a key corporate resource and a driver of long-term sustainable value creation (Zingales, 2000; Edmans, 2011; Regier & Rouen, 2023). Despite its strategic importance and its recognition as "the most important asset", traditional disclosure practices have provided limited information related to human capital management (HCM) (Lev & Schwartz, 1971; Wyatt & Frick, 2010). The U.S. Securities and Exchange Commission (SEC) partially addressed this gap in disclosure by its 2020 mandate requiring HCM disclosure in Item 1 of the 10-K report (SEC, 2020). This regulatory change responds to increasing demands from institutional investors and capital market players for HCM information (BlackRock, 2017; Edkins, 2018). Institutional investors are also urging board of directors to actively oversee HCM (Blackrock, 2024). In an EY survey of 378 directors, 80% say their boards spend more time discussing talent strategy than they did 5 years ago (EY, 2020). These anecdotes reflect that, while the stewardship and reporting of HCM was once a management concern, it has now clearly become a board responsibility.

Concurrent with these regulatory changes and the evolving investor expectations, corporate boards are transforming to accommodate the emerging HCM paradigm. Two notable trends emerge: first, anecdotal evidence shows that many firms are renaming the traditional compensation committee to include terms such as "HR", "culture", or "talent", and even more are amending their charters to include broad HCM oversight (Jones et al., 2023); second, there is an increase in the appointment of directors with specialized HR expertise, with the percentage of such directors in S&P 1500 firms rising from 11.3% in 2020 to 19.4% in 2022 (Caminiti, 2022). Further, a recent PwC director survey indicates HR as the number one function boards most need exposure to (PwC, 2022). Given these shifts, the critical question that this study addresses is: How is human

resources (HR) governance—specifically, board HR expertise and the rebranding of compensation committee as HR committee—associated with HCM disclosure transparency?

Unlike IFRS, U.S. GAAP does not require firms to disclose personnel expenses, despite long-standing calls from accounting scholars about the importance of human capital information for firm value (e.g., Edmans, 2011; Lev, 2019).[4] The recent HCM disclosure requirements have thus become the primary source of information on a firm's personnel costs and management. However, the SEC's principles-based approach allows managers significant discretion in what to disclose, leading to significant variation across firms (Bourveau et al., 2023; Michaelides & Vafeas, 2023). The SEC's 2023 agenda may introduce amendments that emphasize the role of individual directors in overseeing HCM (Sawyer et al., 2023), further raising the importance of board involvement in HCM disclosure transparency. This regulatory focus, combined with the increasing incorporation of HR into board of directors, highlights the need to examine the board's role in HCM disclosure transparency.

Relying on agency and resource dependence theories, I posit that an HR committee, without an HR expert director, is negatively associated with HCM disclosure transparency. The renaming of compensation committee to HR committee without the expertise may be a superficial response to HCM trends, lacking substantive impact on HCM disclosure transparency. Similarly, I posit that the presence of an HR expert director, in the absence of an HR committee, is negatively related to HCM disclosure transparency. This may be due to the expert's potential to use their knowledge to limit exposure to scrutiny, with their influence constrained without the support of a dedicated HR committee.

[4] The Financial Accounting Standards Board (FASB) is finalizing the new accounting standard to mandate the disaggregation of operating costs that shows employee compensation costs on the income statement, effective for fiscal years beginning after December 15, 2026 (FASB, 2024).

Conversely, I posit that the interaction and the combined effect between HR committee and HR expertise on HCM disclosure transparency is positive and greater than the individual effect of each. The HR committee provides a platform for HR experts to effectively apply their knowledge, while experts equip the committee with the necessary skills to enhance transparency. These hypotheses are not without tension though, because HR committee and HR expertise, individually, can leverage their monitoring and advising functions for a positive relation on HCM disclosure transparency.

To address the research question, I analyze HCM disclosures of S&P 500 firms from 2020 to 2023, post-SEC regulation. Prior to 2020, most firms provided very limited disclosures. Even though HCM disclosure is now mandatory, I observe wide variation in the quality and quantity of these disclosures. Consistent with prior research, I proxy for HCM disclosure transparency using textual analysis measures related to the number of topics, readability, specificity, and numerical intensity. To categorize a HR committee, I search within a company's board committees for keywords related to HR. To measure board HR expertise, I collect data on directors' employment background from BoardEx and classify directors with and without HR expertise based on prior work experience as an HR professional (Chief Human Resource Officer (CHRO) or related HR role) or based on involvement in diversity and inclusion initiatives.

Results from the main analyses show that the presence of an HR committee without HR expertise is significantly associated with lower numerical intensity and lower specificity. Board HR expertise without an HR committee is significantly associated with more topics but lower specificity. These results suggest that HR committee and HR expertise, individually, are negatively associated with HCM disclosure transparency. When both HR committee and HR expertise are present, HCM disclosures are more readable, more numerically intense, and more specific

compared to the presence of either factor alone. These findings suggest that both governance mechanisms are needed for more HCM transparency.

Next, I conduct two cross-sectional analyses. First, I partition the sample into two subsamples based on whether the firm has a CHRO. The results show that for firms with a CHRO, HR governance is significantly associated with higher readability of HCM disclosures. This finding highlights the distinct yet complementary roles of CHROs and directors: while directors ensure that the disclosures are informative, CHROs ensure the language is comprehensible to the public. Second, I partition the sample into firms that experienced employment growth and those that did not. The results show that HR governance is associated with HCM disclosure transparency only for firms with employment growth. This finding reveals that directors place greater emphasis on HCM transparency when there is a higher likelihood of stakeholder scrutiny. In additional analyses, I re-examine my main model using an entropy balanced sample, dropping financial firms, and limiting my definition of HR expertise to only HR-related employment. Results from these analyses are consistent with the main findings.

This study contributes to the disclosure and corporate governance literatures and to practice in the following ways. First, related to the disclosure literature, this study extends prior work on the role of board composition on corporate disclosures. Much of this literature focuses on quantitative disclosures (e.g., Ajinkya et al., 2005; Karamanou & Vafeas, 2005). An exception is Lee & Park (2019) who study board financial expertise and its relation to qualitative disclosures. I add to this line of research by highlighting how newer measures of board composition (i.e., HR governance) are related to the transparency of narrative textual disclosures in financial reports. Further, this study adds to the HCM disclosure literature, which is still in its infancy, by unraveling a new determinant that explains variations in HCM disclosures, extending beyond traditional

governance mechanisms and firm-level characteristics (e.g., Michaelides & Vafeas, 2023; Zhang, 2022).

Second, this study contributes to the corporate governance literature, particularly on the role of the compensation committee. This literature mainly investigates the role of the compensation committee in curbing out excessive executive pay (Anderson & Bizjak, 2003; Bugeja et al., 2016) and executive compensation disclosure quality (Ben-Amar & Zeghal, 2011; Laksmana, 2008). I add to this literature stream by shedding light on the compensation committee's evolving role in the realm of HCM oversight and transparency, an area which has not been systematically studied yet despite extensive anecdotal evidence. Further, this study extends the literature stream on directors' individual expertise, which focuses on financial (Badolato et al., 2014), legal (Krishnan et al., 2011), environmental (Rodrigue et al., 2013), and information technology expertise (Ashraf et al., 2020). Only Mullins (2018) examines board HR expertise in relation to diversity management. My study complements the work of Mullins (2018) by showing that HR expertise can enhance corporate disclosure transparency that relates to directors' specialized knowledge. It underscores the value of diverse, nonfinancial expertise in enriching the spectrum of corporate disclosures.

Lastly, this study informs regulators and standard setters in light of the new proposed mandatory disclosures that highlight the individual director role in HCM governance (Sawyer et al., 2023). The findings of this study can support the development of policies that help delineate the responsibilities and contributions of board members in HCM governance more clearly. In addition, this research provides institutional investors, who are increasingly demanding active board involvement in HCM oversight, with empirical evidence on effective governance structures for transparent and comprehensive HCM reporting. The study underscores that simply renaming

the compensation committee into a HR committee is insufficient; such a change must be accompanied by the presence of HR expertise to meaningfully enhance transparency. The study can serve as a guide for investors in their engagement and voting decisions, ultimately influencing the adoption of best practices in HCM oversight across the corporate landscape.

2.2. Institutional Background

The shift towards a knowledge economy has led to greater attention on intangibles, such as human capital (Lev, 2019; Lev & Schwartz, 1971). However, U.S. GAAP, unlike IFRS, have not kept pace with this development and do not require the disclosure of personnel expenses, which represent a major part of a company's costs. Publicly listed firms are only required to disclose the number of employees and the salary of the median employee, leaving a significant gap in the information available to investors (Regier & Rouen, 2023).

In November 2020, the SEC amended Item 101 of Regulation S-K, requiring registrants to provide expanded discussions related to HCM in Item 1 of their 10-K filing. The Final Release requires a description of human capital resources and relevant measures if material to understanding the business (SEC, 2020). Adopting a principles-based approach, the SEC allows firms discretion in determining what to disclose, leading to variability and inconsistencies in HCM reporting (Bourveau et al., 2023; Demers et al., 2024a).[5] The SEC even refused to define "human capital", arguing that its meaning can vary by industry and over time (SEC, 2020).[6] Recognizing these inconsistencies, the SEC's Investor Advisory Committee (IAC) called for amendments to

[5] The SEC's Final Release mentions subjects of development, attraction and retention of personnel, but these are non-exclusive examples of topics and not disclosure mandates.
[6] In its 2023 agenda, the SEC is considering proposing rule amendments to enhance registrants' human capital disclosure. Refer to https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202304&RIN=3235-AM88

standardize HCM disclosures, including metrics on employee turnover, detailed compensation costs, and workforce demographics to improve comparability across firms.[7] These recommendations reflect ongoing efforts to refine and enhance the quality of HCM reporting.

The disclosure mandate came in response to growing investor demands for HCM transparency. In 2017, BlackRock, the world's largest asset manager, highlighted for the first time HCM as a top engagement priority, and it has since remained a central focus in CEO Larry Fink's letters and engagement priorities. Institutional investors are also urging boards to oversee HCM. Blackrock, for instance, insists that boards not only prioritize HCM but also be held accountable for it. Recent statements from BlackRock emphasize that both the board and management should address HCM matters, with the board regularly reviewing relevant metrics and linking these metrics to executive compensation to ensure accountability.[8,9] Boards advisors, such as the Big Four accounting firms, law firms, and executive compensation consulting firms, are increasingly recognizing HCM as a crucial element for board oversight and establishing benchmarks for effective board oversight over HCM. For instance, Ernst & Young (EY) emphasizes that while boards previously focused primarily on C-suite succession and development, they now need to prioritize human capital as a key component of long-term value (EY, 2021).[10] In response to these evolving expectations, the SEC is considering amendments that may include disclosing the role of individual directors in HCM governance (Sawyer et al., 2023).

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[7] Available at https://www.sec.gov/files/20230914-draft-recommendation-regarding-hcm.pdf

[8] Available at https://www.blackrock.com/corporate/literature/publication/blk-commentary-engagement-on-human-capital.pdf

[9] Similarly, State Street, another member of "the big three" asset managers, echo similar sentiments regarding the role of boards over HCM reporting. In 2020, it announced that it would vote against the boards of underperforming companies concerning ESG matters, including HCM (Wigglesworth, 2020). Furthermore, recent HCM shareholder proposals call for additional HCM disclosure and disclosure about board oversight over HCM issues (Breheny et al., 2020).

[10] Similarly, the Conference Board, an organization that commands authority in corporate boardrooms, identifies HCM as a fundamental area of focus for boards and an emerging best practice (The Conference Board, 2020).

These developments align with observable shifts in voluntary board practices and oversight over HCM, with more companies renaming their compensation committee to an HR committee and appointing HR expert directors. This transition signals a significant shift in corporate governance and underscores the need to examine how these changes impact HCM disclosure transparency—an aspect investors are increasingly interested in.

2.3. Related Literature and Hypothesis Development

2.3.1. The Dual Role of the Board of Directors

The corporate governance literature extensively explores the dual role of the board of directors in aligning managerial actions with shareholder interests and in enhancing the strategic capabilities of the firm. Agency theory delineates the board's role in monitoring management to prevent self-interested behaviors that may be detrimental to shareholder value (Fama & Jensen, 1983; Jensen & Meckling, 1976). Monitoring involves oversight activities such as strategic decision validation, executive compensation structuring, and accountability enforcement. Effective monitoring by the board can lead to reduced agency costs and improved organizational outcomes (e.g., Firoozi et al., 2019; Wahid & Welch, 2019). Key factors that enhance board monitoring include the number of independent directors, separation of CEO and chairman roles, presence of financial experts, and audit committee independence (Magnan & Michelon, 2024).

Resource dependence theory complements the agency theory framework by emphasizing the board's advisory role, where directors contribute valuable resources such as expertise, knowledge, and networks essential for strategic success (Adams et al., 2010; Hillman & Dalziel, 2003; Hillman et al., 2000; Salancik & Pfeffer, 1978). Directors with diverse backgrounds provide

strategic guidance and advise management, particularly in areas where management may lack sufficient expertise (Adams et al., 2010; Adams & Ferreira, 2007). Their experience can help managers perform their duties more effectively and enhance corporate disclosures (Muttakin et al., 2018; Reeb & Zhao, 2013; Michelon & Parbonetti, 2012).

Recent literature acknowledges that directors simultaneously fulfill both monitoring and advisory roles, and both are crucial for firm performance and sound corporate governance (Ke et al., 2020; Desender et al., 2013; Sur et al., 2013; Adams et al., 2010).

2.3.2. Board of Directors and Financial Disclosure

Prior literature shows that the board of directors play an important role in overseeing the transparency and dissemination of corporate information (Michelon & Parbonetti, 2012; Reeb & Zhao, 2013). Empirical studies in this stream of literature consistently show that, over countries and time, various aspects of board structure and composition—such as board size, the proportion of independent directors, the diversity of expertise among board members, board networks, and board interlocking—improve the level and quality of corporate disclosure (e.g., Ajinkya et al., 2005; Gul & Leung, 2004; Karamanou & Vafeas, 2005; Klein, 2002). However, these papers examine quantitative disclosure, such as management earnings forecasts. To the best of our knowledge, only Lee & Park (2019) examine the role of audit committee in qualitative textual disclosure, specifically, the MD&A section of the annual report. They show that audit committee financial expertise mitigates the abnormal opportunistic tone of the MD&A. The current paper extends this literature by showing how the board of directors influence qualitative disclosure in the realm of newly mandated HCM disclosure.

2.3.3. Human Capital Management Disclosure

Accounting scholars have long criticized the current accounting standards for not providing sufficient information related to human capital (e.g., Lev, 2019; Ballester et al., 2002; Lev & Schwartz, 1971), despite a robust body of prior research highlighting the importance of human capital in firm value and performance (e.g., Regier & Rouen, 2023; Edmans, 2011; Wyatt & Frick, 2010). Prior to the SEC's 2020 regulation, only a few firms disclosed HCM information voluntarily. Zhang (2022) examines the determinants and consequences of firms' voluntary HCM disclosure and finds that, when product market competition is high, firms disclose more about their social-oriented HCM disclosures as firms aim to signal their good performance and differentiate themselves from rivals, but less operational-oriented HCM disclosures due to its proprietary nature. Social-oriented HCM disclosures improve social ratings and attract sustainable investors, whereas only operational-oriented HCM disclosures improve market value.

The SEC's new regulation spurred additional academic research interest in this area as data became available. Demers et al. (2024a) analyze the first two years of the regulation and find that disclosure characteristics regress towards the mean over time, meaning that poor-quality disclosures improve over time, but good-quality disclosure diminish over time as they learn that they over-shot the standard. Demers et al. (2024b) provide a methodological contribution by developing a comprehensive lexicon of HC-related keywords that effectively identify HC-related sentences in various corpora by training a machine learning algorithm *(word2vec)* on hand-collected HCM disclosures. Bourveau et al. (2023) examine hand-collected *quantitative* HCM metrics from 2017 to 2022 and find that while firms increased their disclosures post-regulation, there is significant variability in the metrics reported. Most of the increase is for diversity, equity,

and inclusion (DEI) and employee turnover metrics. They also find that firms with higher information acquisition costs or poorer HCM performance are less likely to disclose, even after the SEC mandate. Using a hand-collected sample of 1,636 firms in the first year of the mandatory disclosure requirement, Arif et al. (2022) show that HCM disclosures contain value-relevant information, but the equity and bond markets react differently, with the equity market reacting positively and the bond market reacting negatively. Michaelides & Vafeas (2023) show that the presence of CHRO is positively associated with the quality of HCM disclosures, which they manually categorize as below average, average, and above average based on their length, level of detail, and quantitative data. These studies collectively highlight that while newly mandated HCM disclosures provide valuable information, they vary widely in both quantity and quality. The present study contributes to the literature by identifying a new determinant beyond, firm economic characteristics, that explains some of the variation in HCM disclosure transparency.

2.3.4. Hypothesis Development

2.3.4.1. HR Committee and HCM Disclosure Transparency

Traditionally, the compensation committee oversees the development and implementation of executive compensation policies.[11] Recently, in response to the increasing emphasis on HCM, some compensation committees have broadened their scope to include talent management, as evidenced by their renaming to HR committees (Huang & Floersch, 2022; Jones et al., 2023; PwC, 2023). This renaming can signal a firm's commitment to enhanced HCM oversight and accountability, which is likely to be reflected in more transparent HCM disclosures. To address

[11] Their responsibilities include setting compensation for the company's CEO and senior executives, designing incentive schemes to align the interests of executives with those of the shareholders, reviewing performance targets, determining bonus payouts, preparing the compensation discussion and analysis for the company's annual report or proxy statement, and ensuring compliance with legal and regulatory requirements regarding disclosure of compensation information (Hermanson et al., 2012; O'Brien et al., 2020; PwC, 2023).

investors' demands for HCM transparency, the HR committee may increase its monitoring and advising functions over HCM reporting. The monitoring function involves oversight of HCM disclosures to ensure they are comprehensive and informative to investors. The advising function involves providing strategic guidance in crafting detailed and accurate HCM disclosures that meet investor expectations and are effectively communicated to the public. As a result, firms with dedicated HR committees are expected to exhibit higher levels of HCM disclosure transparency.

On the other hand, the name change of the compensation committee may simply be a branding strategy to cope with evolving interest in HCM matters with no substantive impact on disclosure practices. This can be largely attributed to the phenomenon of "window dressing", a superficial branding strategy aimed at aligning with current trends in corporate governance, rather than a substantive change in operations or focus (Helland & Sykuta, 2004; Hillier et al., 2008; Lamoreaux et al., 2019; Michaelides & Vafeas, 2023). At its core, the renaming can be seen as a response to the growing trend of emphasizing HCM in corporate governance and does not inherently alter the committee's expertise—specifically HR expertise—or its operational focus and commitment to transparency in HCM disclosure.[12] In the absence of standardized HCM metrics from the SEC and lacking an HR expert who is knowledgeable about HCM matters, the HR committee might use its monitoring and advising functions merely to ensure compliance with the new regulation. This approach is likely to result in less transparent HCM disclosures, suggesting a negative association between the HR committee and HCM disclosure transparency. This discussion yields to the first hypothesis presented in alternative form:

[12] Unlike audit committees, which require members to have certain areas of expertise, there are no specific rules about what background members of the compensation committee should have (PwC, 2023). The main requirement is that these members must be independent. This prioritization of independence stems from the idea that directors charged with executive compensation should not be influenced by those same executives.

H1: In the absence of an HR expert on a board of directors, the presence of an HR committee is negatively associated with HCM disclosure transparency.

2.3.4.2. Board HR Expertise and HCM Disclosure Transparency

Directors with HR expertise may positively relate with HCM disclosure transparency through their monitoring and advisory functions. From an agency theory perspective, HR expert directors can effectively monitor managerial reporting on HCM metrics, especially given increasing investor demand and potential SEC regulations requiring disclosure of individual directors' roles in HCM governance (Gregory, 2022). Their specialized knowledge allows for more vigilant oversight of management and alignment of HCM disclosures with regulatory and stakeholder expectations (e.g., Deloitte, 2022; Washington & Ray, 2021). Additionally, from a resource dependence theory perspective, HR experts act as crucial connectors between firms and the external environment. Their experience, often as former or current Chief Human Resources Officers (CHROs), provides them with valuable insights into industry-specific HCM metrics, enabling them to advise management on relevant metrics and align human capital strategies with industry standards (Mullins, 2018). By leveraging their expertise, HR directors can help to enhance the transparency of HCM disclosures.

However, directors with HR expertise may be negatively associated with HCM disclosure transparency in the absence of an HR committee. First, HR experts have extensive background in labor laws and may often be appointed to ensure compliance with employment regulations and to limit exposure to scrutiny. Their expertise may be deeply rooted in legal frameworks and the complexities of labor legislation. Recent lawsuits against high-profile companies like Alphabet, Wynn Resorts, and Twentieth Century Fox highlight the severe consequences of boards failing to

uphold human rights and other employment-related legal standards (Wiessner, 2023; Stempel, 2022, 2017). In the absence of a dedicated HR committee, companies might appoint HR experts primarily to address legal concerns rather than to enhance transparency. This focus on legal compliance may mean that HR experts prioritize protecting sensitive information over improving HCM disclosure transparency, especially if they lack robust support from a committee dedicated to HCM issues. Second, in the absence of an HR committee, HR experts on the board may struggle to effectively monitor and advise on broader HCM issues due to their minority status and the lack of a formal structure dedicated to these concerns. Without a dedicated committee, minority voices, regardless of their expertise, can be overruled or diluted by the majority who may have different priorities or perspectives (Rao & Tilt, 2016; Westphal & Milton, 2000). Restricted monitoring and advisory influence may thus result in HCM disclosures that are less transparent, as the expert's input is not sufficiently integrated into the overall board strategy. Thus, the second hypothesis in alternative form is:

H2: In the absence of an HR committee, the presence of an HR expert on the board of directors is negatively associated with HCM disclosure transparency.

2.3.4.3. The interaction between HR Committee and HR Expertise on HCM Disclosure Transparency

Next, I argue that the simultaneous presence of both an HR committee and HR expertise is essential for HCM disclosure transparency. HR expert directors bring in-depth knowledge and insights into human capital, which are vital for understanding the nuances and strategic importance of HCM disclosures. However, their impact can be limited if they lack a dedicated platform to influence HCM reporting. An HR committee provides a focused forum for developing and

overseeing HCM policies and disclosures, institutionalizing the importance of HCM within the governance framework and ensuring consistent attention and resources (Hermanson et al., 2012). Although there is no formal requirement for HR expertise on the compensation committee, having members with HR experience allows to to better understand how people are motivated and how compensation fits into the picture (PwC, 2023). When combined, HR expertise and a dedicated HR committee may synergistically enhance the alignment and transparency of HCM disclosures, leading to more transparent and comprehensive reporting on human capital value. Thus, the third set of hypotheses is:

H3a) Having both an HR committee and an HR expert on the board is positively associated with HCM disclosure transparency

H3b) Firms with an HR committee and an HR expert on board exhibit greater HCM disclosure transparency than firms with only an HR committee

H3c) Firms with an HR committee and an HR expert on board exhibit greater HCM disclosure transparency than firms with only an HR expert on board.

2.4. Research Design

2.4.1. Sample Selection

The sample includes all firms listed on the S&P 500 index that filed their 10-Ks between November 9, 2020 (effective date of the regulation) and June 26, 2024 (date of this writing). Firms within the S&P 500 offer an appropriate setting for analyzing HCM disclosure due to their greater tendency to provide voluntary information, which is particularly relevant given the discretionary nature of the HCM disclosure rule and the observed variation in disclosure practices among these firms (Michaelides & Vafeas, 2023). To ensure accuracy, I *manually* extract HCM disclosures from

Item 1 of the 10-K reports available on SEC Edgar, keeping all tables because they contain important information such as the segregation of employees by gender and ethnicity. I also *manually* categorize the disclosures into eight topics: (1) Number of Employees (NoE), (2) Attraction, Retention, and Development (Attr), (3) Compensation and Benefits (Comp), (4) Diversity, Equity, and Inclusion (DEI), (5) Health and Safety - General (HS_G), (6) Health and Safety - COVID (HS_Covid), (7) Labor Relations (LR), and (8) Culture (Cult). I narrow down these topics based on the framework provided by Demers et al. (2023), specifically for the topics of "Comp", "DEI", "HS_G"," HS_Covid", and "NoE". Additionally, I add the topic of "Attr" after observing that many firms discuss it in a separate section. I also separate "LR" and "Cult" into distinct topics, while Demers et al. (2023) combine them into one, because the two discuss topics are distinct enough to warrant separate investigation. I collect board-level data from BoardEx and financial data from Compustat. The final sample consists of 1,800 firm-year observations.[13] Table 1 presents the sample distribution by fiscal year and by Fama and French 12-industry classification. Appendix A presents examples of HCM disclosures.

2.4.2. Test Variables: HR Expertise and HR Committee

HR expertise is multi-faceted and can be acquired through education, professional designation, employment, and/or governance (i.e., serving on a compensation committee). Since the BoardEx education dataset does not indicate the specialization, I exclude the education facet from my analysis. Nonetheless, this omission is unlikely to lead to an under-identification of HR expertise, because such credentials are typically reflected in the individual's professional

[13] The lower number of firms in fiscal year 2023 is due to the current data availability from BoardEx for that year.

accomplishments and employment records. I also exclude the governance facet because serving on a compensation committee does not necessarily require HR-related work experience.

When reviewing directors' biographies from proxy statements and companies' websites, companies often equate executive leadership experience with human capital expertise, particularly in the competency matrix in proxy statements. Although leadership roles, such as CEO or CFO, involve team management, I argue that such roles do not necessarily reflect the specialized skills inherent to HR expertise, which entails a deeper understanding of workforce management, compensation, retention, and succession planning that extend beyond the traditional purview of executive leadership roles such as the CEO or the CFO.

For my analysis, I focus exclusively on professional HR experience at the executive or senior management level, following the approach of Ashraf et al. (2020), who measures audit committee information technology expertise through executive and senior management experience in information technology.[14] Additionally, I also include directors' involvement in diversity and inclusion initiatives within a company's diversity, equity, and inclusion (DEI) council[15], because diversity and inclusion are essential components of HR, and HCM disclosure often discuss DEI efforts. This is evidenced by the fact that often CHROs concurrently hold the title of Chief Diversity and Inclusion Officers.

[14] Prior literature has taken a broader approach to measuring HR expertise. For instance, Mullins (2018) measures board HR expertise by manually reviewing board members' backgrounds from corporate proxy statements, company websites, and Bloomberg.com, and classifies a member as having HR expertise if their job title includes HR-related terms (i.e., human resources management, human resources, personnel, or labor), if they held a position with major HR responsibilities, or if they had worked or consulted with the HR division within a company. However, such a broad approach overestimates HR expertise as it may capture short-term appointments or subordinate roles in which the person had only a partial view of the HR field. My approach is comprehensive and rigorous and aims to identify directors with deep and specific HR professional experience

[15] A DEI council is an organization's advisory board dedicated to promoting a diverse and inclusive workplace culture.

Therefore, *HR_Expertise* equals 1 if firm *i* has at least one HR expert on the board in year *t,* and 0 otherwise. A director is deemed an HR expert if they (1) have worked during their career as a Chief Human Resource Officer, Chief Personnel Officer, Chief People Officer, Chief Talent Officer, Chief Diversity and Inclusion Officer, or director, vice president, senior vice president, head, manager, or general manager of HR, or (2) serves on or chairs a DEI council within an organization.

Next, to code the variable *HR_Committee,* I search among board committee names for each firm-year for the following keywords: "human resource", "human capital", "talent", "leadership", "people", "employee", "personnel", and "workforce". I exclude committee names that refer to other functions, such as governance or sustainability, and only retain committee names that clearly reflect the HR function only. As such, a committee is deemed an HR committee if its name contains any HR or related keywords that reflect a broad talent management scope that extends beyond executive oversight. *HR_Committee* equals 1 if firm *i* has an HR committee on the board in year *t*, and 0 otherwise. Appendix C details the list of committee names that reflect the HR function.

2.4.3. Dependent Variables

I use the following four measures to proxy for HCM disclosure transparency: number of topics (*Topics)*, readability (*Readability*), numerical intensity (*Num_Int)*, and specificity (*Specificity)*. All these variables capture different facets of HCM disclosure transparency. *Topics* represents the number of topics that the company discusses within its HCM disclosure, with a range from 0 to 8. I *manually* categorize the disclosure into 8 topics, as discussed in Section 4.1.

Readability refers to the ease of comprehension of a written text. The SEC's plain English requirements have spurred research on readability as a measure of disclosure transparency (e.g., Blankespoor et al., 2020; Bochkay et al., 2022; Dyer et al., 2017; Li, 2008; Loughran & Mcdonald, 2016). I proxy for readability using the Gunning Fog index, which measures the number of years of formal education required to read and comprehend a text (F. Li, 2008). A higher Gunning Fog index indicates less readable and more complex disclosures. I multiply the index with (-1) for ease of interpretation. Theoretically, rational inattention models state that investors have limited processing capabilities to process all available information and may neglect relevant information signals due to high processing costs (e.g., Sims, 2003, 2010). Empirical studies generally find that narrative complexity impedes equity price formation and results in detrimental market effects relating to price informativeness, responsiveness, market volatility, liquidity, and valuation (e.g., Lawrence, 2013; Miller, 2010; You & Zhang, 2009). Alternatively, managers might use linguistic complexity as a strategic obfuscation strategy to distract investors and impede their learning (Lo et al., 2017; F. Li, 2008; deHaan et al., 2021). Therefore, readability measured by the Gunning Fox index is a reasonable proxy for HCM disclosure transparency.

Numerical intensity (*Num_Int*) refers to the percentage of numbers in the text (Blankespoor, 2019; Blankespoor et al., 2020; Dyer et al., 2017). The SEC notes that textual disclosure seems less likely to be supported by quantitative data (Dyer et al., 2017; SEC, 1998). A text that contains more quantitative information is more verifiable, precise, and has lower processing costs (Blankespoor et al., 2020; Dyer et al., 2017). Higher numerical intensity of HCM disclosures indicates a higher content of quantifiable metrics embedded in textual disclosures. I use the Named Entity Recognition component of spaCy and count the number of 'Money', 'Percent', and 'Cardinal' entities in the raw HCM disclosure, and divide it by the number of non-

stop words, multiplied by 100.[16] My data collection includes all tables in the HCM disclosure, which often contain numbers.

Specificity measures how often the text refers to specific places, people, organizations, times, or numbers (Dyer et al., 2017; Hope et al., 2016). The SEC notes that textual disclosures have become increasingly boilerplate (SEC, 1998), and this is documented in empirical research (Dyer et al., 2017). I follow Hope et al. (2016) and proxy for specificity by counting the number of named entities scaling by the total number of words. The classes of entities include Person, Location, Organization, Date, and Time. I exclude Money and Percent because the *Num_Int* already captures this dimension. I use the Named Entity Recognition component of spaCy to identify named entities in the raw HC disclosure and divide the count of specific entities by the number of non-stop words, multiplied by 100. A higher proportion of named entities in HCM disclosure reflects more detailed and specific information about HCM.

2.4.4. Empirical Model

To test my hypotheses, I estimate the following ordinary least squares regression model with fixed effects that tests whether board HR expertise and HR committee affect HCM disclosure characteristics:

$$HCM\_Disclosure_{i,t} = b_1\, HR\_Committee_{i,t} + b_2\, HR\_Expertise_{i,t} + b_3\, HR\_Committee_{i,t} * HR\_Expertise_{i,t} + Controls + Year/Industry\ Fixed\ Effects \quad (1)$$

where *HCM_Disclosure* is, in turn, one of *Topics, Readability*, *Num_Int, or Specificity*.

[16] spaCy is a Python library for natural language processing. A description of its named entity recognition component is available here: https://spacy.io/api/entityrecognizer.

The coefficient b_1 measures the incremental change in HCM disclosure transparency when the firm has an HR committee without HR expertise (H1). b_2 captures the incremental change in HCM disclosure transparency when the firm has an HR expert director on the board without an HR committee (H2). b_3 measures the interaction effect between having an HR committee and an HR expert director (H3a). $b_2 + b_3$ captures the effect of having an HR committee and an HR expert on board compared to only having an HR committee (H3b).[17] $b_1 + b_3$ captures the effect of having an HR committee and an HR expert on board compared to only having an HR expert on the board (H3c).[18]

Following prior research, I control for key economic characteristics that may affect HCM disclosure. Specifically, I control for firm size (*Size*), the number of employees (*Emp*), book-to-market ratio (*BTM*), asset tangibility (*PPE/TA*), and financial performance (*ROA*). I do not include separate controls for firms in human-capital intensive industries, because industry fixed effects subsume these variations. Michaelides & Vafeas (2023) show that the presence of CHRO is associated with HCM disclosure quality, so I include this variable (*CHRO*) as control.

Further, governance factors may correlate with HCM disclosure given that disclosure policies emanate from the board (Michelon & Parbonetti, 2012). I control for the number of board directors (*Board_Size*), ratio of independent directors (*Board_Ind*), presence of CEO duality (*CEO_Duality*), ratio of female directors (*Gender_Div*), and percent of institutional ownership (*Inst_Own*) (Ajinkya et al., 2005; Cerbioni & Parbonetti, 2007; Gul & Leung, 2004; Karamanou & Vafeas, 2005; Reeb & Zhao, 2013; M. Zhang, 2022).

[17] H3b states that firms with an HR committee and HR expertise ($b_1 + b_2 + b_3$) have higher disclosure transparency than firms with only HR committee (b_1), which leads to $b_1 + b_2 + b_3 > b_1$, which boils down to $b_2 + b_3 > 0$.
[18] H3c states that firms with an HR committee and HR expertise ($b_1 + b_2 + b_3$) have higher disclosure transparency than firms with only HR expertise (b_2), which leads to $b_1 + b_2 + b_3 > b_2$, which boils down to $b_1 + b_3 > 0$.

Appendix B presents detailed definitions and sources for all the variables discussed. I winsorize all continuous variables at the 1% and 99% levels. I also include industry- and year-fixed effects to control for time-invariant and industry-specific unobservable characteristics.

2.5. Results

2.5.1. Descriptive Statistics

Table 2 presents descriptive statistics. On average, 33% of the sample observations have an HR committee, and 32% have at least one director with HR expertise, compared to an average of 8% for board HR expertise during the period 2002-2006 in Mullins (2018). Further, 11% of the sample have both HR committee and HR expertise. These statistics confirm anecdotal evidence that firms are increasingly incorporating HR into their governance structures. The governance control variables show that, on average, the board has 11 directors, 89% of board members are independent directors, 31% are female directors, and for 41% of the sample the CEO chairs the board. Consistent with prior research (Michaelides & Vafeas, 2023), 47% of firm-years have a CHRO.

Firms' HCM disclosure characteristics exhibit considerable variation, in line with anecdotal criticism and prior research (Bourveau et al., 2023; Demers et al., 2024a). On average, firms cover approximately 6 topics in their disclosures, with a low of 1 and a maximum of 8. Readability scores vary widely, ranging from -18.43 to -9.95, with an average score of -13.67 and a standard deviation of 1.53, suggesting differences in the complexity of language used. Numerical intensity scores range from 0.29% to 11.55% of total meaningful words in HCM disclosure, and an average of 2.68% with a standard deviation of 1.81, reflecting differences in the incorporation

of numerical data. Specificity in disclosures ranges from 1.31% to 14.04% of total meaningful words in HCM disclosure, with an average score of 6.06% and a standard deviation of 2.35.

Table 3 reports Pearson correlation statistics of the variables used in the study. *HR_Committee* is positively and significantly correlated *Readability* ($r = 0.068$, $p < 0.01$), suggesting that firms with an HR committee have more readable HCM disclosures. *HR_Expertise* is positively and significantly correlated with *Readability* ($r = 0.050$, $p < 0.05$), *Num_Int* ($r = 0.042$, $p < 0.1$), and *Specificity* ($r = 0.055$, $p < 0.05$), indicating that firms that with an HR expert director have more readable, more numerically intense, and more specific HCM disclosures. Additionally, the small correlations between the independent variables suggest that the results are unlikely to be subject to multicollinearity. I also check the variance inflation factor (VIF) of each of the independent variables, and they are all below 10.

2.5.2. Main analysis

Table 4 presents the regression results of the multivariate regression model in Equation (1). The findings show that the presence of an HR committee without HR expertise (H1, β_1) is associated with lower numerical intensity (coefficient = -0.421, $p < 0.01$) and lower specificity (coefficient = -0.399, $p < 0.01$) of HCM disclosures. This suggests that merely renaming the compensation committee to an HR committee, without adding HR expertise, reflects a window-dressing approach that lacks substantive impact on HCM disclosure transparency. Additionally, having HR expertise on the board, without an HR committee (H2, β_2), is associated with discussing more topics (coefficient = 0.125, $p < 0.1$) but with lower specificity (coefficient = -0.241, $p < 0.1$), suggesting that HR experts, without a dedicated HR committee, use their expertise to reduce HCM disclosure transparency, potentially to limit exposure to scrutiny, with their minority presence not

translating into enhanced overall transparency. Overall, these two results imply that, in the absence of prescriptive disclosure rules and standardized metrics from regulators, HR committees and HR expert directors individually promote less transparent HCM disclosures.

Conversely, the incremental effect of having both HR committee and HR expertise (H3a, β_3) is associated with fewer topics (coefficient = -0.212, $p < 0.1$), higher readability (coefficient = 0.293, $p < 0.1$), higher numerical intensity (coefficient = 0.703, $p < 0.01$), and higher specificity (coefficient = 1.165, $p < 0.01$). Further, firms with both an HR committee and an HR expert on board are associated with higher readability (coefficient = 0.235, $p < 0.1$), higher numerical intensity (coefficient = 0.542, $p < 0.01$), and higher specificity (coefficient = 0.924, $p < 0.01$) than firms with only an HR committee, supporting H3b ($\beta_2 + \beta_3$). Similarly, these firms are associated with higher readability (coefficient = 0.286, $p < 0.05$), higher numerical intensity (coefficient = 0.282, $p < 0.01$), and higher specificity (coefficient = 0.766, $p < 0.01$) than firms with only an HR expert, supporting H3c ($\beta_1 + \beta_3$). These results suggest that the combination of the two governance mechanisms correlates with higher HCM disclosure transparency. A dedicated HR committee provides a platform for HR expert directors to leverage their expertise, and in turn, HR experts equip the HR committee with the necessary skills to fulfill its oversight role in HCM transparency. These findings highlight to the SEC and institutional investors, who are calling for board oversight over HCM, that having both HR expertise and HR committee is essential for effective oversight and enhanced transparency of HCM disclosures.

As for the control variables, *Board_Size* is associated with more topics and more readable disclosures. *CEO_Duality* and *Gender_Div* are associated with higher readability score, higher numerical intensity, and higher specificity. Overall, these results suggest that board characteristics play a governance role in HCM transparency. Surprisingly, institutional ownership is not

associated with any of the textual variables, in line with the findings of Demers et al. (2024a), despite the anecdotal evidence of institutional investors pressuring firms to disclose HCM information. This result can also be explained by the fact the sample comprises S&P500 firms that have high institutional ownership and face similar pressures. *CHRO* is associated with all the textual variables, suggesting that having a CHRO enhances the transparency of HCM disclosures, consistent with the findings of Michaelides & Vafeas (2023). As for firm characteristics, results differ slightly from Demers et al. (2024a) because of sample differences, especially in *Size* and *Emp*.

2.5.3. Cross-sectional Tests

2.5.3.1. Cross-sectional Analysis Based on the Presence of a CHRO

Prior literature shows that having a CHRO in the top management team is positively associated with higher-quality HCM disclosures (Michaelides & Vafeas, 2023). Thereofe, an interesting question is whether the impact of HR governance on HCM disclosure transparency varies depending on the presence of a CHRO. I partition the sample into two subsamples based on the presence of CHRO and re-estimate Equation (1). Table 5, Panel A reports the results for the subsample of firms with a CHRO *(CHRO=1)*, while Panel B reports the results for the subsample of firms without a CHRO *(CHRO=0).* For parsimony, I report only the regression coefficients of interest. For both subsamples of firms, the presence of an HR committee or HR expertise individually is negatively associated with HCM disclosure transparency, but the interaction between them is positively associated with HCM disclosure transparency. Importantly, for only the subsample of firms with a CHRO, we observe a positive association between the interaction of HR committee and HR expertise and readability. These results suggest that the CHRO plays a

nuanced role in enhancing the readability of the disclosure, ensuring that HCM disclosures are not only detailed and specific but also are easy to understand for stakeholders. These findings suggest distinct roles for boards of directors and CHROs: boards act as monitors, moderating the tone and ensuring the inclusion of specific and numerical content in HCM disclosures, while CHROs enhance the clarity and comprehensibility of these disclosures for the public.

2.5.3.2. Cross-sectional Analysis Based on Employment Growth

Firms that have employment growth opportunities, as indicated by an increase in employees from the previous year, may have different incentives to provide higher quality disclosure regarding their HCM practices. As firms experience growth in their workforce, there is an increased scrutiny and stakeholder interest in understanding why firms are expanding and the financial implications thereof. Stakeholders seek reassurance about the sustainability and strategic alignment of the firm's growth. Therefore, corporate boards may have greater emphasis on HCM disclosure transparency to effectively communicate the rationale behind workforce growth, ensuring stakeholders perceive the expansion as strategically sound and sustainable. To explore this argument, I investigate whether the primary findings differ depending on employment growth. I first compute the change in the number of employees by comparing the current year's count with that of the previous year. Then, I partition my sample into two groups: firms that experienced employment growth (change is above 0) and those that did not (change is 0 or negative). Table 6, Panel A reports the results of Equation (1) on the first subsample, while Panel B reports the results of the second subsample. For parsimony, I report only the coefficients of interest. In Panel A, which covers firms with employment growth, the findings align with the main findings. Specifically, in the absence of an HR expert director, HR committee is negatively and significantly associated with

numerical intensity (coefficient = -0.435, $p < 0.01$) and specificity (coefficient = -0.291, $p < 0.1$). In the absence of an HR committee, HR expertise is positively and significantly associated with more topics discussed (coefficient = 0.172, $p < 0.05$). The interaction between HR committee and HR expertise is negatively and significantly associated with topics (coefficient = -0.345, $p < 0.05$) but positively and significantly associated with readability (coefficient = 0.357, $p < 0.1$), numerical intensity (coefficient = 0.817, $p < 0.01$), and specificity (coefficient = 1.084, $p < 0.01$). From these firms experiencing employment growth, firms with both an HR committee and HR expertise have higher numerical intensity (coefficient = 0.676, $p < 0.01$) and higher specificity (coefficient = 0.875, $p < 0.01$) than firms with only an HR committee, and less topics (coefficient = -0.225, $p < 0.1$), higher readability (coefficient = 0.354, $p < 0.05$), higher numerical intensity (coefficient = 0.382, $p < 0.05$) and higher specificity (coefficient = 0.793, $p < 0.01$) than firms with only HR expertise. However, for firms not experiencing employment growth, there are no significant associations between HR governance and the HCM transparency measures, except for specificity. These results show that the relation between HR governance and HCM disclosure transparency is more pronounced for firms experiencing employment growth, confirming the prediction that corporate boards with both an HR committee and HR expertise place a greater emphasis on the transparency of HCM disclosures when firms experience employment growth to address the heightened scrutiny from stakeholders.

2.6. Additional Analyses

2.6.1. Addressing Endogeneity

To mitigate the potential endogeneity and self-selection bias that could arise from correlated omitted firm characteristics influencing the presence of HR committee, HR expertise

and HCM disclosure transparency, I re-estimate Equation (1) using an entropy balanced sample based on having both HR committee and HR expertise. Entropy balancing is a powerful matching technique that assigns continuous weights on all control observations, so that the post-weighting treatment and control observations' moments are equal on all included covariates (Hainmueller, 2012). The weights assigned are then used in subsequent regression analyses. In contrast to propensity score matching, entropy balancing ensures covariate balance between treatment and control observations, which mitigates the concern that matched observations might differ in determinants, and requires less researcher discretion than propensity score matching (McMullin & Schonberger, 2020). This matching technique addresses the concern that confounding firm characteristics may drive the results, although this possibility can never be completely ruled out in an archival research setting.

I match the treated observations (i.e., *HR_Committee* = 1 and *HR_Expertise*=1) with control observations on the first and second moments (i.e., mean and variance) of the following covariates: *Size, Emp, PPE/TA, ROA, CHRO, Board_Size*, *CEO_Duality*, and *Gender_Div*. I choose these variables because they are the most significant in the regression analyses. Table 7, Panel A reports the difference in means for the sample pre-matching and Panel B reports the results of estimating Equation (1) on the entropy matched sample. The results are qualitatively similar to my main results, confirming that the observed relationships between HR governance and HCM disclosure transparency are robust to concerns about endogeneity and selection bias.

2.6.2. Robustness Tests (Untabulated)

I perform the following sensitivity tests to ensure the robustness of the results. First, I find the results of Table 4 are robust to removing firms in the financial industry since these firms are

more regulated. Second, I re-define HR expertise by excluding directors who only have diversity experience, i.e., no mention of HR-related employment in their career. The results remain qualitatively similar to my main findings.

2.7. Conclusion

This study investigates the role of HR governance, specifically HR committee and HR expertise, on HCM disclosure transparency. The findings reveal that while HR expert directors and HR committees individually encourage discussion of more topics of HCM disclosures, the disclosures are less transparent. However, when both HR expertise and an HR committee are present, HCM disclosures are more readable, numerically intense, and specific, aligning with investors' demands. Further analyses reveal that the positive effects are more pronounced for firms with a CHRO and those experiencing employment growth. In a world increasingly advocating for HCM transparency, this study underscores the importance of integrating HR governance into the board of directors.

These results have important implications for regulators, such as the SEC, and institutional investors calling for board oversight of HCM. While firms are increasingly renaming the compensation committee to an HR committee to signal the inclusion of HCM oversight in the board of directors, this study implies that the HR committee alone is not sufficient. Instead, having a member with HR expertise is essential to achieve HCM transparency. Therefore, companies aiming to meet the growing demands for transparent and informative HCM disclosures should ensure that their boards include both a dedicated HR committee and directors with HR expertise.

2.8. Tables and Appendices

APPENDIX A
Examples of HCM Disclosures

Skyworks Solutions, Inc. 2021 10-K HCM Disclosure

Employees

Our workforce consists of approximately 11,000 employees located around the world, more than 99% of whom are full-time employees. As of October 1, 2021:

•Our workforce was distributed geographically approximately as follows: 57% in Mexico, 23% in the United States, 18% in Asia, 1% in Canada, and less than 1% in Europe.

•Our workforce was distributed by function approximately as follows: 48% in individual contributor manufacturing roles, 31% in engineering or technician roles, 11% in managerial roles, and 10% in professional or other administrative roles.

•Approximately 4,350 of our employees in Mexico, 280 of our employees in Singapore, and 420 of our employees in Japan were covered by collective bargaining and other union agreements.

In managing our business, we focus on attracting and retaining employees by providing compensation and benefits packages that are competitive within the applicable market, taking into account the job position's location and responsibilities. Nearly all full-time employees across the globe are eligible to participate in one of the Company's incentive plans, under which payments are tied to pre-established performance goals. In addition, we believe that developing our employees' skillsets and decision-making abilities—through challenging project assignments, formal training, mentorship, and recognition—is key not only to our employees' job satisfaction and our retention efforts, but also to maintaining a strong leadership pipeline.

Abbott Laboratories 2022 10-K HCM Disclosure

Human Capital

The sustainability of Abbott's business depends on attracting, engaging and developing talented people with diverse backgrounds who share Abbott's mission to help people live their healthiest possible lives. Abbott provides its employees opportunities to grow and develop their careers, market competitive compensation and benefit programs, and the satisfaction of being part of a global company dedicated to improving health in more than 160 countries.

As of December 31, 2022, Abbott employed approximately 115,000 people, 69% of whom were employed outside of the U.S. Women represented 47% of Abbott's U.S. workforce, 46% of its global workforce, and 41% of its managers.

Talent Management

Abbott has an integrated global talent management process that is designed to identify and assess talent across the organization and provide equal and consistent opportunities for employees to develop their skills. All levels of employees participate in Abbott's annual performance

management process to create development plans that support their particular career objectives, and Abbott provides a broad range of training, mentoring and other development opportunities to help its employees meet these objectives. The board of directors conducts an annual Talent Management Review, focusing on development of talent, diversity, and succession planning for critical positions. Similar reviews take place across Abbott to develop talent and diversity across the organization.

Diversity and Inclusion

Abbott is committed to developing a workplace that is inclusive for all. Abbott ties executive compensation to human capital management, including diversity outcomes, to sustain an inclusive culture and the fair and balanced treatment of Abbott's employees. In 2022, Abbott released the second edition of its diversity, equity, and inclusion report, providing an update on Abbott's plans, strategies, and actions to fulfill its commitment to develop an inclusive workplace.

Abbott's employee networks play an important role in building an inclusive culture across all Abbott operations. A corporate officer serves as a sponsor for each of these networks, helping to align their objectives with Abbott's business strategies. Abbott has ten such networks, which are: Early Career Network (supporting early career employees), Asian Leadership and Cultural Network, Black Business Network, Flex Network (supporting employees with part-time and flexible schedules), LA VOICE Network (supporting Hispanic and Latino employees), disABILITY Network (supporting employees with disabilities), PRIDE (supporting LGBTQ employees), Veterans Network, Women Leaders of Abbott, and Women in STEM. All networks are open to all Abbott employees.

Abbott offers professional development programs, which provide recent college graduates the opportunity to rotate through different areas of Abbott, often with the chance to work outside their home country. In 2022, 53% of the participants were women. Also, Abbott hosts hundreds of college students for paid internships. In 2022, 58% of the U.S. interns were women and 59% were minorities. Further, Abbott has offered a STEM internship program for high school students in the U.S. since 2012 and since 2021, students who complete the program receive a college credit recommendation from the American Council on Education. The program's objective is to increase the number of students pursuing STEM-related careers and contribute to a more diverse talent pipeline for Abbott. In 2022, 69% of the STEM interns were women and 78% were minorities.

Health and Safety

The health, safety and wellness of its employees is an Abbott priority embedded at every level of its business. Abbott's integrated Environmental, Health and Safety organization governs health, safety and wellness at Abbott's facilities. Abbott also maintains global policies and standards for managing employee health and safety.

Abbott takes a holistic approach to employee well-being. Abbott's global wellness programs are designed to meet the unique needs of employees across businesses and geographies and offer a wide range of programs, including supporting the mental, financial and physical health of employees and their families. For example, for over 20 years, Abbott has annually offered Exercise Across Abbott, which is a four-week physical wellness program that encourages employees to

team up with colleagues and track how many minutes they exercise each day. Over 21,000 Abbott employees across 74 countries took part in 2022.

Compensation and Benefits

Abbott is committed to building, retaining, and motivating a diverse talent pipeline that can meet the current and future needs of its businesses. To that end, Abbott provides market competitive compensation, healthcare benefits, continuing education benefits, pension and/or retirement savings plans, financial support for employees with student loan debt, and several programs to facilitate employees building an ownership stake in Abbott, including a global long-term incentive program for employees generally beginning at the manager level. Abbott also has procedures and processes focused on ensuring employees receive equitable compensation, regardless of race or gender or other personal characteristics.

Laboratory Corporation of America Holdings 2021 10-K HCM Disclosure

Human Capital

Mission and Culture

Labcorp believes in the power of science to change lives. The Company’s culture centers around its mission to improve health and improve lives. The Company's more than 75,500 employees serve clients in over 100 countries. They are essential to the Company’s ability to innovate and advance science and technology to empower patients, providers, and pharmaceutical companies to make clear and confident decisions. Labcorp’s employees are also critical to its ongoing support of the COVID-19 pandemic response through diagnostic testing and its work to aid pharmaceutical companies in the development of vaccines and treatments. Engaging the collective expertise and passion of its employees is vital to achieving the Company’s mission, which permeates its performance-driven, collaborative, inclusive, customer-centered, and inquisitive culture.

Workforce Demographics

The Company’s success depends on its sustained ability to attract, develop, and retain a highly specialized and skilled global workforce. Management believes that the Company has good working relationships with its employees. Employees are globally dispersed, with 75% in the U.S. and Canada, 12% in Asia, 13% in Europe, the Middle East, and Africa, and less than 1% in Latin America. Of the Company’s global workforce, 90% of employees are full time, and 10% are part time. Four percent of Labcorp’s global workforce is employed under a collective bargaining agreement. Depending on business demand and the talent-hiring environment, Labcorp supplements up to 12% of its workforce with contingent workers.

The challenges of 2021, felt globally, also presented the Company with significant challenges in acquiring and retaining talent. Despite these obstacles, Labcorp’s global workforce increased by more than 4%. The majority of Labcorp's hires are sourced through an internal talent acquisition team. In addition, the Company continues to grow its workforce through mergers and acquisitions. The Company implemented significant investments to retain talent and enable the organization to

meet the business needs for growth, which are discussed further in the section below on "Compensation and Benefits."

Throughout the pandemic, a significant portion of Labcorp's employees have been working diligently to serve patients and customers. To ensure the safety and welfare of our employees, the majority of employees who do not work with patients, animals, in labs, or in logistics, continue to work remotely. This includes call center employees, customer service teams, sales teams, and corporate and functional teams. Going forward, the Company expects that a significant number of employees will continue working remotely, or through hybrid, in-office and remote work arrangements. The Company believes that flexibility in work location and arrangements expands the pool from which it can source experienced and valuable talent.

Diversity and Inclusion

Labcorp's diverse, global talent is core to its ability to innovate and meet patient and customer needs. The Company believes that the diversity of its employees and its inclusive programs contribute to a healthy, productive, and respectful work environment.

The Company has a Diversity and Inclusion (D&I) strategic framework, with three overarching pillars of focus: empowering inclusive leadership; developing and sustaining a diverse talent pipeline; and creating an environment for engagement across the Company and in its communities. Labcorp's D&I strategy is designed as a continuing journey to maintain and further evolve its inclusive workforce consistent with the changing dynamics of the global workforce. Highlights of actions supporting the Company's D&I framework that it believes will foster a more inclusive environment and strengthen its culture include:

•the launch of an unconscious bias training program designed to improve self-awareness of personal biases. The program was rolled out globally to all of the Company's people leaders, with over 6,000 completing the training in 2021;

•a formal mentoring initiative that includes a Reverse Diverse Mentoring program that received the Gold Award in the category of Best Advance in Mentoring to Develop Diverse Leaders from the Brandon Hall Group;

•a first-ever virtual women's summit for executive women leaders. This event, called the Power of Women, is part of the Company's leadership development programs for women that include specific offerings for mid-level and senior leaders;

•the introduction of additional Employee Resource Groups (ERGs). ERGs are led by employee volunteers and are important resources to foster cross-company connections, encourage belonging, support career development, and champion employee voices. The Company now has eight unique ERGs with more than 70 chapters in 11 countries. Each ERG has executive sponsorship from senior leadership.

The Company was named to FORTUNE® magazine's 2022 List of World's Most Admired Companies, making the annual list for the fourth time. Labcorp also made the Forbes 2021 list of World's Best Employers for the second consecutive year. In addition, the Company was named to Fast Company's list of the World's Most Innovative Companies for 2021. In 2021 and 2022, the Company was recognized for the fourth and fifth consecutive years as a Best Place to Work for LGBTQ+ Equality, with a perfect score on the Human Rights Campaign Foundation's Corporate

Equality Index. The Index is the nation's foremost benchmarking survey and report on corporate policies and practices related to LGBTQ+ workplace equality.

The Company has also implemented opportunities for greater engagement between employees and management, including quarterly town halls that are held virtually and open to all employees, interaction with front-line employees on visits to the Company facilities, and town halls with employees in business units. In early 2022, the Company initiated a Voice of the Employee Survey.

Compensation

As the Company's business becomes increasingly complex, global, and dynamic, the Company believes that its compensation and benefits programs must be competitive and flexible to attract and retain the caliber of talent needed to continue to move the business forward. In 2021, the Company faced unique challenges to growing and maintaining its global workforce. The Company believes that its ability to expand the workforce in 2021 evidences that the Company's compensation and benefit strategies are market competitive and support the business needs to attract and retain talent.

The Company continually monitors market activity and employee movement within and outside of the core life sciences industry to maintain competitiveness, given the dynamic business environment and labor market challenges it faces.

Labcorp's employees met the unique challenges faced by patients and clients as the COVID-19 pandemic continued in 2021. The Company invested more than $120 million to recognize and reward our global workforce, with particular focus placed on frontline workers. These investments included:

•$51 million in market-based pay adjustments, including an increase in the minimum wage for all non-union employees in the U.S. to $15 per hour;

•$21 million to increase base wages up to an additional 1.5% to encourage participation in the 401(k) retirement savings plan for 37,000 U.S. employees earning less than $75,000 per year;

•$35 million in two separate, global "gratitude" bonuses for more than 61,500 employees; and

•$14 million in retention payments to employees in key global positions to encourage continued career development with the Company.

Employee Wellness

The Company also continued investing in the health and wellness of its global workforce, with particular emphasis on improving its U.S. health benefits program for employees. The Company's efforts on this front included:

•no annual cost increase for the payroll contributions in its U.S. Healthy Value medical, dental and vision insurance plans, impacting approximately 36,000 covered employees and more than 30,000 dependents. For approximately 26,000 employees in the U.S. earning less than $50,000 per year, the Company further reduced the cost of monthly medical insurance contributions by $240 per year;

•adding company-paid disability insurance coverage for short- and long-term disability for all U.S. employees;

•providing up to $4,560 in annual medical plan contribution discounts for over 36,000 employees and their spouses for committing to and maintaining a healthy and tobacco-free lifestyle;

•encouraging health and wellness education and activities by providing up to $1,000 in Health Reimbursement Account contributions to approximately 31,000 employees and their spouses or partners. This included $100 for COVID-19 vaccines and $50 for Flu vaccines;

•reimbursing up to $300 in fitness-related costs for approximately 16,000 employees.

The Company continually educates its workforce on health issues of importance. For example, the Company provided a series of videos throughout 2021 from its medical experts covering the facts, safety, and effectiveness of the COVID-19 vaccines. Further, the Company has also prioritized continuous education on the importance of mental well-being, through communications and resources made available to all employees. The Company believes that its investments in compensation and wellness are crucial to maintaining competitive positioning and a productive and engaged workforce.

Development and Training

To meet the needs of patients and clients in the evolving and competitive diagnostics and drug development markets, the Company is committed to creating a work environment that supports a focus on the continuous development and training of its employees. With this focus, the Company believes it is well-positioned in the long term to meet the demands of the regulatory environment and accelerate its ability to innovate and develop talent in a highly skilled and competitive talent market.

Labcorp's curriculum has three primary focus areas: regulatory training, technical training, and professional development. Regulatory training is required by laws and regulations for the Company to operate in certain areas within the life sciences industry and in certain jurisdictions. Technical training and professional development enable the Company to compete more effectively in the life sciences industry.

The Company maintains an extensive library of over 46,000 courses that are available virtually within its global learning management system. In 2021, Labcorp employees completed over 3.2 million hours of training, primarily consisting of regulatory and technical training. In addition, due to the Company’s access to sensitive and personally identifiable information, employees completed over 1.3 million IT security training courses, representing more than 300,000 total hours, with the goal of maintaining IT system safety and security for clients and patients.

Labcorp also invests in the professional development of its talent, and in retaining our best employees for future internal opportunities. In 2021, employees completed more than 65,000 hours of professional development.

Challenges in the talent labor market have reinforced the need to offer new and engaging learning resources. In 2021, the Company expanded its approach to tuition assistance, helping an additional 500 employees complete college degrees in the life science and healthcare fields. In

addition, Labcorp added new relationships with leading learning partners that provide open, online courses. These partners provide video courses, job aides, and short, self-paced learning taught by industry experts.

Health and Safety

The nature of the Company's business requires employees to work directly with patients and animals. This includes the handling, processing, and testing of human or animal specimens on a daily basis. As the health and safety of employees is a primary concern, the Company has established numerous employee health and safety protocols, including engineering and administrative controls, policies, procedures, processes, and training to minimize the potential for, and the severity of, work-related injuries and illnesses.

In 2021, the Company reorganized its Environment, Health and Safety (EHS) function, combining Dx and DD programs to enable consistency and common policies, procedures, and areas of focus. The Company was able to maintain its work-related injury rate per 100 employees at a low 1.6, and to reduce its work-related lost work injury rate per 100 employees by 40%, from 0.5 to 0.3. The Company also implemented a common Corporate EHS Audit process, allowing it to assess locations against common expectations and performance criteria. In response to COVID-19, the Company modified the audit format so that it could be effectively performed virtually.

While COVID-19 presented continued challenges, the Company minimized the impact on staff and operations through careful planning and consistent global implementation of precautionary measures. These measures included additional cleaning and sanitization, social distancing, the use of protective equipment such as facemasks, face shields and respirators, the increased utilization of work from home, and leveraging video and communications technology.

Employee Giving

The Labcorp Charitable Foundation, a private, charitable 501(c)(3) organization established by the Company, invested in more than 70 programs in 2021 that align with the Company’s strategic mission to improve health and improve lives. The Foundation’s funding supports the focus areas of health, education, and community across the globe.

In addition, the Company's employees took advantage of many opportunities to support charitable causes and make a positive impact in their communities.

Annually, U.S. colleagues have the opportunity to automatically direct a portion of each paycheck to one or more of six selected charities through the Employee Giving Campaign: the American Cancer Society, American Heart Association, American Diabetes Association, American Red Cross (Disaster Relief), United Way, and the National Urban League. Employee contributions support these charities to provide needed services in their local communities and across the nation.

The Company's global colleagues also support the local communities where they live and work. For example, as India endured a second, severe wave of positive COVID-19 cases, Labcorp’s India Crisis Management Team helped 2,398 employees and their families get vaccinated. Additionally, in celebration of Earth Day, Labcorp colleagues in China took an active part in the American Chamber of Commerce Shanghai Annual E-waste Drive, in which employees donated personal

electronics that they no longer use. The donated equipment was distributed to schools throughout rural communities in China to improve access to technology.

APPENDIX B
Variable Definitions

Variable	Definition	Data Source
Test Variables		
HR_Committee	1 if firm *i* has an HR committee on the board in year *t*, and 0 otherwise. A committee is deemed an HR committee if its name contains any HR or related keywords that reflect a broad talent management scope that extends beyond executive oversight.	BoardEx
HR_Expertise	1 if firm *i* has an HR expert on the board in year *t*, and 0 otherwise. A director is deemed as HR expert if he or she (1) has worked as a Chief Human Resource Officer, Chief Personnel Officer, Chief People Officer, Chief Talent Officer, Chief Diversity and Inclusion Officer, or director, vice president, senior vice president, head, manager, or general manager of HR/Talent/Labor Relations, or (2) serves on or chairs a DEI council within an organization.	BoardEx
Dependent Variables		
Topics	The number of topics discussed in HCM disclosures for firm *i* in year *t*. I manually categorize the disclosure into 8 topics.	
Readability	The Gunning Fog index, defined as 0.4 * (average word count per sentence + percentage of complex words) for HCM disclosures of firm *i* in year *t.* In regressions, I multiply it by (-1) for ease of interpretation.	10-K Filings
Specificity	The number of words that are named entities divided by the total number of non-stop words, multiplied by 100 for HCM disclosures of firm *i* in year *t*.	10-K Filings
Num_Int	The number of numbers divided by the total number of non-stop words, multiplied by 100, for HCM disclosures of firm *i* in year *t*.	10-K Filings
Firm Control Variables		
Size	The market value (prcc_f * csho) for firm *i* in year *t*. The natural logarithm is used in regressions.	Compustat
Emp	The number of employees (emp) for firm *i* in year *t*. The natural logarithm is used in regressions.	Compustat
BTM	The book value of equity (ceq) scaled by the market value of equity for firm *i* in year *t.*	Compustat

PPE/TA	The net property plant and equipment (ppent) scaled by total assets (at) for firm *i* in year *t*.	Compustat
ROA	Income before extraordinary items (ib) scaled by total assets for firm *i* in year *t*.	Compustat
CHRO	1 if firm *i* has a Chief Human Resource Officer on the top management team in year *t*, and 0 otherwise.	BoardEx
Governance Control Variables		
Board_Size	The number of directors on the board for firm *i* in year *t.*	BoardEx
Board_Ind	The number of independent directors scaled by the total number of directors for firm *i* in year *t.*	BoardEx
Gender_Div	The number of female directors scaled by the total number of directors for firm *i* in year *t*.	BoardEx
CEO_Duality	1 if the CEO is also the chairman of the board for firm *i* in year *t*, and 0 otherwise.	BoardEx
Inst_Own	The percentage of institutional ownership for firm *i* in year *t*.	Thomson Reuters

APPENDIX C

List of Committee Names Reflecting HR Functions

Compensation & Employee Benefits	Human Resources & Remuneration
Compensation & Human Capital Management	Human Resources and Compensation
Compensation & Personnel Development	Human Resources and Diversity Equity & Inclusion
Compensation and Human Capital	Human Resources and Safety
Compensation and Human Capital Management	Human Resources Compensation and Benefits
Compensation and Human Resources	Human Resources Development and Compensation
Compensation and Leadership	Human Resources Diversity and Inclusion
Compensation and Leadership Management	Human Resources Health and Compensation
Compensation and Leadership Performance	Human Resources Safety and Culture
Compensation and Leadership Resources	Human Resources Safety and Environment
Compensation and Leadership Talent	Human Resources Workplace Health and Safety
Compensation and People Development	Leadership & Compensation
Compensation and Personnel	Leadership and Talent
Compensation and Talent	Leadership Development & Compensation
Compensation and Talent Development	Leadership Development Belonging & Compensation
Compensation and Talent Management	Leadership Development Compensation and Governance
Compensation and Workforce	Leadership Development Inclusion & Compensation
Compensation Benefits and Talent Management	Leadership Diversity Equity Inclusion and Compensation
Compensation Human Resources & Management Success	Organization Leadership and Compensation
Compensation Human Resources and Health Safety & Environmental	People and Compensation
Compensation Leadership Development	People and Culture
Compensation People and Culture	People and Performance
Compensation People Diversity and Inclusion	People Culture and Compensation
Compensation Performance & Talent Management	People Culture and Remuneration
Compensation Talent & Culture	People Experience
Compensation Talent and Rewards	People Resources
Compensation Talent and Technology	Personnel
Compensation/Human Capital	Personnel and Benefits
Employee and Public Responsibility	Personnel and Compensation
Employee Compensation and Benefits	Talent
Executive Compensation & Human Capital	Talent and Leadership Development
Human Capital	Talent Culture & Total Rewards

Human Capital and Compensation	Talent Culture and Compensation
Human Capital and Total Rewards	Talent Development
Human Capital Management	Talent Leadership and Compensation
Human Resources	Talent Oversight and Compensation

Table 1

Panel A: Sample Distribution by Year

Fiscal Year	N	Percent
2020	453	25.17
2021	490	27.22
2022	495	27.50
2023	362	20.11
Total	**1,800**	**100**

Panel B: Sample Distribution by Fama French 12-industry classification

	Freq.	Percent
Consumer Non-Durables	104	5.78
Consumer Durables	33	1.83
Manufacturing	172	9.56
Energy	67	3.72
Chemicals	75	4.17
Business Equipment	322	17.89
Telecommunication	33	1.83
Utilities	132	7.33
Wholesale, Retail, Services	137	7.61
Healthcare and Drugs	156	8.67
Finance	342	19
Other	227	12.61
Total	**1,800**	**100**

Table 2
Descriptive Statistics

	N	Mean	SD	Min	p5	p25	p50	p75	p95	Max
HR_Committee	1,800	0.33	0.47	0	0	0	0	1	1	1
HR_ Expertise	1,800	0.32	0.47	0	0	0	0	1	1	1
*HR_Committee * HR_Expertise*	1,800	0.11	0.32	0	0	0	0	0	1	1
Topics	1,800	5.94	1.22	1	4	5	6	7	8	8
Readability	1,800	-13.67	1.53	-18.43	-16.43	-14.63	-13.59	-12.59	-11.36	-9.95
Num_Int	1,800	2.68	1.81	0.29	0.68	1.44	2.252	3.35	6	11.55
Specificity	1,800	6.06	2.35	1.31	2.74	4.41	5.73	7.40	10.34	14.04
Size (in Millions)	1,800	65,697	125,516	5,488	9,206	16,619	30,314	60,451	233,428	1,577,593
Emp	1,800	50,270	81,759	304	1,723	9,500	20,000	54,841	190,117	534,000
BTM	1,800	0.34	0.31	-0.17	-0.01	0.11	0.26	0.50	0.93	2.01
ROA	1,800	0.07	0.07	-0.22	-0.02	0.02	0.05	0.10	0.21	0.31
PPE/TA	1,800	0.25	0.24	0	0	0.06	0.14	0.38	0.77	0.88
CHRO	1,800	0.47	0.50	0	0	0	0	1	1	1
Board_Size	1,800	11.06	2	6	8	10	11	12	14	23
Board_Ind	1,800	0.89	0.05	0.62	0.78	0.87	0.90	0.92	0.93	1
CEO_Duality	1,800	0.41	0.49	0	0	0	0	1	1	1
Gender_Div	1,800	0.31	0.09	0	0.18	0.25	0.30	0.36	0.46	0.69
Inst_Own	1,800	0.78	0.15	0.32	0.45	0.7	0.82	0.89	0.95	1

Table 2 presents the descriptive statistics for all variables used in analyses. Sample size is 1,800 firm-year observations. All variables are defined in Appendix B. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 3
Panel A: Pearson Correlations Matrix for columns (1) – (8)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) *Topics*	1.000							
(2) *Readability*	**0.083**	1.000						
	(0.000)							
(3) *Num_Int*	**-0.216**	**0.303**	1.000					
	(0.000)	**(0.000)**						
(4) *Specificity*	**-0.059**	**0.266**	**0.430**	1.000				
	(0.012)	**(0.000)**	**(0.000)**					
(5) *HR_Committee*	0.018	**0.068**	-0.032	0.031	1.000			
	(0.434)	**(0.004)**	(0.170)	(0.189)				
(6) *HR_Expertise*	0.034	**0.050**	**0.042**	**0.055**	0.027	1.000		
	(0.149)	**(0.036)**	**(0.076)**	**(0.020)**	(0.253)			
(7) *Size*	**-0.095**	-0.034	-0.033	-0.001	0.037	**-0.090**	1.000	
	(0.000)	(0.146)	(0.156)	(0.957)	(0.119)	**(0.000)**		
(8) *Emp*	-0.022	**0.084**	-0.022	0.018	**0.121**	**0.040**	**0.486**	1.000
	(0.344)	**(0.000)**	(0.354)	(0.453)	**(0.000)**	**(0.093)**	**(0.000)**	
(9) *BTM*	**-0.065**	-0.028	**0.060**	**0.073**	0.027	**0.041**	**-0.243**	**-0.066**
	(0.005)	(0.242)	**(0.011)**	**(0.002)**	(0.247)	**(0.085)**	**(0.000)**	**(0.005)**
(10) *PPE/TA*	**0.132**	**0.068**	**0.118**	**0.172**	0.006	**0.047**	**-0.049**	-0.016
	(0.000)	**(0.004)**	**(0.000)**	**(0.000)**	(0.803)	**(0.046)**	**(0.036)**	(0.501)
(11) *ROA*	0.037	**0.064**	-0.028	**-0.144**	-0.001	0.010	**0.237**	-0.014
	(0.120)	**(0.006)**	(0.229)	**(0.000)**	(0.977)	(0.681)	**(0.000)**	(0.541)
(12) *CHRO*	**0.047**	**0.118**	**0.069**	**0.054**	**0.065**	-0.010	-0.037	0.035
	(0.045)	**(0.000)**	**(0.003)**	**(0.022)**	**(0.006)**	(0.664)	(0.117)	(0.140)
(13) *Board_Size*	-0.002	**0.060**	0.038	**0.104**	**0.129**	**0.111**	**0.244**	**0.245**
	(0.919)	**(0.011)**	(0.109)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**
(14) *Board_Ind*	-0.012	**0.090**	**0.051**	**0.067**	**0.179**	0.023	**0.090**	**0.080**
	(0.607)	**(0.000)**	**(0.032)**	**(0.005)**	**(0.000)**	(0.334)	**(0.000)**	**(0.001)**
(15) *CEO_Duality*	-0.033	**0.058**	**0.104**	**0.080**	0.021	**0.060**	**0.141**	**0.105**
	(0.164)	**(0.013)**	**(0.000)**	**(0.001)**	(0.370)	**(0.011)**	**(0.000)**	**(0.000)**
(16) *Gender_Div*	**-0.043**	**0.074**	0.032	**0.072**	**0.158**	**0.042**	**0.092**	**0.075**
	(0.070)	**(0.002)**	(0.175)	**(0.002)**	**(0.000)**	**(0.076)**	**(0.000)**	**(0.001)**
(17) *Inst_Own*	0.014	-0.013	-0.006	**-0.077**	-0.032	0.011	**-0.484**	**-0.392**
	(0.567)	(0.575)	(0.787)	**(0.001)**	(0.175)	(0.640)	**(0.000)**	**(0.000)**

Table 3 (continued)

Panel B: Pairwise Correlations Matrix for columns (9) – (17)

Variables	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(9) *BTM*	1.000								
(10) *PPE/TA*	0.010	1.000							
	(0.670)								
(11) *ROA*	**-0.435**	**-0.087**	1.000						
	(0.000)	**(0.000)**							
(12) *CHRO*	**0.054**	**-0.105**	**-0.066**	1.000					
	(0.023)	**(0.000)**	**(0.005)**						
(13) *Board_Size*	**0.198**	0.009	**-0.189**	**0.088**	1.000				
	(0.000)	(0.694)	**(0.000)**	**(0.000)**					
(14) *Board_Ind*	-0.007	**0.044**	**-0.080**	**0.143**	**0.257**	1.000			
	(0.779)	**(0.062)**	**(0.001)**	**(0.000)**	**(0.000)**				
(15) *CEO_Duality*	**0.043**	**-0.066**	**-0.044**	**0.075**	**0.122**	**0.143**	1.000		
	(0.068)	**(0.005)**	**(0.059)**	**(0.002)**	**(0.000)**	**(0.000)**			
(16) *Gender_Div*	-0.037	-0.008	0.013	**0.039**	-0.011	**0.119**	-0.004	1.000	
	(0.115)	(0.739)	(0.580)	**(0.099)**	(0.629)	**(0.000)**	(0.882)		
(17) *Inst_Own*	**-0.091**	**-0.123**	0.032	**0.089**	**-0.256**	0.018	**-0.094**	-0.017	1.000
	(0.000)	**(0.000)**	(0.172)	**(0.000)**	**(0.000)**	(0.434)	**(0.000)**	(0.482)	

Table 3 displays the Pearson correlation coefficients and associated p-values for the variables of interest. All variables are defined in Appendix B. Correlation coefficients with significance at the 10% level are boldfaced.

Table 4
The Relation between HR Governance and HCM Disclosure Transparency

VARIABLES	(1) Topics	(1) Readability	(3) Num_Int	(4) Specificity
HR_Committee	0.096	-0.007	-0.421***	-0.399***
	(1.36)	(-0.08)	(-3.80)	(-2.86)
HR_Expertise	0.125*	-0.058	-0.161	-0.241*
	(1.71)	(-0.66)	(-1.46)	(-1.74)
HR_Committee × HR_Expertise	-0.212*	0.293*	0.703***	1.165***
	(-1.71)	(1.81)	(3.67)	(4.90)
Size	-0.119***	-0.310***	-0.093	-0.001
	(-2.68)	(-5.19)	(-1.46)	(-0.01)
Emp	-0.032	0.169***	0.050	0.009
	(-1.15)	(4.58)	(1.41)	(0.19)
BTM	-0.157	-0.315**	0.200	-0.136
	(-1.46)	(-2.11)	(1.23)	(-0.63)
PPE/TA	0.236	0.681***	1.070***	1.616***
	(1.41)	(3.10)	(4.45)	(4.79)
ROA	0.165	2.688***	1.444**	-3.217***
	(0.33)	(4.67)	(1.99)	(-3.50)
CHRO	0.130**	0.301***	0.268***	0.204*
	(2.28)	(4.17)	(3.09)	(1.86)
Board_Size	0.037**	0.048**	0.006	0.052
	(2.42)	(2.11)	(0.23)	(1.58)
Board_Ind	-0.638	1.259	0.635	0.309
	(-1.04)	(1.64)	(0.80)	(0.25)
CEO_Duality	-0.069	0.158**	0.398***	0.331***
	(-1.21)	(2.09)	(4.49)	(2.89)
Gender_Div	-0.433	0.973**	0.947*	2.011***
	(-1.27)	(2.24)	(1.95)	(3.15)
Inst_Own	-0.210	-0.392	-0.094	-0.543
	(-0.93)	(-1.28)	(-0.30)	(-1.17)
Constant	8.311***	-14.731***	1.509	4.384***
	(11.84)	(-16.56)	(1.59)	(2.92)
Hypothesis 3 tests:				
H3b: $\beta_2 + \beta_3 > 0$	-0.087	0.235*	0.542***	0.924***
	(-0.87)	(1.70)	(3.49)	(4.79)
H3c: $\beta_1 + \beta_3 > 0$	-0.116	0.286**	0.282*	0.766***
	(-1.13)	(2.13)	(1.78)	(3.85)
Observations	1,800	1,800	1,800	1,800
R-squared	0.128	0.082	0.067	0.100
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 4 reports the regression results of the model in Equation (1). The dependent variables in columns (1) through (4) are *Topics, Readability, Num_Int,* and *Specificity*, respectively. All variables are defined in Appendix B. Year- and industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t- statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 5

Panel A: The Relation between HR Governance and HCM Disclosure Transparency for the Subsample of Firms with a CHRO

VARIABLES	(1) Topics	(2) Readability	(3) Num_Int	(4) Specificity
HR_Committee	0.025	-0.191	-0.566***	-0.217
	(0.26)	(-1.48)	(-3.34)	(-1.10)
HR_Expertise	0.015	-0.293**	-0.324*	-0.250
	(0.14)	(-2.45)	(-1.92)	(-1.27)
HR_Committee × *HR_ Expertise*	-0.105	0.534**	0.819***	1.269***
	(-0.60)	(2.55)	(3.09)	(3.94)
Hypothesis 3 tests:				
H3b: $\beta_2 + \beta_3 > 0$	-0.090	0.241	0.495**	1.019***
	(-0.66)	(1.41)	(2.46)	(4.02)
H3c: $\beta_1 + \beta_3 > 0$	-0.080	0.343**	0.253	1.052***
	(-0.54)	(2.05)	(1.20)	(4.09)
Observations	848	848	848	848
R-squared	0.198	0.087	0.090	0.134
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel A reports the regression results of the model in Equation (1) for the subsample of firms where CHRO=1. The dependent variables in columns (1) through (4) are *Topics, Readability, Num_Int*, and *Specificity*, respectively. All variables are defined in Appendix B. Year- and industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t- statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

Panel B: The Relation between HR Governance and HCM Disclosure Transparency for the Subsample of Firms without a CHRO

VARIABLES	(1) Topics	(2) Readability	(3) Num_Int	(4) Specificity
HR_Committee	0.149	0.187	-0.327**	-0.658***
	(1.49)	(1.34)	(-2.29)	(-3.50)
HR_Expertise	0.275***	0.115	-0.009	-0.225
	(2.72)	(0.94)	(-0.06)	(-1.16)
HR_Committee × *HR_Expertise*	-0.331*	0.037	0.670**	1.090***
	(-1.86)	(0.15)	(2.26)	(3.06)
Hypothesis 3 tests:				
H3b: $\beta_2 + \beta_3 > 0$	-0.056	0.152	0.661***	0.864***
	(-0.37)	(0.68)	(2.63)	(2.79)
H3c: $\beta_1 + \beta_3 > 0$	-0.181	0.224	0.343	0.432
	(-1.23)	(1.03)	(1.31)	(1.34)
Observations	952	952	952	952
R-squared	0.113	0.117	0.072	0.117
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel B reports the regression results of the model in Equation (1) for the subsample of firms where CHRO=0. The dependent variables in columns (1) through (4) are *Topics, Readability, Num_Int,* and *Specificity*, respectively. All variables are defined in Appendix B. Year- and industry-fixed effects are added to the model. Reported statistics

are based on robust standard errors. t- statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 6

Panel A: The Relation between HR Governance and HCM Disclosure Transparency for the Subsample of Firms with Employment Growth

VARIABLES	(1) Topics	(2) Readability	(3) Num_Int	(4) Specificity
HR_Committee	0.120	-0.003	-0.435***	-0.291*
	(1.43)	(-0.02)	(-3.30)	(-1.74)
HR_Expertise	0.172**	-0.126	-0.141	-0.209
	(1.99)	(-1.22)	(-1.09)	(-1.32)
HR_Committee × HR_ Expertise	-0.345**	0.357*	0.817***	1.084***
	(-2.25)	(1.86)	(3.58)	(3.74)
Hypothesis 3 tests:				
H3b: $\beta_2 + \beta_3 > 0$	-0.173	0.231	0.676***	0.875***
	(-1.35)	(1.40)	(3.65)	(3.62)
H3c: $\beta_1 + \beta_3 > 0$	-0.225*	0.354**	0.382**	0.793***
	(-1.75)	(2.22)	(2.04)	(3.27)
Observations	1,360	1,360	1,360	1,360
R-squared	0.117	0.093	0.076	0.104
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 6, Panel A reports the regression results of the model in Equation (1) for the subsample of firms where employment growth is positive. The dependent variables in columns (1) through (4) are *Topics, Readability, Num_Int,* and *Specificity*, respectively. All variables are defined in Appendix B. Year- and industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t- statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Panel B: The Relation between HR Governance and HCM Disclosure Transparency for the Subsample of Firms without Employment Growth

VARIABLES	(2) Topics	(3) Readability	(4) Num_Int	(5) Specificity
HR_Committee	0.006	-0.103	-0.450**	-0.787***
	(0.05)	(-0.55)	(-2.12)	(-3.07)
HR_Expertise	-0.101	0.087	-0.273	-0.535*
	(-0.72)	(0.49)	(-1.20)	(-1.79)
HR_Committee × HR_ Expertise	0.163	0.012	0.406	1.383***
	(0.79)	(0.04)	(1.13)	(3.38)
Hypothesis 3 tests:				
H3b: $\beta_2 + \beta_3 > 0$	0.062	0.099	0.132	0.847***
	(0.41)	(0.38)	(0.46)	(2.81)
H3c: $\beta_1 + \beta_3 > 0$	0.170	-0.092	-0.044	0.596*
	(1.05)	(-0.16)	(-0.15)	(1.80)
Observations	440	440	440	440
R-squared	0.204	0.115	0.090	0.166
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 6, Panel B reports the regression results of the model in Equation (1) for the subsample of firms where employment growth is zero or negative. The dependent variables in columns (1) through (7) are Word_Count, Topics, Readability, Num_Int, Specificity, Tone, and Similarity, respectively. All variables are defined in Appendix B. Year- and industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t- statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 7
Panel A: Sample before Entropy Balancing

Variables	Firms with *HR_Committee* = 1 and *HR_Expertise* =1 Mean (n = 204) (1)	Firms with *HR_Committee* = 0 or *HR_Expertise* =0 Mean (n = 1,596) (2)	Mean Diff (1) - (2) (3)
Size	10.374	10.468	-0.094
Emp	10.141	9.927	0.214**
BTM	0.338	0.339	-0.001
PPE/TA	0.249	0.246	0.003
ROA	0.071	0.067	0.004
CHRO	0.564	0.459	0.105***
Board_Size	11.828	10.961	0.867***
Board_Ind	0.899	0.885	0.014***
CEO_Duality	0.451	0.409	0.042
Gender_Div	0.337	0.307	0.03***
Inst_Own	0.769	0.783	-0.014

Table 7 (continued)
Panel B: The Relation between HR governance and HCM Disclosure Transparency using an Entropy Balanced Sample

VARIABLES	(1) Topics	(2) Readability	(3) Num_Int	(4) Specificity
HR_Committee	0.058	-0.071	-0.385***	-0.382**
	(0.70)	(-0.66)	(-2.79)	(-2.09)
HR_Expertise	-0.043	-0.140	-0.145	-0.244
	(-0.46)	(-1.28)	(-0.82)	(-1.29)
HR_Committee × HR_ Expertise	-0.070	0.407**	0.777***	1.274***
	(-0.53)	(2.38)	(3.21)	(4.67)
Size	-0.120**	-0.382***	-0.027	-0.235*
	(-2.05)	(-3.99)	(-0.32)	(-1.82)
Emp	-0.038	0.168**	-0.049	0.089
	(-0.79)	(2.36)	(-0.87)	(1.16)
BTM	-0.378**	-0.271	0.806***	0.526*
	(-2.24)	(-1.14)	(3.15)	(1.85)
PPE/TA	0.789***	-0.064	0.485	1.304**
	(3.22)	(-0.18)	(1.44)	(2.40)
ROA	0.464	3.506***	1.537	-1.699
	(0.68)	(3.56)	(1.41)	(-1.30)
CHRO	0.092	0.032	0.081	0.133
	(1.01)	(0.26)	(0.50)	(0.82)
Board_Size	0.067***	0.019	0.030	0.082
	(2.99)	(0.54)	(0.64)	(1.62)
Board_Ind	-1.744***	-1.594	-0.564	-0.188
	(-2.65)	(-1.58)	(-0.55)	(-0.09)
CEO_Duality	-0.043	0.313**	0.247*	0.126
	(-0.49)	(2.55)	(1.71)	(0.70)
Gender_Div	-0.069	1.149	0.975	0.739
	(-0.15)	(1.53)	(1.28)	(0.68)
Inst_Own	-1.042***	-1.667***	0.246	-1.560**
	(-3.18)	(-3.97)	(0.62)	(-2.05)
Constant	9.664***	-10.062***	1.843	6.454**
	(10.29)	(-7.90)	(1.34)	(2.28)
Hypothesis 3 tests:				
H3b: $\beta_2 + \beta_3 > 0$	-0.113	0.267*	0.632***	1.030***
	(-1.14)	(1.90)	(3.96)	(5.18)
H3c: $\beta_1 + \beta_3 > 0$	-0.012	0.336**	0.392**	0.892***
	(-0.11)	(2.50)	(2.03)	(4.19)
Observations	1,800	1,800	1,800	1,800
R-squared	0.228	0.102	0.123	0.187
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 7 reports the regression results of the model in Equation (1) using an entropy balanced sample. The dependent variables in columns (1) through (4) are *Topics, Readability, Num_Int,* and *Specificity*, respectively. All variables are defined in Appendix B. Year- and industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t- statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Chapter 3: Unveiling Value: Do Human Capital Management Disclosures Matter for Analysts?

Abstract

This study examines the association between human capital management (HCM) disclosures and analyst forecasts. The results show that readability, inclusion of dollar amounts, the number of numbers in the text, and specificity, relate with greater analyst forecast accuracy, while disclosure length shows no significant effect. None of HCM attributes are related to analyst forecast dispersion. These results suggest that by revealing a firm's inner workings and culture, transparent and detailed HCM disclosures relate with better individual financial analysts' information environment. Furthermore, the study identifies four topics as most informative to analysts: (1) attraction, retention, development, and turnover, (2) compensation and benefits, (3) diversity, equity, and inclusion, and (4) culture. The findings contribute to the growing literature arguing that in today's knowledge economy, human capital drives much of a firm's value.

Keywords: human capital**,** human capital management disclosures, analyst forecast

3.1. Introduction

In 2020, responding to rising investor demand, the U.S. Securities and Exchange Commission (SEC) mandated firms to disclose material human capital management (HCM) information in Item 1 of the 10-K report (SEC 2020). Such information should be relevant in understanding a firm's business operations. This study examines the usefulness of such mandatory HCM disclosures by assessing their effect on analysts' earnings forecasts. It aims to assess if the new disclosures answer capital markets' needs. Mandatory HCM disclosure reflects the shift towards a knowledge economy as well as the transformation as to how firms create value, moving away from traditional tangible assets to a greater emphasis on intangible assets, particularly human capital (Edmans, 2021; Lev & Schwartz, 1971; Rajan & Zingales, 2001; Zingales, 2000). However, while human capital has evolved into a critical driver of organizational success, accounting standards and disclosure requirements have lagged in capturing and reflecting its growing importance (Edmans, 2011; Green et al., 2019; Lev, 2019). However, while there is broad consensus on the need for HCM disclosures, opinions differ on whether a principles-based approach or a more prescriptive one—requiring specific metrics—is more effective (Bourveau et al., 2023). Up until now, principles-based disclosure rules provided managers with significant discretion in determining what to disclose with respect to HCM, a state of affairs that the SEC has upended.

This study builds upon anecdotal evidence that financial analysts have been gathering data about workforce metrics, often using internally generated methods, and integrating it into their valuation models (SEC IAC, 2023). For instance, in a letter to the SEC, Calvert Research and Management (Calvert), an investment management firm, mentioned that their analysts have developed an in-house proxy for employee turnover as a measure that is considered financially

material but often unavailable in corporate disclosures (Streur, 2021). Calvert noted that this approach has limitations and called on the SEC to mandate the disclosure of turnover rates for easier comparability across sectors.[19] Clearly, the lack of standardized data makes such information costly and unreliable, leading to market inefficiencies in valuing human capital in investment decisions. It remains underexplored whether, and how, analysts incorporate the mandatory HCM information into their models and whether transparent HCM disclosures help bridge this long-standing information gap. This paper seeks to fill this gap in the literature.

Despite their apparent appeal, it is unclear ex-ante whether transparent HCM disclosures can effectively help analysts make more accurate forecasts. On the one hand, since HCM practices have been widely linked to firm performance and value (e.g., Edmans, 2011; Green et al., 2019; Hancock et al., 2013), a transparent discussion of a company's HCM strategy should enable analysts to better assess the firm's HCM and its potential impact on future earnings. Prior literature provides evidence that HCM disclosures are related to future value (Demers, 2024); however, it is unclear how. Financial analysts, as information intermediaries, can help the market assimilate HCM information and understand how it relates to value creation. By interpreting and incorporating HCM data into their forecasts, analysts can bridge the gap between HCM practices and firm value, enhancing the overall information environment for investors. On the other hand, HCM information is vulnerable to social washing, where firms make misleading claims to appear more socially responsible than they actually are (Baker et al., 2024). Additionally, HCM

[19] Specifically, Calvert wrote the following: "Since retention and turnover data is not widely available but has been determined to be financially material, Calvert analysts have developed proxies for turnover to support our analysis of companies and their ESG performance. One example of such a proxy is an in-house proprietary indicator that was developed for the real estate sector to measure and track the forfeiture of stock option grants in order to glean the level of professional turnover at companies that offer stock options as a component of compensation. There are obvious limitations to this approach, as it would not apply to sectors and companies where stock options are not a component of compensation. Having a standardized, publicly reported metric for turnover would enhance our ability to more directly measure performance of this important human capital management factor across all sectors." Available at https://www.sec.gov/files/spotlight/iac/20230921-recommendation-regarding-hcm.pdf

disclosures, like other sustainability disclosures, can be challenging to interpret and analyze, even for experts, which may complicate analysts' ability to map this information onto earnings forecasts (Christensen et al., 2022; Regier & Rouen, 2023).

To empirically test the research question, mandatory HCM disclosures of S&P 500 firms are manually collected from 2020 (year in which the regulation was enacted) to 2022 (last year of available analyst data). These disclosures are then matched with one-year-ahead analyst forecasted earnings per share (EPS) (Fabrizi et al., 2023; Muslu et al., 2017). Forecasts made within three months after the fiscal year-end are included to ensure that the information is fully incorporated by financial analysts while minimizing the effects of events that may occur during the year. The final sample consists of 1,410 firm-year observations from 485 unique firms during the sample period 2020-2022. Five textual measures commonly used in the financial disclosure literature proxy for HCM transparency: length (*Word_Count*), readability (*Readability*), indicator variable for dollar amounts in the text (*Dollar_Amounts*), the number of numbers in the text (*Num_Int*), and specificity (*Specificity*) (Blankespoor et al., 2020; Bochkay et al., 2023; Hope et al., 2016; Loughran & Mcdonald, 2016).

The main findings show that analyst forecast accuracy is positively associated with readability, inclusion of dollars amounts, the number of numerical data, and specificity. In contrast, disclosure length is not associated with analyst forecast accuracy. These findings suggest that the volume of disclosure alone is not informative to analysts; instead, it is ease of comprehension, inclusion of dollar amounts, numerical data, and the mention of specific initiatives and programs that enables analysts to better assess a firm's HCM strategy and link it to future earnings. Furthermore, none of the HCM attributes are significantly related to analyst forecast dispersion, suggesting that while transparent HCM disclosures enhance the private information available to

analysts, there is no evidence that all analysts interpret this information consistently. Thus, firms employing transparent and detailed language in their HCM disclosures can gain a competitive advantage and contribute to more efficient price allocation. This evidence contrasts with the SEC's principles-based rule and supports investors' calls for standardized metrics that would facilitate comparability and improve the mapping of HCM to future earnings, ultimately leading to more efficient capital allocation.

Next, I examine which topics within HCM disclosures are most informative to analysts. HCM disclosures are manually categorized into eight topics: (1) number of employees, (2) attraction, retention, development, and turnover, (3) compensation and benefits, (4) diversity, equity, and inclusion, (5) health and safety – general, (6) health and safety – COVID19, (7) labor relations, and (8) culture. This test focuses on analyst forecast accuracy because the main test shows no association for analyst forecast dispersion. The findings show that topics related to attraction, retention, development, and turnover, compensation and benefits, diversity, equity, and inclusion, and culture are most strongly associated with higher analyst forecast accuracy. Particularly, the numerical intensity of these topics is significantly associated with more accurate forecasts. The results suggest that analysts place greater value on quantitate information related to how companies attract, train, retain, and compensate employees, including turnover rates, employee satisfaction, organizational culture, and diversity metrics, as these elements are critical for assessing a firm's long-term sustainability and growth potential. Therefore, the results suggest that the SEC should consider mandating standardized metrics for these topics to enhance the comparability and usefulness of HCM disclosures for market participants.

This paper contributes to the literature on the usefulness of HCM disclosures by providing empirical evidence of how their characteristics can help in analyst forecasts and, ultimately,

facilitate more informed investment decisions. While this literature suggests that HCM is related to firm value (Demers et al., 2024; Zhang, 2022), it remains unclear how this relationship functions. This study shows that financial analysts, as information intermediaries, play a key role in helping the market assimilate the qualitative information in HCM disclosures and link it to value creation, which is ultimately reflected in their forecasts.

Moreover, this paper adds to the literature on accounting for intangible assets that critiques the current accounting system for failing to adapt to today's knowledge economy, which has led to financial statements becoming less useful for investors (Honigsberg & Rajgopal, 2022; Lev, 2019; Nallareddy et al., 2020; Srivastava, 2014). The study shows how qualitative discussions of intangible assets can complement traditional accounting practices, making financial reports more useful for investors.

Additionally, this research informs the SEC about the implications of the principles-based approach while supporting the call from investors for standardized HCM metrics. It also offers valuable insights to the Financial Accounting Standards Board (FASB) about the new accounting standard to disaggregate the reporting of major operating costs, including compensation costs (FASB, 2024). The findings suggest that capital markets benefit from management's discussions of HCM, and that they complement compensation costs disclosure on the income statement. Without these discussions, critical metrics like turnover may be overlooked, making it harder to evaluate a company's overall performance (SEC IAC, 2023; Streur, 2021).

3.2. Prior Literature and Hypothesis Development

HCM reflects a firm's approach to its workforce and encompasses practices and policies aimed at attracting, retaining, motivating, and compensating employees. A substantial body of

theoretical and empirical literature has long established that effective HCM practices are critical drivers of firm performance and value creation (e.g., Becker, 1964; Edmans, 2011; Lev & Schwartz, 1971; McGregor, 1960; Rajan & Zingales, 2001; Wyatt & Frick, 2010; Zingales, 2000). For instance, factors such as employee satisfaction (Edmans, 2011), skill development (Bhattacharya et al., 2015), workforce turnover (Hancock et al., 2013), diversity (Edmans et al., 2024; Fatmy et al., 2022), health and safety (Cohn & Wardlaw, 2016), employee reviews (Green et al., 2019), compensation (Rayton, 2003), and stock-based compensation (Bell et al., 2002) are positively associated with firm value and future financial performance.

The literature on HCM disclosure is relatively limited due to the absence of disclosure requirements prior to the SEC's 2020 mandate. In the pre-regulation period, Lajili & Zéghal (2006) show that the voluntarily disclosure of labor costs is value-relevant as it provides useful insights for assessing HCM and performance. Zhang (2022) examines voluntary HCM disclosures prior to SEC's 2020 regulation and shows that only operational-oriented disclosures are associated with firm value, while socially oriented HCM disclosures exhibit higher social ratings and investments from sustainable investors.

The enactment of SEC's 2020 regulation spurred additional research about the value relevance of mandatory HCM disclosures. Mayew & Zhang (2024) show that disclosures about firm's COVID-19 responses in HCM disclosures are positively associated with firm value, overall employee satisfaction and employee productivity for firms with high financial flexibility. Demers et al. (2024) study the first two years of disclosures and find that the length and readability of HCM disclosures are value relevant, whereas numerical intensity and specificity are not. Arif et al. (2022) find that the equity market positively reacts to HCM disclosures, while the bond market negatively reacts to this information. In an European setting, Regier & Rouen (2023) show that mandatory

disclosure of personnel costs under IFRS is only partially priced by the market, and that analysts fail to incorporate the full value of investments in human capital. Collectively, these studies imply that while HCM disclosures reduce the information gap in capital markets, they may still be mispriced due to the challenges of quantifying the true value of human capital, which can be interpreted differently by various investors. Financial analysts, as sophisticated information intermediaries in capital markets, are in a better position to interpret HCM disclosures and integrate their content into their forecasts, thus providing investors with value-relevant pricing information about HCM.

The financial disclosure literature shows that disclosure narratives (i.e., readability, tone, quantitative information, forward-looking statements, etc.) are informative to capital markets (e.g., Brown & Tucker, 2011; Lehavy et al., 2011; Loughran & Mcdonald, 2016). Similarly, Muslu et al. (2017) show that narratives in CSR reports, beyond the mere issuance of a CSR report, are positively associated with analyst forecast accuracy. Building on this strand of arguments, it is argued that HCM disclosure transparency is also positively associated with analysts forecast accuracy. Transparent HCM disclosures should help analysts evaluate a firm's long-term prospects by enhancing their understanding of workforce management, operational efficiency, and future potential. This detailed discussion of HCM enhances the information environment for analysts and provides tangible inputs to their valuation models, leading to more informed analysis of the firm’s overall value.

However, there are two reasons why HCM disclosure transparency may not be associated with analyst forecast accuracy. First, HCM disclosure, even if transparent, may reflect a social washing strategy, where companies misrepresent their actual workforce management to appear more socially appealing than they truly are, similar to the concept of greenwashing (Baker et al.,

2024; Ramus & Montiel, 2005; Torelli et al., 2020). For instance, Baker et al. (2024) find a weak relationship between firms' diversity disclosures in HCM disclosures and their actual diversity, suggesting that companies may engage in social washing by selectively disclosing diversity metrics that do not align with their real practices. Second, HCM information, which is part of sustainability information, may be challenging to interpret and quantify in terms of the future expected returns, even for experts, which increases analyst information processing costs (Blankespoor et al., 2020; Christensen et al., 2022; Eisfeldt & Papanikolaou, 2013; Griffin et al., 2020; Regier & Rouen, 2023). For these two reasons, HCM transparency may fail to provide analysts with useful insights into the firm's future earnings.

Given the above discussion, the first hypothesis is in the null form:

H1: HCM transparency is not associated with analyst forecast accuracy.

HCM transparency may or may not influence analyst forecast dispersion. On one hand, transparent HCM disclosures could reduce dispersion by providing analysts with consistent and comprehensive information regarding workforce management, enabling a more uniform interpretation. On the other hand, HCM transparency might not effectively reduce dispersion due to the qualitative and complex nature of many HCM disclosures. HCM information often requires judgment, which can lead to differences in how analysts interpret the impact of these factors on firm performance. Thus, HCM disclosures may improve the private information available to analysts, which reduces the uncertainty in their individual earnings forecasts, but the nature of HCM information means that it may not be interpreted uniformly by all analysts. Analysts might apply different valuation models, assumptions, or judgments when incorporating HCM data into their forecasts. As a result, even though HCM transparency enhances the informational environment for individual analysts, the diversity in interpretation and application of the disclosed

information can lead to varying conclusions about a firm's future earnings, ultimately having no significant effect on reducing forecast dispersion.

Given the above discussion, the second hypothesis is in the null form:

H2: HCM transparency is not associated with analyst forecast dispersion.

3.3. Research Design

3.3.1. Sample

The sample comprises firms in the S&P500 index that filed their 10-K report between November 9, 2020 (effective date of the regulation) and fiscal year 2022 (latest year of available analyst data). HCM disclosures from Item 1 of 10-K reports are manually extracted, keeping all tables as they contain important information. Analyst data is from I/B/E/S database and financial data from Compustat. Forecasts are made within three months after the fiscal year-end to ensure that the information is fully incorporated by financial analysts while minimizing the effects of events that may occur during the year. Observations with non-missing values are kept to compute control variables. The final sample consists of 1,410 firm-year observations generated from 485 unique firms during the sample period 2020 to 2022. Table 1 displays the sample distribution by fiscal year.

3.3.2. HCM Transparency

Consistent with prior literature on textual disclosures, five textual measures proxy for HCM transparency: (1) length (*Word_Count*), (2) readability (*Readability*), (3) indicator variable for dollar amounts (*Dollar_Amounts*), (4) number of numbers in the text (*Num_Int*), and, (5)

specificity (*Specificity*) (Blankespoor et al., 2020; Bochkay et al., 2023; Loughran & Mcdonald, 2016; Muslu et al., 2017). *Word_Count* represents the count of non-stop words in HCM disclosures (i.e., meaningful words). *Readability* is the Gunning Fog index that measures the number of formal years of education needed to understand the text, multiplied by -1 for ease of interpretation of coefficients (F. Li, 2008). *Dollar_Amounts* is an indicator variable that takes the value 1 when HCM disclosure contains dollar amounts, and 0 otherwise (Enache et al., 2023). I use an indicator variable instead of the percentage of non-stop words, as companies disclose one dollar amount, on average, if any. *Num_Int* represents the percentage of numbers in the text, excluding dollar amounts, relative to the total non-stop words in the HCM disclosure (Dyer et al., 2017). *Specificity* represents the percentage of specific entity names relative to the total non-stop words in HCM disclosure (Hope et al., 2016). The classes of entities are: Person, Location, Organization, Date, and Time. Appendix A presents detailed information and sources for all the variables used. Appendix B presents examples of HCM disclosures with high transparency levels in each of the variables.

3.3.3. Empirical Model

The following ordinary least squares (OLS) regression model with fixed effects tests whether HCM disclosure transparency is associated with analyst forecasts:

$$Accuracy_{i,t} \text{ or } Dispersion_{i,t} = \beta_0 + \beta_1 HCM\_Transparency_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Loss_{i,t-1} + \beta_4 \Delta ROA_{i,t-1} + \beta_5 Evolat_{i,t-1} + \beta_6 Sales\_Growth_{i,t-1} + \beta_7 Leverage_{i,t-1} + \beta_8 R\&D_{i,t-1} + \beta_9 Accruals_{i,t-1} + \beta_{10} Coverage_{i,t-1} + + \beta_{11} Item1\_Transparency_{i,t-1} + Year/Industry\ Fixed\ Effects + \varepsilon \quad (1)$$

Accuracy is analyst forecast accuracy computed as minus the absolute value of the one-year-ahead mean EPS estimated by analysts, less the reported EPS scaled by the year-end stock market price. *Dispersion* is the standard deviation of analyst EPS forecast estimates scaled by year-end stock market price. *HCM_Transparency* is one of *Word_Count*, *Readability*, *Dollar_Amounts*, *Num_Int*, or *Specificity.* A positive and significant β_1 would indicate that HCM disclosure transparency is associated with better information environment for analysts, while a negative and significant β_1 would indicate that HCM transparency complicates analysts' forecasting. A non-significant β_1 coefficient would indicate that HCM transparency is not related to analyst forecasts.

Following prior literature, I control for firm characteristics and earnings attributes that can affect the firm information environment and analyst forecasting activities (Barron et al., 2002; Bhattacharya et al., 2003; Dichev & Tang, 2009; Fabrizi et al., 2023; Hope, 2003; Kross & Suk, 2012; Lang & Lundholm, 1996; Lehavy et al., 2011; Muslu et al., 2017; X. Zhang, 2006). I control for firm size (*Size*), reporting net losses (*Loss*), current changes in earnings (*ΔROA*), long-term earnings volatility (*Evolat*), current sales growth (*Sales_Growth*), leverage (*Leverage*), intangible intensity proxied by the level of R&D expenses scaled by operating expenses (*R&D*), financial transparency proxied by the level of accruals scaled by total assets (*Accruals*), and analyst coverage (*Coverage*). I also control for overall disclosure characteristics of Item 1 excluding HCM disclosures (*Item1_Tranparency*). *Item1_Tranparency* is one of *Item1_Word_Count*, *Item1_Readability*, *Item1_Dollar*, *Item1_Num_Int*, and *Item1_Specificity*, respectively, depending on the independent variable of interest for HCM disclosure. I winsorize all continuous variables at the 1% and 99% levels. I also include year- and industry-fixed effects to control for macroeconomics and industry-specific unobservable characteristics.

3.4. Results

3.4.1. Descriptive Statistics

Table 2 reports descriptive statistics of the variables included in Equation (1). The mean forecast accuracy (*Accuracy*) is -0.015, indicating that, on average, the mean difference between analysts' forecasts and actual earnings is 1.5% of the lagged stock price. The mean dispersion (*Dispersion*) is 0.005, suggesting that the average variation among analyst forecasts is about 0.5% of the stock price. These statistics are consistent with the findings of Fabrizi et al. (2023), although their study uses a larger sample. The median firm in the sample if followed by 18 analysts (*Coverage*). On average, HCM disclosures consist of approximately 580 non-stop words, require 14 years of formal education to comprehend, and include 2.6% numerical data of total meaningful words, and 6.1% specific entities of total meaningful words. Additionally, 21.5% of the sample includes dollar amounts in their disclosures. The table also shows that the sample exhibit variation in size and economic characteristics (i.e., earnings volatility, growth, leverage, financial transparency, etc.). As for the non-HCM portion of Item 1, the average number of non-stop words is 4,748. The readability is equivaent to 12 years of formal education, indicating it is slightly more readable compared to HCM disclosures. The numerical intensity is 1.6% of non-stop words, which is lower than that of HCM disclosures, while the average specificity is 8.6%, slightly higher than in the HCM section. Additionally, 85.7% of firms disclose at least one dollar amount in the non-HCM section of Item 1, compared to fewer in HCM disclosures.

Table 3 presents the Pearson correlation matrix among variables included in Equation (1). There are no high correlations that may give rise to multicollinearity. Further, all variance inflation factors (VIF) of all independent variables are below 10, suggesting that there is no issue of multicollinearity.

3.4.2. Main Analysis

Table 4, Panel A reports the regression results of the regression model in Equation (1) when *Accuracy* is the dependent variable. The coefficients for *Readability* (0.002; $p < 0.1$), *Dollar_Amounts* (0.006; $p < 0.01$), *Num_Int* (0.116; $p < 0.01$), and *Specificity* (0.07; $p < 0.1$) are all positively and significantly associated with *Accuracy*. These findings suggest that HCM disclosures with higher readability and containing dollar amounts, numerical data, and specific entities provide analysts with valuable insights that enhance their ability to predict the future impact of HCM on earnings. However, *Word_Count* is not significantly associated with *Accuracy* at conventional significance levels, indicating that longer disclosures do not provide additional value to analysts. These findings support the hypothesis that transparent HCM disclosures are positively associated with analyst forecast accuracy. Thus, qualitative HCM disclosures are beneficial to analysts when they include clear dollar amounts representing investments in human capital, numerical and specific data on employee composition, workforce turnover, diversity levels, and employee engagement initiatives, along with higher readability for ease of comprehension, all of which help analysts evaluate the firm's HCM strength and quantify its impact on future earnings, while disclosure volume alone is not informative to analysts per se. This evidence contrasts with the SEC's principles-based rule and underscores the necessity for mandating specific metrics and monetary values to facilitate more efficient market pricing. As for the control variables, bigger firms (*Size*) are negatively associated with forecast accuracy, and firms with high leverage (*Leverage*) are positively associated with analyst forecast accuracy. None of the disclosure characteristics of the non-HCM portion of Item 1 are associated with analyst forecast accuracy, confirming that it is specifically HCM transparency that is related to accuracy, rather than the overall disclosure style of firms.

Table 4, Panel B reports the regression results of the regression model in Equation (1) when *Dispersion* is the dependent variable. The findings show that none of the HCM disclosure attributes are significantly associated with analyst forecast dispersion. Overall, the results in Table 4 suggest that HCM disclosure transparency contributes to a better information environment for individual analysts, enhancing their private information and helping them produce more accurate forecasts. However, there is no evidence that analysts interpret HCM disclosures consistently or that these disclosures significantly relate with forecast dispersion.

3.4.3. Topic Analysis and Analyst Forecast Accuracy

Next, the analysis focuses on which HCM topics are most informative to analysts. Since the main results show that HCM disclosures are associated with analyst forecast accuracy and not dispersion, this test focuses only on analyst forecast accuracy. To do so, HCM disclosures are manually categorized into eight distinct topics following prior literature, investor recommendation, and a thorough reading of the disclosures (Demers et al., 2024; SEC IAC, 2023; Zhang, 2022). The topics are as follows: (1) number of employees (*NoE*), (2) attraction, retention, development, and turnover (*Attraction*), (3) compensation and benefits (*Comp*), (4) diversity, equity, and inclusion (*DEI*), (5) health and safety – general (*HS_General*), (6) health and safety – COVID19 (*HS_COVID*), (7) labor relations (*LR*), and (8) culture (*Culture*). For each of these topics, I measure the same textual variables as the main analysis: count of non-stop words of the topic, readability of the topic, indicator variable for dollar amounts in the topic, numerical intensity as a percentage of total non-stop words in the topic, and specificity as a percentage of specific entity names of non-stop words in the topic. I exclude word count from the regression analyses, as the main analysis

indicates that length of HCM disclosures does not provide useful information for analysts. Appendix A provides the definitions of these variables.

3.4.3.1. Descriptive Statistics

Table 5, Panel A presents the descriptive statistics of the topics variables. The descriptive statistics for the variables across each HCM topic show that there is a wide variation in the coverage of HCM topics and transparency of each topic. Almost all companies disclose information about *NoE* (97.5% of the sample), as required by the SEC since 2005. Among the eight topics in HCM disclosures, *NoE* is the shortest, with an average of 31 non-stop words per disclosure. It is also the most readable topic, requiring an average of 13 years of formal education to understand, the most numerically intense, with an average of 14% of the words being numbers relative to the total non-stop words in the topic, and most specific topic, with 13.5% of the words being specific references of total non-stop words in the topic. Only 1% of observations contain dollar amounts, because *NoE* typically involves disaggregation of employee counts by function and geographic region, rather than monetary amounts. Overall, the *NoE* topic tends to provide detailed information about the number of employees by region and function, aligning with SEC guidance.

Additionally, almost all companies (92.7% of the sample) discuss their efforts related to attraction, retention, professional development, and turnover (*Attraction*). This is the second largest topic by length, following DEI, with an average of 126 non-stop words. Only 4.8% of observations that discuss *Attraction* topic include dollar amounts. The numerical intensity is low of 0.9% of non-stop words in the topic, while the readability score indicates that 17 years of formal education are needed to understand the content, suggesting a high level of complexity. The

specificity, on average, is 3.8% of non-stop words in the topic, which is relatively good and indicates a meaningful focus on detailed references within this topic.

Approximately 80% of the sample discusses *Comp*. On average, the *Comp* topic contains 108 non-stop words, with a readability level that requires 18 years of formal education, indicating a high level of complexity. 11.2% of observations discussing *Comp* topic include dollar amounts, which is the highest percentage among the topics. Still, it is a low percentage and indicates that many firms do not voluntarily disclose compensation costs. The numerical intensity is relatively low at 0.5%, but the specificity is good with an average of 3.6%.

Almost all companies discuss *DEI* (93% of the sample). *DEI* is the longest topic in HCM disclosures, with an average of 525 non-stop words. The Fog Index for *DEI* is 16, suggesting that the content leans toward the complex side. Only 5.3% of observations discussing *DEI* include dollar amounts. *DEI* has a good numerical intensity of 3.5%, and a high specificity of 7.3%, meaning that companies, on average, provide detailed discussions of their initiatives related to diversity and describe the percentage composition of employees across various diversity categories.

Only 57% of the sample discusses *HS_General.* On average, this topic contains 80 non-stop words. The readability level requires around 16 years of formal education, indicating a tendency toward more complex language. Only 2.5% of observations discussing this topic include dollar amounts. The numerical intensity is low at 1.4% of non-stop words in the topic. However, the specificity is relatively good at 4.7% of non-stop words of the topic, as companies tend to describe in detail their procedures for protecting employees' physical and mental health.

Around 40% of the sample discusses *HS_COVID*, mainly during fiscal years 2020 and 2021 when the pandemic was most relevant. The topic is relatively brief, with an average of 63

non-stop words. The readability score is high at 19, reflecting the inherent complexity of the COVID-19 topic. Only 2.8% of observations discussing this topic include dollar amounts. The numerical intensity is low at 0.4% of non-stop words in the topic. The specificity is relatively good at 3.4% of non-stop words in the topic, comparable to other topics, indicating that companies, on average, provide detailed disclosures on how they manage COVID-19 in the workplace.

Around 48% of the sample discusses *LR*. On average, *LR* disclosures contain 39 non-stop words, and the readability score is moderate at 15. This topic does not include dollar amounts.[20] The numerical intensity is 4.2%, and the specificity is the highest among all topics at 8.2% of non-stop words in the topic, indicating a high level of detail and numerical data in describing relationship with employees.

Lastly, around 90% of the sample discusses culture, with an average of 114 non-stop words. The readability score of 17 indicates that the content is quite complex to understand. 0.3% of observations discussing this topic include dollar amounts. The numerical intensity is low at 0.8% of non-stop words in the topic. The specificity is good at 4.2% of non-stop words in the topic, suggesting that companies provide detailed descriptions of their corporate culture, employee engagement, and related initiatives.

3.4.3.2. Model and Results

To analyze the effect of the characteristics of these topics on analyst forecast accuracy, I estimate the following OLS regression model with fixed effects:

[20] Because *LR_Dollar* is zero for all observations (except 2 observations), the variable is dropped from regression analyses.

$$Accuracy_{i,t} = \beta_0 + \beta_1 Topic_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Loss_{i,t-1} + \beta_4 \Delta ROA_{i,t-1} + \beta_5 Evolat_{i,t-1} + \beta_6 Sales\_Growth_{i,t-1} + \beta_7 Leverage_{i,t-1} + \beta_8 R\&D_{i,t-1} + \beta_9 Accruals_{i,t-1} + \beta_{10} Coverage_{i,t-1} + \beta_{11} Item1\_Transparency_{i,t-1} \ Year/Industry\ Fixed\ Effects + \varepsilon \quad (2)$$

where *Topic* represents either readability, dollar amounts, numerical intensity, or specificity of the eight topics, respectively. Specifically, *Topic* is one of *NoE_Readability*, *NoE_Dollar*, *NoE_Num_Int*, *NoE_Specificity*, *Attraction_Readability*, *Attraction_Dollar*, *Attraction_Num_Int*, *Attraction_Specificity*, *Comp_Readability*, *Comp_Dollar*, *Comp_Num_Int*, *Comp_Specificity*, *DEI_Readability*, *DEI_Dollar*, *DEI_Num_Int*, *DEI_Specificity*, *HS_General_Readability*, *HS_General_Dollar*, *HS_General_Num_Int*, *HS_General_Specificity*, *HS_COVID_Readability*, *HS_COVID_Dollar*, *HS_COVID_Num_Int*, *HS_COVID_Specificity*, *LR_Readability*, *LR_Dollar*, *LR_Num_Int*, *LR_Specificity*, *Culture_Readability*, *Culture_Dollar*, *Culture_Num_Int*, and *Culture_Specificity*. I include year- and industry-fixed effects and all control variables as previously defined.

Table 5 presents the results of Equation (2). For parsimony, only coefficients of interest are reported. Panel B of Table 5 reports the results of number of employees transparency on analyst forecast accuracy. None of the textual characteristics of number of employees are significantly associated with accuracy, suggesting that this mandatory disclosure is not informative for analysts. Panel C presents the results of attraction, retention, development, and turnover transparency on forecast accuracy. Higher readability and numerical intensity of this topic relate with greater accuracy, suggesting that providing more detailed and easier-to-understand information about turnover and how companies attract, retain, and develop their employees can help analysts make better predictions. In Panel D, higher numerical intensity and higher specificity of compensation and benefits are associated with greater analyst forecast accuracy. Surprisingly, dollar amounts of

this topic, which represents compensation costs, is not associated with accuracy. These results suggest that only numerical and specific disclosure about compensation strategy is informative to analysts. In Panel E, DEI dollar amounts and numerical intensity are significantly associated with analyst forecast accuracy, suggesting that DEI disclosures with monetary figures and quantitative data provide useful insights for analysts. The dollar amounts in this topic seem to be the most valuable HCM-related monetary disclosures for analysts. In Panel F, none of the textual attributes for general health and safety are significantly related to analyst forecast accuracy, suggesting that this topic is not informative to investors. In Panel G, numerical intensity of COVID-19 disclosures is negatively associated with analyst forecast accuracy, suggesting that detailed disclosures about COVID-19 may complicate the task for analysts, which is inherent to the nature of COVID-19's impact on uncertainty and future firm value at that time. In Panel H, the numerical intensity of labor relations disclosures is negatively associated with accuracy, suggesting that quantitative disclosures about labor disputes or collective bargaining may create additional complexity, making it harder for analysts to interpret the impact on future performance. In Panel I, culture disclosures show that, surprisingly, readability of this topic is negatively associated with analyst forecast accuracy, while numerical intensity is positively associated. This suggests that more readable descriptions of corporate culture and employee engagement may provide less useful information, whereas the inclusion of quantitative details adds value for analysts.

Overall, the results in Table 5 indicate that not all HCM topics are equally informative for analysts. The topics of attraction, retention, development, and turnover, compensation and benefits, diversity, equity, and inclusion (DEI), and culture are most relevant to analysts. On the other hand, number of employees, health and safety, and labor relations topics are not informative to analysts. Numerical intensity across these topics is the most informative attribute of disclosure for analysts.

Dollar amount disclosures are only informative for the topic of DEI, supporting the argument that qualitative discussions of HCM—beyond simply disclosing compensation costs—provide value to analysts. Therefore, the SEC regulation should complement the FASB standard of mandating compensation cost disclosures in the income statement. These results suggest that the SEC should consider mandating specific metrics on the topics of attraction, retention, development, and turnover, compensation and benefits, diversity, equity, and inclusion (DEI), and culture for all companies to ensure analysts have access to standardized and valuable information.

3.4.4. Cross-Sectional Analysis

In this subsection, I further explore whether labor intensity affects the relationship between HCM transparency and analyst forecast accuracy.

The association between HCM transparency and analyst forecast accuracy is likely to be stronger in firms with low labor intensity. In a typical production function, when a company relies more on nonhuman capital (e.g., machinery, equipment, or technology), each employee's productivity becomes more significant (Gutiérrez et al., 2020; İmrohoroğlu & Tüzel, 2014; Q. Li et al., 2022). This means that in firms with low levels of labor intensity (i.e., high levels of nonhuman capital), each worker plays a more critical role. In such firms, workers often possess specialized skills and knowledge that are harder to replace, and their departure can have a greater impact on the company's overall performance (Li et al., 2022). Thus, transparent HCM disclosures may be particularly valuable for analysts assessing firms with low labor intensity. Labor intensity (*Labor_Int*) is measured as the number of employees scaled by total assets and is used to partition the full sample into high and low labor intensity groups based on the median value (Li et al., 2022). I re-estimate Equation (1) into low versus high labor intensity subsamples, and report results in

Table 6, Panels A and B, respectively. In the low labor intensity subsample in Panel A, the coefficients on *Dollar_Amounts*, *Num_Int*, and *Specificity* are statistically significant at conventional levels, whereas none of the variables show statistical significance in the high labor intensity subsample in Panel B. These results suggest that the association between HCM transparency and analyst forecast accuracy is more pronounced for low labor intensity firms, where employees tend to have valuable, hard-to-replace skills. The results are consistent with the findings of Li et al. (2022) who show that the relationship between employee turnover and firm performance is stronger for low labor intensity firms.

3.5. Conclusion

This study investigates the relationship between HCM disclosure transparency and analyst forecasts. The findings show that HCM readability, dollar amounts, numerical intensity, and specificity are positively associated with higher analyst forecast accuracy. However, none of the HCM attributes are significantly related to analyst forecast dispersion. These results suggest that transparent HCM disclosures enhance the information environment for individual analysts, enabling them to assess the value impact of HCM practices more effectively. Given the complex nature of HCM and how its impact future firm value, sophisticated analysts help the market incorporate this information, which ultimately is reflected in their forecasts and potentially in their reports. Future research could examine whether analysts provide insights about HCM in their reports, shedding light on how analysts interpret this information and connect it to value creation.

Additionally, the study finds that not all HCM topics are equally informative for analysts. Specifically, topics such as attraction, retention, development and turnover, compensation and benefits, diversity, equity and inclusion, as well as culture and employee engagement are

particularly relevant, especially when they are numerically intensive. Therefore, this study highlights the HCM topics that are important for investment decisions and advises the SEC to mandate standardized metrics for these topics to improve comparability and enhance the efficiency of capital markets. This study further highlights that qualitative information on HCM, beyond just compensation costs, is informative for analysts. Consequently, the SEC's regulation of HCM disclosures complements the FASB's recent accounting standard update, which mandates the inclusion of compensation costs on the income statement for fiscal years ending on or after December 15, 2026.

3.6. Tables and Appendices

APPENDIX A
Variable Definitions

Variable	Definition	Source
Accuracy	Minus the absolute value of the mean EPS estimated by analysts, less the reported EPS divided by the year-end stock market price	IBES
Dispersion	Standard deviation of analyst EPS forecast estimates divided by year-end stock market price.	IBES
Word_Count	Count of total non-stop words of HCM disclosure. Its natural logarithm transformation is used in correlation and regression analyses.	Self-Computed
Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of HCM disclosure.	Self-Computed
Dollar_Amounts	Indicator variable that takes the value 1 if the HCM disclosure contains dollar amounts, and 0 otherwise.	Self-Computed
Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in HCM disclosure.	Self-Computed
Specificity	The number of words that are named entities scaled by the total number of non-stop words in HCM disclosure. The classes of entities are: Person, Location, Organization, Date, and Time.	Self-Computed
Size	Natural logarithm of total assets (*at*).	Compustat
Loss	Indicator variable that takes the value 1 if net income before extraordinary items (*ib*) is below zero, and 0 otherwise.	Compustat
ΔROA	Absolute value of the difference between current year's ROA (*ib*/*at*) and last year's ROA.	Compustat
Evolat	Standard deviation of ROA (*ib*/*at*) for the previous three-year period.	Compustat
Sales_Growth	Difference between current year's net sales (*sale*) and last year's net sales, scaled by operating expenses (xopr).	Compustat
Leverage	Debt to assets computed as the sum of debt in current liabilities (*dlc*) and long-term debt (*dltt*) divided by total assets (*at*) at fiscal year-end.	Compustat
R&D	Research and development expenditures (*xrd*) scaled by total net sales (*sale*).	Compustat
Accruals	Absolute value of total accruals (*ebidta* - *oancf*) scaled by total assets (*at*).	Compustat
Coverage	Number of analysts covering the firm over the year.	IBES

Item1_Word_Count	Count of total non-stop words of Item 1 **excluding** HCM disclosures. Its natural logarithm transformation is used in correlation and regression analyses.	Self-Computed
Item1_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of Item 1 **excluding** HCM disclosures.	Self-Computed
Item1_Dollar	Indicator variable that takes the value 1 if the Item 1 **excluding** HCM disclosures contains dollar amounts, and 0 otherwise.	Self-Computed
Item1_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in Item 1 **excluding** HCM disclosures.	Self-Computed
Item1_Specificity	The number of words that are named entities scaled by the total number of non-stop words in Item 1 **excluding** HCM disclosures. The classes of entities are: Person, Location, Organization, Date, and Time.	
NoE_Count	Count of non-stop words in number of employees topic.	Self-Computed
NoE_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of number of employees topic.	Self-Computed
NoE_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in number of employees topic.	Self-Computed
NoE_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in number of employees topic.	Self-Computed
NoE_Specificity	The number of words that are named entities scaled by the total number of non-stop words in number of employees topic. The classes of entities are: Person, Location, Organization, Date, and Time.	Self-Computed
Attraction_Count	Count of non-stop words in attraction, retention, development, and turnover topic.	Self-Computed
Attraction_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of attraction, retention, development, and turnover topic.	Self-Computed
Attraction_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in attraction, retention, development, and turnover topic.	Self-Computed
Attraction_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in attraction, retention, development, and turnover topic.	Self-Computed
Attraction_Specificity	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in attraction, retention, development, and turnover topic.	Self-Computed

Comp_Count	Count of non-stop words compensation and benefits topic.	Self-Computed
Comp_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of compensation and benefits topic.	Self-Computed
Comp_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in compensation and benefits topic.	Self-Computed
Comp_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in compensation and benefits topic.	Self-Computed
Comp_Specificity	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in compensation and benefits topic.	Self-Computed
DEI_Count	Count of non-stop words in diversity, equity, and inclusion topic.	Self-Computed
DEI_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of diversity, equity, and inclusion topic.	Self-Computed
DEI_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in diversity, equity, and inclusion topic.	Self-Computed
DEI_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in diversity, equity, and inclusion topic.	Self-Computed
DEI_Specificity	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in diversity, equity, and inclusion topic.	Self-Computed
HS_General_Count	Count of non-stop words in health and safety - general topic.	Self-Computed
HS_General_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of health and safety - general topic.	Self-Computed
HS_General_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in health and safety - general topic.	Self-Computed
HS_General_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in health and safety - general topic.	Self-Computed
HS_General_Specificity	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in health and safety - general topic.	Self-Computed
HS_COVID_Count	Count of non-stop words in health and safety - COVID topic.	Self-Computed

HS_COVID_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of health and safety - COVID topic.	Self-Computed
HS_COVID_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in health and safety - COVID topic.	Self-Computed
HS_COVID_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in health and safety - COVID topic.	Self-Computed
HS_COVID_Specificity	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in health and safety - COVID topic.	Self-Computed
LR_Count	Count of non-stop words in labor relations topic.	Self-Computed
LR_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of labor relations topic.	Self-Computed
LR_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in labor relations topic.	Self-Computed
LR_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in labor relations topic.	Self-Computed
LR_Specificity	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in labor relations topic.	Self-Computed
Culture_Count	Count of non-stop words in culture topic.	Self-Computed
Culture_Readability	Minus the Gunning Fog index, calculated as 0.4 * (average word count per sentence + percentage of complex words) of culture topic.	Self-Computed
Culture_Dollar	The number of instances of dollar amounts scaled by the total number of non-stop words in culture topic.	Self-Computed
Culture_Num_Int	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in culture topic.	Self-Computed
Culture_Specificity	The number of numbers, excluding dollar amounts, scaled by the total number of non-stop words in culture topic.	Self-Computed
Labor_Int	The number of employees scaled by total assets.	Compustat

APPENDIX B
Examples of HCM Disclosures

Example of HCM disclosure with high readability

Extract from United Rentals Inc 2022 10-K HCM disclosure:

Attraction, retention, development, and turnover

Employee experience and retention: To evaluate our employee experience and retention efforts, we monitor a number of employee measures, such as employee retention, internal promotions and referrals. For example, voluntary employee turnover, which represents voluntary terminations during the year divided by average headcount during the year, was 13.1 percent, 13.5 percent and 9.1 percent for 2022, 2021 and 2020, respectively. We also conduct an annual employee experience survey, which provides valuable information on drivers of engagement and areas where we can improve. In 2022, we switched survey administration to Peakon (a Workday company). Our 2022 employee experience survey showed strong results with average responses ranging from 8.4 to 9.2 out of 10 in each of our four survey categories: Engagement (8.5), Diversity & Inclusion (8.7), Health & Wellbeing (8.4) and Safety Commitment (9.2), which placed us in the top 10 percent of the Peakon Benchmark for Commercial and Professional Services Companies for each survey category. To provide an open and frequent line of communication for all employees, we host town hall meetings and quarterly all employee conference calls, and utilize Workplace, a virtual collaboration platform for our employees, to engage with our full team. The Company also sponsors the United Compassion Fund, an employee-funded 501(c)(3) charity that provides financial assistance to fellow employees in need. In 2022, employees voluntarily donated approximately $1.2 million to the fund, and employees received 338 grants totaling approximately $1.0 million. Training and development: The Company is committed to the continual development of its employees. We aim for all new hires to attend JumpSTART, a new hire orientation, to quickly acclimate them to our culture, as well as applicable new hires to attend Center of Excellence (job related) training within 90 days of hire. We offer a wide array of training solutions (classroom, hands-on, e-learning and experience maps) for further development of our employees to help them achieve their career goals. In addition, as we did in 2022, we aim to regularly develop new training programs, launch pilot programs and expand leadership opportunities for our employees. In 2022, our employees enhanced their skills through approximately 645,000 hours of training, including safety training, sales and leadership training and equipment-related training from our suppliers. Although we still deliver some training virtually, we pivoted back to in-person training in 2022 (most training was delivered virtually during 2021 and 2020, primarily due to COVID-19). Our performance process encourages employee check-ins throughout the year to discuss performance and career goals, as well as development opportunities at all levels across the Company.

Example of HCM disclosure with dollar amounts:

Extract from Best Buy Co Inc. 2021 10-K HCM Disclosure

Diversity, Equity and Inclusion
We are creating a more inclusive future, both inside our company and in our communities. In fiscal 2021, we set employee diversity goals to be attained by 2025, and we are pleased to report the following progress in fiscal 2022:

- filled 37% of new, salaried corporate positions with Black, Indigenous and People of Color (BIPOC) employees, compared to our goal to fill one of three positions; and
- filled 26% of new, salaried field positions with female employees, compared to our goal to fill one of three positions.

In fiscal 2022, we made a significant commitment to supplier diversity. We plan to spend at least **$1.2 billion** with BIPOC and diverse businesses by 2025, with a focus on funding and supporting partner organizations that are empowering BIPOC leaders in the tech industry. In addition, we are investing up to $10 million with Brown Venture Group, a venture capital firm that focuses exclusively on Black, Latinx and Indigenous technology startups in emerging technologies.

For our communities, we plan to spend **$44 million** by 2025 to expand college preparation and career opportunities for BIPOC students, including adding scholarships for Historically Black Colleges and University students and increasing scholarship funding for Best Buy Teen Tech Center youth.

The Compensation and Human Resources Committee of our Board supports the development of an inclusive and diverse culture through oversight of our human resources policies and program. The Nominating, Corporate Governance and Public Policy Committee of our Board recommends criteria for the selection of individuals to be considered as candidates for election to the board, which includes diversity considerations.

Example of HCM disclosure with high numerical intensity

Extract from Cognizant Technology Solutions Corp 2022 10-K HCM Disclosure

Attraction, Retention, Development, and Turnover

We regularly monitor employee retention levels. Competition for skilled employees in the current labor market is intense, and we experienced significantly elevated attrition during 2021. We continue to enhance our pay-for-performance approach and increase our efforts with respect to recruitment, talent management and employee engagement. For the three months ended December 31, 2021 and 2020, our annualized attrition rate, including both voluntary and involuntary, was **34.6%** and **19.0%,** respectively. Our attrition rate for the years ended December 31, 2021 and 2020, including both voluntary and involuntary, was **30.8%** and **20.6%,** respectively. Our attrition is weighted towards our more junior employees. In 2021, voluntary attrition constituted the vast majority of our attrition for the period. In comparison, voluntary attrition in 2020 represented only approximately half of our attrition for the period as our personnel actions taken under our Fit for

Growth Plan increased involuntary attrition while voluntary attrition was suppressed due to the COVID-19 pandemic.

Example of HCM Disclosure with high specificity

Extract from Starbucks Corp 2022 10-K HCM disclosure:

Compensation and Benefits

We have demonstrated a history of investing in our workforce by offering competitive salaries and wages by continuously assessing the current business environment and labor market. We have consistently made enhancements in wages in order to attract talent to support our growth strategy and to elevate the customer experience. To foster a stronger sense of ownership and align the interests of partners with shareholders, restricted stock units are provided to eligible non-executive partners under our broad-based stock incentive programs. Furthermore, we offer comprehensive, locally relevant and innovative benefits to all eligible partners. In the **U.S.**, our largest and most mature market, these include:

- Comprehensive health insurance coverage is offered to partners working an average of 20 hours or more each week.
- 100% upfront tuition coverage is offered through the **Starbucks College Achievement Plan** for partners to earn a first-time bachelor's degree online at **Arizona State University**.
- 100% paid parental leave is available to new parents that welcome a child through birth, adoption or foster placement and work an average of 20 hours or more each week.
- **A Partner and Family Sick Time** program is provided and allows partners to accrue paid sick time based on hours worked and use that time for themselves or family members in need of care.
- **Care@Work** benefit provides partners with backup care benefits for children and adults at a small cost to partners, as well as free unlimited senior care planning services. This benefit includes up to 30 days of backup care services through the end of fiscal 2022, in light of the COVID-19 pandemic.
- We view mental health as a fundamental part of our humanity and provide a comprehensive suite of related programs and benefits. These include a free subscription to **Headspace**, an online application that enables guided mediation, and 20 free mental health therapy or coaching sessions annually with **Lyra.**

Outside of the **U.S.**, we have provided other innovative benefits to help address market-specific needs, such as providing interest-free loans to our **U.K.** partners to help cover rental deposits, mental health services in **Canada**, and in **China**, a monthly housing subsidy for full-time Starbucks baristas and shift supervisors, as well as comprehensive health insurance coverage for parents of partners.

To be an employer of choice and maintain the strength of our workforce, we consistently assess the current business environment and labor market to refine our compensation and benefits programs and other resources available to our partners.

We previously achieved and currently maintain 100 percent pay equity in the **U.S.** for women and men and people of all races for partners performing similar work. We have also achieved gender pay equity in **China** and **Canada**, two of our largest markets outside of the **U.S.**, and we made a

commitment to achieve gender pay equity in all company-operated markets. Further, we have formulated pay-equity principles which provide equal footing, transparency and accountability as best practices that help address known, systemic barriers to global pay equity.

Table 1: Sample Distribution by Fiscal Year

Fiscal Year	N	Percent
2020	444	31.49
2021	481	34.11
2022	485	34.40
Total	**1,410**	**100**

Table 2: Descriptive Statistics

	Mean	SD	Min	p5	p25	p50	p75	p95	Max
Accuracy	-0.015	0.038	-0.505	-0.054	-0.013	-0.004	-0.002	0	0
Dispersion	0.005	0.01	0	0	0.001	0.001	0.004	0.021	0.09
Word_ Count	580	279	34	183	372	552	761	1,068	1,613
Word_ Count (log)	6.227	0.571	3.526	5.21	5.919	6.314	6.635	6.974	7.386
Readability	-13.717	1.541	-18.43	-16.5	-14.7	-13.65	-12.64	-11.39	-10.03
Dollar Amounts	0.215	0.411	0	0	0	0	0	1	1
Num_Int	0.026	0.018	0.003	0.006	0.014	0.022	0.032	0.059	0.115
Specificity	0.061	0.024	0.013	0.027	0.044	0.057	0.074	0.103	0.14
Size (log)	10.18	1.253	7.357	8.21	9.31	10.077	10.994	12.412	13.444
Loss	0.084	0.277	0	0	0	0	0	1	1
ΔROA	0.037	0.049	0	0.001	0.007	0.018	0.044	0.14	0.293
Evolat	0.029	0.032	0	0.002	0.008	0.018	0.036	0.101	0.165
Sales_Growth	0.118	0.256	-0.717	-0.17	0.005	0.087	0.183	0.562	1.624
Leverage	0.34	0.202	0.01	0.038	0.208	0.327	0.442	0.699	1.102
R&D	0.054	0.105	0	0	0	0	0.055	0.290	0.583
Accruals	0.038	0.033	0.001	0.003	0.016	0.029	0.051	0.103	0.187
Coverage	18.286	7.203	4	7	13	18	22	31	43
Item1_Word_ Count	4,748	3,012	531	1,247	1,743	4,110	5,975	10,721	17,341
Item1_Word_ Count (log)	8.274	0.64	6.275	7.128	7.884	8.321	8.695	9.28	9.761
Item1_ Readability	-11.544	1.274	-15.55	-13.62	-12.36	-11.53	-10.71	-9.39	-8.25
Item1_Dollar	0.857	0.35	0	0	1	1	1	1	1
Item1_Num_Int	0.016	0.011	0.003	0.005	0.009	0.013	0.02	0.04	0.065
Item1_ Specificity	0.086	0.027	0.033	0.044	0.065	0.084	0.105	0.136	0.166
Labor_Int	0.002	0.004	0	0	0	0.001	0.002	0.007	0.015

Table 2 reports descriptive statistics for all variables included in the main analysis. The sample size is 1,410 firm-year observations for 485 unique firms from 2020 to 2022. Variables are defined in Appendix A. All continuous variables are winsorized at the 1% and 99% levels.

Table 3
Panel A: Pearson Correlations Matrix for columns (1) – (8)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) *Accuracy*	1.000							
(2) *Dispersion*	-0.445	1.000						
	(0.000)							
(3) *Word_Count (log)*	0.054	0.018	1.000					
	(0.042)	(0.491)						
(4) *Readability*	0.059	0.012	0.291	1.000				
	(0.026)	(0.659)	(0.000)					
(5) *Dollar_Amounts*	0.043	0.020	0.244	0.154	1.000			
	(0.110)	(0.456)	(0.000)	(0.000)				
(6) *Num_Int*	0.023	0.044	-0.231	0.269	-0.023	1.000		
	(0.385)	(0.099)	(0.000)	(0.000)	(0.396)			
(7) *Specificity*	0.000	0.087	-0.019	0.272	0.094	0.434	1.000	
	(0.990)	(0.001)	(0.473)	(0.000)	(0.000)	(0.000)		
(8) *Size (log)*	-0.151	0.152	0.000	-0.028	0.085	0.016	0.139	1.000
	(0.000)	(0.000)	(0.997)	(0.299)	(0.001)	(0.550)	(0.000)	
(9) *Loss*	-0.148	0.327	-0.024	0.000	-0.027	0.023	0.078	0.085
	(0.000)	(0.000)	(0.368)	(0.987)	(0.308)	(0.390)	(0.004)	(0.001)
(10) *ΔROA*	-0.126	0.429	0.000	0.025	-0.024	-0.027	0.025	-0.113
	(0.000)	(0.000)	(1.000)	(0.352)	(0.361)	(0.314)	(0.343)	(0.000)
(11) *Evolat*	-0.118	0.246	0.021	0.028	-0.018	-0.036	0.013	-0.147
	(0.000)	(0.000)	(0.432)	(0.297)	(0.509)	(0.182)	(0.617)	(0.000)
(12) *Sales_Growth*	-0.054	0.094	0.060	-0.011	0.024	-0.021	-0.029	-0.049
	(0.043)	(0.000)	(0.025)	(0.671)	(0.374)	(0.429)	(0.274)	(0.068)
(13) *Leverage*	0.026	0.024	0.027	0.048	0.003	0.010	0.073	-0.179
	(0.334)	(0.374)	(0.313)	(0.070)	(0.913)	(0.711)	(0.006)	(0.000)
(14) *R&D*	0.047	-0.092	0.009	-0.014	-0.071	-0.067	-0.055	-0.136
	(0.077)	(0.001)	(0.725)	(0.589)	(0.008)	(0.012)	(0.038)	(0.000)
(15) *Accruals*	-0.014	0.084	0.022	0.068	-0.053	-0.034	-0.074	-0.306
	(0.597)	(0.002)	(0.407)	(0.011)	(0.048)	(0.208)	(0.006)	(0.000)
(16) *Coverage*	-0.005	-0.020	-0.012	0.054	0.105	-0.048	-0.025	0.299
	(0.855)	(0.457)	(0.645)	(0.043)	(0.000)	(0.074)	(0.358)	(0.000)
(17) *Item1_Word_ Count (log)*	-0.069	0.136	0.173	-0.004	0.048	0.008	0.079	0.178
	(0.010)	(0.000)	(0.000)	(0.878)	(0.070)	(0.769)	(0.003)	(0.000)
(18)*Item1_Readability*	0.052	-0.143	-0.110	-0.173	-0.005	-0.113	-0.095	-0.103
	(0.050)	(0.000)	(0.000)	(0.000)	(0.861)	(0.000)	(0.000)	(0.000)
(19) *Item1_Dollar*	-0.038	0.091	0.034	-0.033	-0.008	0.055	0.002	0.113
	(0.156)	(0.001)	(0.203)	(0.217)	(0.769)	(0.039)	(0.929)	(0.000)
(20) *Item1_Num_Int*	-0.023	0.162	0.058	0.071	0.004	0.118	0.081	0.037
	(0.398)	(0.000)	(0.031)	(0.007)	(0.884)	(0.000)	(0.002)	(0.161)
(21)*Item1_Specificity*	-0.053	0.160	0.064	0.088	-0.011	0.077	0.258	0.227
	(0.046)	(0.000)	(0.016)	(0.001)	(0.683)	(0.004)	(0.000)	(0.000)

Table 3 (continued)
Panel B: Pearson Correlations Matrix for columns (9) – (16)

Variables	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(9) *Loss*	1.000							
(10) *ΔROA*	0.354	1.000						
	(0.000)							
(11) *Evolat*	0.143	0.466	1.000					
	(0.000)	(0.000)						
(12) *Sales_Growth*	-0.170	0.126	0.277	1.000				
	(0.000)	(0.000)	(0.000)					
(13) *Leverage*	0.095	0.051	0.103	-0.073	1.000			
	(0.000)	(0.056)	(0.000)	(0.006)				
(14) *R&D*	-0.040	0.154	0.241	0.071	-0.135	1.000		
	(0.130)	(0.000)	(0.000)	(0.008)	(0.000)			
(15) *Accruals*	0.032	0.197	0.145	0.128	0.166	0.044	1.000	
	(0.230)	(0.000)	(0.000)	(0.000)	(0.000)	(0.099)		
(16) *Coverage*	-0.036	0.097	0.127	0.037	-0.026	0.201	0.033	1.000
	(0.178)	(0.000)	(0.000)	(0.164)	(0.326)	(0.000)	(0.217)	
(17) *Item1_Word_ Count (log)*	0.076	0.058	0.046	0.057	-0.055	0.104	-0.062	-0.040
	(0.004)	(0.029)	(0.087)	(0.033)	(0.037)	(0.000)	(0.021)	(0.138)
(18)*Item1_Readability*	-0.054	-0.052	-0.038	0.001	0.012	0.024	-0.003	0.034
	(0.043)	(0.050)	(0.155)	(0.978)	(0.663)	(0.373)	(0.901)	(0.200)
(19) *Item1_Dollar*	0.043	-0.029	-0.038	0.012	0.011	-0.146	-0.020	-0.064
	(0.105)	(0.280)	(0.156)	(0.646)	(0.685)	(0.000)	(0.460)	(0.017)
(20) *Item1_Num_Int*	0.054	0.074	0.030	0.050	0.132	-0.217	0.035	-0.066
	(0.042)	(0.006)	(0.260)	(0.060)	(0.000)	(0.000)	(0.189)	(0.013)
(21)*Item1_Specificity*	0.110	0.055	0.043	-0.066	0.039	-0.109	-0.079	-0.024
	(0.000)	(0.038)	(0.105)	(0.014)	(0.144)	(0.000)	(0.003)	(0.377)

Table 3 (continued)
Panel B: Pearson Correlations Matrix for columns (17) – (21)

Variables	(17)	(18)	(19)	(20)	(21)
(17) *Item1_Word_ Count (log)*	1.000				
(18)*Item1_Readability*	-0.394	1.000			
	(0.000)				
(19) *Item1_Dollar*	0.266	-0.129	1.000		
	(0.000)	(0.000)			
(20) *Item1_Num_Int*	0.095	-0.350	0.194	1.000	
	(0.000)	(0.000)	(0.000)		
(21) *Item1_Specificity*	0.056	-0.419	0.027	0.241	1.000
	(0.036)	(0.000)	(0.316)	(0.000)	

Table 4
Panel A: HCM Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)	(5)
Word_Count (log)	0.004				
	(1.58)				
Item1_Word_Count (log)	-0.002				
	(-1.14)				
Readability		**0.002***			
		(1.74)			
Item1_Readability		-0.001			
		(-0.81)			
Dollar_Amounts			**0.006*****		
			(2.66)		
Item1_Dollar			0.001		
			(0.72)		
Num_Int				**0.116****	
				(2.55)	
Item1_Num_Int				0.090	
				(1.12)	
Specificity					**0.070***
					(1.91)
Item1_Specificity					0.011
					(0.27)
Size (log)	-0.005**	-0.005**	-0.005**	-0.005**	-0.005**
	(-2.49)	(-2.45)	(-2.49)	(-2.43)	(-2.53)
Loss	-0.004	-0.005	-0.005	-0.005	-0.005
	(-1.01)	(-1.08)	(-1.08)	(-1.03)	(-1.12)
ΔROA	-0.008	-0.010	-0.010	-0.010	-0.012
	(-0.26)	(-0.32)	(-0.32)	(-0.33)	(-0.38)
Evolat	-0.045	-0.049	-0.049	-0.046	-0.051
	(-0.85)	(-0.92)	(-0.90)	(-0.86)	(-0.93)
Sales_Growth	-0.003	-0.003	-0.004	-0.004	-0.003
	(-0.53)	(-0.52)	(-0.68)	(-0.60)	(-0.54)
Leverage	0.013***	0.012**	0.013**	0.013**	0.013**
	(2.58)	(2.50)	(2.52)	(2.56)	(2.49)
R&D	0.011	0.010	0.010	0.011	0.010
	(1.16)	(1.26)	(1.33)	(1.41)	(1.24)
Accruals	-0.056	-0.061	-0.055	-0.059	-0.058
	(-1.44)	(-1.54)	(-1.38)	(-1.48)	(-1.45)
Coverage	0.000	0.000	0.000	0.000	0.000
	(1.35)	(1.23)	(1.20)	(1.34)	(1.37)
Constant	0.020	0.043	0.025	0.020	0.023
	(0.85)	(1.64)	(1.37)	(1.18)	(1.31)
Observations	1,410	1,410	1,410	1,410	1,410
R-squared	0.171	0.171	0.170	0.170	0.168

Industry FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

Table 4, Panel A reports results from estimating Equation (1) that investigates the relation between HCM transparency and analyst forecast accuracy. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less the reported EPS scaled by the year-end stock market price. The independent variables of interest are *Word_Count*, *Readability*, *Dollar_Amounts*, *Num_Int*, and *Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 4 (continued)
Panel B: HCM Transparency and Analyst Forecast Dispersion

	(1)	(2)	(3)	(4)	(5)
Word_Count (log)	0.000				
	(0.20)				
Item1_Word_Count (log)	0.001**				
	(2.31)				
Readability		-0.000			
		(-1.50)			
Item1_Readability		0.001***			
		(3.67)			
Dollar_Amounts			0.000		
			(0.39)		
Item1_Dollar			0.001**		
			(1.98)		
Num_Int				-0.007	
				(-0.61)	
Item1_Num_Int				0.042*	
				(1.79)	
Specificity					-0.011
					(-1.23)
Item1_Specificity					0.014*
					(1.83)
Size (log)	0.001***	0.001***	0.001***	0.001***	0.001***
	(3.94)	(3.91)	(3.81)	(3.99)	(3.83)
Loss	0.003	0.003	0.003	0.003	0.003
	(1.57)	(1.59)	(1.59)	(1.62)	(1.61)
ΔROA	0.047***	0.047***	0.048***	0.047***	0.047***
	(4.49)	(4.51)	(4.56)	(4.53)	(4.55)
Evolat	-0.011	-0.011	-0.010	-0.010	-0.011
	(-0.84)	(-0.79)	(-0.78)	(-0.73)	(-0.79)
Sales_Growth	0.002	0.002	0.002	0.002	0.002
	(0.89)	(0.92)	(0.93)	(0.92)	(0.99)
Leverage	0.000	0.000	0.000	0.000	0.000
	(0.03)	(0.19)	(0.08)	(0.16)	(0.17)
R&D	-0.003	-0.003	-0.001	-0.002	-0.002
	(-1.12)	(-0.92)	(-0.45)	(-0.55)	(-0.54)
Accruals	0.023**	0.023**	0.023**	0.023**	0.023**
	(2.38)	(2.36)	(2.35)	(2.29)	(2.37)
Coverage	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(-3.61)	(-3.48)	(-3.50)	(-3.45)	(-3.49)
Constant	-0.016***	-0.001	-0.007**	-0.007***	-0.007**
	(-3.91)	(-0.18)	(-2.53)	(-2.60)	(-2.37)
Observations	1,410	1,410	1,410	1,410	1,410
R-squared	0.502	0.504	0.499	0.499	0.499

Industry FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

Table 4, Panel B reports results from estimating Equation (1) that investigates the relation between HCM transparency and analyst forecast dispersion. The dependent variable is *Dispersion*, computed as the standard deviation of analyst EPS forecast estimates scaled by the year-end stock market price. The independent variables of interest are *Word_Count*, *Readability*, *Dollar_Amounts*, *Num_Int*, and *Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 5
Panel A: Descriptive Statistics of Topics Variables

	N	Mean	SD	Min	p5	p25	p50	p75	p95	Max
NoE_ Count	1,375	31.505	23.9	5	7	14	25	41	81	129
NoE_ Readability	1,375	-13.535	4.406	-36.46	-21.33	-15.63	-12.86	-11.11	-8	-3.7
NoE_ Dollar	1,375	0.01	0.1	0	0	0	0	0	0	1
NoE_Num_ Int	1,375	0.144	0.066	0.011	0.045	0.095	0.143	0.182	0.259	0.369
NoE_ Specificity	1,375	0.135	0.068	0	0.034	0.089	0.127	0.175	0.273	0.333
Attraction_ Count	1,308	125.788	83.659	13	30	63	107	167.5	290	457
Attraction_ Readability	1,308	-16.94	3.076	-42.79	-22.57	-18.4	-16.46	-15.08	-12.9	-8.28
Attraction_ Dollar	1,308	0.048	0.214	0	0	0	0	0	0	1
Attraction_ Num_Int	1,308	0.009	0.013	0	0	0	0	0.015	0.037	0.062
Attraction_ Specificity	1,308	0.038	0.028	0	0	0.017	0.035	0.056	0.091	0.12
Comp_ Count	1,129	107.971	74.009	12	21	53	91	140	262	359
Comp_ Readability	1,129	-17.979	4.533	-64.9	-25.19	-19.48	-17.22	-15.44	-13.04	-7.37
Comp_ Dollar	1,129	0.112	0.316	0	0	0	0	0	1	1
Comp_Num_Int	1,129	0.005	0.01	0	0	0	0	0.007	0.024	0.083
Comp_ Specificity	1,129	0.036	0.029	0	0	0.015	0.031	0.054	0.091	0.143
DEI_Count	1,312	149.549	90.577	13	29	85	135	197	318	525
DEI_ Readability	1,312	-16.332	4.242	-64.43	-22	-17.760	-15.725	-14.11	-11.21	-7.09
DEI_Dollar	1,312	0.053	0.223	0	0	0	0	0	1	1
DEI_Num_ Int	1,312	0.035	0.042	0	0	0.007	0.023	0.046	0.118	0.261
DEI_Specificity	1,312	0.073	0.042	0	0	0.045	0.072	0.1	0.146	0.213
HS_ General_ Count	804	80.581	60.059	6	19	41	64	100.5	195	423
*HS_*	804	-15.731	3.481	-38.67	-21.42	-17.55	-15.47	-13.44	-11.16	-2.6

General_ Readability										
HS_ General_ Dollar	804	0.025	0.155	0	0	0	0	0	0	1
HS_ General_ Num_Int	804	0.014	0.022	0	0	0	0	0.023	0.063	0.097
HS_ General_ Specificity	804	0.047	0.038	0	0	0.018	0.044	0.073	0.118	0.158
HS_COVID_Count	577	62.887	39.785	9	14	32	53	86	135	220
HS_COVID_ Readability	577	-19.563	5.674	-69.39	-30.6	-21.41	-18.21	-16	-13.86	-7.2
HS_COVID_Dollar	577	0.028	0.164	0	0	0	0	0	0	1
HS_COVID_Num_Int	577	0.004	0.01	0	0	0	0	0	0.024	0.056
HS_ COVID_ Specificity	577	0.034	0.033	0	0	0	0.027	0.053	0.1	0.133
LR_Count	683	38.433	48.117	4	5	13	24	47	109	347
LR_ Readability	683	-15.397	3.525	-32.81	-21.55	-17.2	-15.16	-12.86	-10.1	-6.34
LR_Dollar	683	0.003	0.054	0	0	0	0	0	0	1
LR_Num_ Int	683	0.042	0.053	0	0	0	0.029	0.065	0.154	0.25
LR_ Specificity	683	0.082	0.074	0	0	0	0.076	0.132	0.207	0.318
Culture_ Count	1,278	114.245	80.286	7	21	56	95	156	278	443
Culture_ Readability	1,278	-16.755	3.174	-40.89	-22.18	-18.4	-16.36	-14.66	-12.49	-7.99
Culture_ Dollar	1,278	0.055	0.229	0	0	0	0	0	1	1
Culture_ Num_Int	1,278	0.008	0.014	0	0	0	0	0.013	0.037	0.08
Culture_ Specificity	1,278	0.042	0.032	0	0	0.017	0.037	0.061	0.103	0.143

Table 5, Panel A presents the descriptive statistics for all topic variables used in Equation (2). All variables are defined in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles.

Panel B: Number of Employees Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)
NoE_Readability	0.000			
	(1.22)			
NoE_Dollar		0.003		
		(0.99)		
NoE_Num_Int			0.027	
			(1.60)	
NoE_Specificity				0.000
				(0.02)
Constant	0.030	0.027	0.022	0.027
	(1.55)	(1.48)	(1.38)	(1.51)
Observations	1,375	1,375	1,375	1,375
R-squared	0.168	0.167	0.169	0.167
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel B reports the regression results of the model in Equation (2) for the number of employees (*NoE*) topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market price. The independent variables of interest are *NoE_Readability*, *NoE_Dollar*, *NoE_Num_Int*, and *NoE_Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t-statistics are reported in parentheses below the coefficient estimates. *,**, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel C: Attraction, Retention, Development, and Turnover Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)
Attraction_Readability	0.001**			
	(2.11)			
Attraction_Dollar		0.003		
		(0.90)		
Attraction_Num_Int			0.151**	
			(2.42)	
Attraction_Specificity				0.018
				(0.51)
Constant	0.042*	0.030	0.027	0.029
	(1.88)	(1.56)	(1.48)	(1.55)
Observations	1,308	1,308	1,308	1,308
R-squared	0.172	0.169	0.171	0.169
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel C reports the regression results of the model in Equation (2) for the attraction, retention, development, and turnover (*Attraction)* topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market

price. The independent variables of interest are *Attraction_Readability*, *Attraction_Dollar*, *Attraction_Num_Int*, and *Attraction_Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t-statistics are reported in parentheses below the coefficient estimates. *,**, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel D: Compensation and Benefits Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)
Comp_Readability	0.000			
	(1.01)			
Comp_Dollar		0.004		
		(1.32)		
Comp_Num_Int			0.260***	
			(2.91)	
Comp_Specificity				0.076***
				(2.68)
Constant	0.019	0.014	0.010	0.012
	(0.96)	(0.82)	(0.63)	(0.72)
Observations	1,129	1,129	1,129	1,129
R-squared	0.207	0.207	0.211	0.209
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel D reports the regression results of the model in Equation (2) for the compensation and benefits (*Comp*) topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market price. The independent variables of interest are *Comp_Readability*, *Comp_Dollar*, *Comp_Num_Int*, and *Comp_Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. *t*-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel E: Diversity, Equity, and Inclusion Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)
DEI_Readability	-0.000			
	(-1.30)			
DEI_Dollar		0.007**		
		(2.13)		
DEI_Num_Int			0.032**	
			(2.01)	
DEI_Specificity				-0.009
				(-0.33)
Constant	0.018	0.024	0.022	0.024
	(1.05)	(1.32)	(1.23)	(1.35)
Observations	1,312	1,312	1,312	1,312
R-squared	0.145	0.146	0.145	0.144

Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel E reports the regression results of the model in Equation (2) for the diversity, equity, and inclusion (*DEI*) topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market price. The independent variables of interest are *DEI_Readability*, *DEI_Dollar*, *DEI_Num_Int*, and *DEI_Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. *t*-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel F: Health and Safety - General Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)
HS_General_Readability	0.000			
	(0.58)			
HS_General_Dollar		0.009		
		(1.04)		
HS_General_Num_Int			0.026	
			(0.63)	
HS_General_Specificity				0.001
				(0.04)
Constant	0.039*	0.033*	0.033*	0.034*
	(1.75)	(1.79)	(1.82)	(1.84)
Observations	804	804	804	804
R-squared	0.222	0.224	0.225	0.223
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel F reports the regression results of the model in Equation (2) for the health and safety – general (*HS_General*) topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market price. The independent variables of interest are *HS_General_Readability*, *HS_General_Dollar*, *HS_General_Num_Int*, and *HS_General_Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. *t*-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel G: Health and Safety - COVID19 Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)
HS_COVID_Readability	-0.000			
	(-1.80)			
HS_Covid_Dollar		0.001		
		(0.29)		
HS_Covid_Num_Int			-0.320**	
			(-2.28)	
HS_Covid_Specificity				-0.002
				(-0.10)
Constant	-0.006	0.003	0.001	0.003
	(-0.47)	(0.15)	(0.06)	(0.15)
Observations	577	577	577	577
R-squared	0.284	0.283	0.288	0.283
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel G reports the regression results of the model in Equation (2) for the health and safety – COVID-19 (*HS_COVID*) topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market price. The independent variables of interest are *HS_COVID_Readability*, *HS_COVID_Dollar*, *HS_COVID_Num_Int*, and *HS_COVID_Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. *t*-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel H: Labor Relations Transparency and Analyst Forecast Accuracy

	(1)	(3)	(4)
LR_Readability	0.000		
	(0.03)		
LR_Num_Int		-0.062*	
		(-1.92)	
LR_Specificity			0.011
			(0.49)
Constant	0.053	0.051*	0.053*
	(1.56)	(1.76)	(1.78)
Observations	683	683	683
R-squared	0.332	0.337	0.333
Controls	YES	YES	YES
Industry FE	YES	YES	YES
Year FE	YES	YES	YES

Table 5, Panel H reports the regression results of the model in Equation (2) for the labor relations (*LR*) topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market price. The independent variables of interest are *LR_Readability*, *LR_Dollar*, *LR_Num_Int*, and *LR_Specificity*, respectively. All variables are defined in

Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. *t*-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel I: Culture Transparency and Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)
Culture_Readability	-0.001**			
	(-2.24)			
Culture_Dollar		-0.001		
		(-0.24)		
Culture_Num_Int			0.149**	
			(2.20)	
Culture_Specificity				-0.005
				(-0.13)
Constant	0.017	0.030	0.028	0.030
	(0.93)	(1.49)	(1.47)	(1.51)
Observations	1,278	1,278	1,278	1,278
R-squared	0.141	0.138	0.140	0.138
Controls	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table 5, Panel I reports the regression results of the model in Equation (2) for the culture (*Culture*) topic. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less reported EPS scaled by the year-end stock market price. The independent variables of interest are *Culture_Readability*, *Culture_Dollar*, *Culture_Num_Int*, and *Culture_Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. *t*-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Table 6
Panel A: HCM Transparency and Analyst Forecast Accuracy for Low Labor Intensity

	(1)	(2)	(3)	(4)	(5)
Word_Count (log)	0.004				
	(1.26)				
Readability		0.001			
		(0.46)			
Dollar_Amounts			**0.006***		
			(1.73)		
Num_Int				**0.113***	
				(1.85)	
Specificity					**0.123****
					(2.08)
Observations	705	705	705	705	705
R-squared	0.222	0.219	0.222	0.222	0.222
Controls	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

Panel B: HCM Transparency and Analyst Forecast Accuracy for High Labor Intensity

	(1)	(2)	(3)	(4)	(5)
Word_Count (log)	0.002				
	(0.54)				
Readability		0.002			
		(1.27)			
Dollar_Amounts			0.004		
			(1.44)		
Num_Int				0.045	
				(0.90)	
Specificity					0.011
					(0.36)
Observations	705	705	705	705	705
R-squared	0.290	0.294	0.291	0.289	0.288
Controls	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

Table 6 reports results from estimating Equation (1) for subsample of firms with low labor intensity in Panel A and high labor intensity in Panel B. Labor intensity is measured as the number of employees scaled by total assets. The dependent variable is *Accuracy*, computed as minus the absolute value of the mean EPS estimated by analysts, less the reported EPS scaled by the year-end stock market price. The independent variables of interest are *Word_Count*, *Readability*, *Dollar_Amounts*, *Num_Int*, and *Specificity*, respectively. All variables are defined in Appendix A. Year- and Industry-fixed effects are added to the model. Reported statistics are based on robust standard errors. t-statistics are reported in parentheses below the coefficient estimates. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Chapter 4: Conclusion

This thesis comprises two essays that investigate the newly mandated HCM disclosures in financial reports in the U.S. The first essay demonstrates that the presence of both an HR committee and HR expertise on the board of directors promotes higher HCM disclosure transparency, whereas the presence of either mechanism alone appears to be more symbolic and negatively associated with transparency. The second essay examines the usefulness of HCM disclosure transparency to financial analysts, who are key participants in capital markets. The findings indicate that HCM disclosure transparency benefits analysts, as evidenced by more accurate earnings forecasts. However, not all topics disclosed by companies are equally useful to analysts, with only four specific topics showing to be informative.

This dissertation makes valuable contributions to the literature on corporate disclosure, corporate governance, and accounting for intangibles, as well as providing insights for practitioners, regulators, and standard setters. First, the dissertation contributes to the HCM disclosure literature by offering insights into the newly mandated HCM disclosures under the principles-based regime, which grants companies discretion over what to disclose. The dissertation provides descriptive evidence on the current state of HCM disclosures, highlighting what and how companies are reporting under the principles-based approach. The descriptive evidence reveals substantial variation in disclosure practices, including differences in length, readability, topics, monetary intensity, numerical intensity, and specificity, which is consistent with prior research in this area (Bourveau et al., 2023; Demers et al., 2024a). This variation emphasizes the diversity of approaches taken by firms, which is inherent in a principles-based disclosure regime.

Further, the first essay identifies board HR governance as a determinant of HCM transparency, which extends beyond traditional governance mechanisms and firm-level

characteristics. The first essay reveals that the presence of either HR committee or HR expertise alone tends to be more symbolic, resulting in lower levels of transparency. By shedding light on how board-level HR governance relate with HCM disclosure transparency, the first essay provides evidence that effective governance requires both structural mechanisms (i.e., HR committee) and domain-specific expertise (i.e., HR expertise) to meaningfully promote corporate transparency. This insight is particularly valuable for institutional investors who have been advocating for greater board oversight of HCM and for companies considering changes in their governance structures. Furthermore, the findings suggest that firms adopting superficial governance changes without the appropriate expertise may fail to meet the demands for increased transparency from investors.

Additionally, the second essay demonstrates that HCM transparency is useful for analysts and identifies the specific topics that investors need to make informed investment decisions regarding human capital. This evidence helps to bridge the gap between human capital reporting and its practical usefulness for capital market participants, thereby enhancing the decision-usefulness of such disclosures. By exploring which attributes of HCM disclosures—such as readability, numerical intensity, specificity, and the types of topics disclosed—are most beneficial to analysts, the essay provides critical insights into how firms can enhance the quality of their HCM reporting to better meet the needs of investors. Moreover, the findings emphasize the value of quantitative and specific information within HCM disclosures, such as turnover rates, employee training metrics, and diversity figures, as these details are related to the accuracy of analysts' earnings forecasts. This underscores the importance of providing more than just narrative content and highlights that concrete data is essential for effective decision-making in capital markets.

Second, this dissertation contributes to the corporate governance literature in three main ways. The first essay provides new insights into the evolving role of the compensation committee

in the realm of HCM. To the best of my knowledge, no prior study has specifically examined this recent shift in responsibility for HCM governance. It is important to investigate how the compensation committee's new duties affect the management of HCM and, ultimately, the transparency of HCM reporting. Further, the first essay extends the literature on the role of directors' individual expertise by focusing on HR expertise, which has received limited attention in previous research (Mullins, 2018). The findings highlight the critical importance of HR expertise in today's economy, particularly in managing intangible assets like human capital. Moreover, the first essay complements the existing research on the role of boards in shaping qualitative disclosures, which remains underexplored (Lee & Park, 2019). By demonstrating how boards, through their advisory and monitoring functions, can influence narrative disclosures, this dissertation underscores the broader role that board governance plays in enhancing transparency and providing valuable information to stakeholders.

Third, the second essay contributes to the literature on accounting for intangible assets. This literature has long criticized financial reports for failing to provide decision-useful information to investors in today's knowledge-driven economy by neglecting to record the value derived from intangible assets, including human capital (Gu et al., 2023; Lev, 2019; Lev & Schwartz, 1971; Srivastava, 2023). The SEC's mandate for HCM disclosures aims to partially address this gap by improving transparency about human capital, which is a major source of value that is often not adequately reflected in traditional financial statements. By demonstrating that transparent HCM disclosures are indeed useful to financial analysts, the second essay sheds light on the potential of narrative information to enhance the decision-usefulness of financial reports. These insights suggest that including discussions about human capital, along with other intangible

assets, can contribute to more comprehensive and informative corporate reporting, ultimately benefiting capital market participants in assessing firm value.

This dissertation also offers valuable insights for practitioners, regulators, and standard setters in several ways. First, the first essay offers guidance to institutional investors advocating for board oversight of HCM. Given that many firms are delegating HCM oversight to compensation committees and renaming them as HR committees, the first essay critiques this trend and demonstrates that without an HR expert on the board, these changes are largely symbolic rather than substantive. This insight helps investors understand what effective governance structures truly enhance HCM transparency. Second, the first essay also provides useful evidence for the SEC, which is considering the implementation of mandatory disclosures highlighting the individual roles of directors in HCM governance (Jones et al., 2023). It emphasizes the need for HR expertise on boards to ensure effective HCM oversight.

Third, the second essay provides valuable insights to the SEC by evaluating the current effectiveness of HCM disclosures and identifying the specific HCM topics that are most useful to analysts. The findings indicate that analysts derive greater value from quantitative HCM information, such as turnover rates, training hours, and diversity metrics. This information can aid the SEC in revising the current HCM mandate and prioritizing metrics that contribute most to investor decision-making. Lastly, the dissertation provides timely guidance for regulators and the investment community concerning the FASB's upcoming accounting standards update, effective for fiscal years beginning after December 15, 2026, which includes mandatory compensation cost disclosures in the income statement (FASB, 2024). It highlights that the SEC's narrative HCM disclosures, which explain a firm's strategy for attracting, training, compensating, and retaining

employees, are complementary to the quantitative compensation costs in the income statement, together creating a more holistic view of human capital management.

The essays in the dissertation are subject to some limitations and addressing them could be fruitful for future research. One limitation is the small sample size, as I focused only on S&P 500 firms, which are the largest companies in the U.S. Because firms are inconsistent in where they disclose HCM within Item 1 of the 10-K report, automating their extraction was challenging and inaccurate, so I opted for manual collection instead. The sample, therefore, captures disclosures primarily from larger firms and may not be fully generalizable to smaller companies. However, given the wide variation in HCM disclosures even within the S&P 500, this analysis still provides valuable insights into firms' disclosure practices and their usefulness. Moreover, manual extraction ensures greater accuracy and focuses solely on HCM-related content. Future research could benefit from leveraging advanced machine learning techniques to automate disclosure extraction, potentially expanding the sample to a broader range of firms. Another limitation is that the data only covers recent years, given that the regulation took effect in 2020. This provides preliminary evidence on HCM disclosure practices, and as more time passes, further insights into firms' disclosure evolution may become apparent.

Another limitation of the dissertation is that the essays adopt an association-based approach, which limits the ability to establish causal relationships. Additionally, in the second essay, the use of analyst forecasts serves as an indirect measure of whether analysts incorporate HCM into their valuation models. Given the complexity of valuation models, which are difficult to empirically disentangle, future research could explore analysts' reports using textual analysis to directly examine whether and how analysts discuss HCM information in their analyses and relate it to firm value. Future research could also expand on this dissertation by examining the credibility

of HCM disclosures, investigating whether firms engage in social washing, and identifying mechanisms that could deter such behavior.

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