Corporate Human Capital Disclosures:
Early Evidence from the SEC's Disclosure Mandate[*]

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Abstract

In November 2020, the SEC issued amendments to Regulation S-K requiring filers to provide expanded discussions related to the firm's human capital (HC). This study provides the first large-sample descriptive evidence related to the resulting HC disclosures during the first year of the regulation's implementation. Our findings confirm that, in the absence of detailed guidance under the principles-based regulation, filers' HC disclosures are extremely heterogeneous in terms of their length, numerical intensity, tone, readability, and similarity with peer firms. The disclosures tend to be very positively-toned and inherit many of the properties of the firm's other Item 1 disclosures. Consistent with investor complaints, the disclosures are generally not numerically intensive. Firms for which HC is strategically important do not provide superior disclosures, and time trends suggest that firms have learned over the first year of the non-directive regulation to provide disclosures that are longer and more optimistic, but less informative (i.e., more similar or boilerplate and less numerically intensive). Overall, our comprehensive evidence validates concerns regarding the heterogeneity (i.e., lack of comparability), lack of specificity, and dearth of numerical disclosures being provided under the new principles-based rules.

Keywords: Human capital; ESG; sustainability; linguistic analysis; disclosure; SEC regulation

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"The most valuable of all capital is that invested in human beings."
– Alfred Marshall, *Principles of Economics* (1890)

I.   INTRODUCTION

Human capital is a critically important source of corporate value creation in the modern economy (e.g., Zingales 2000; Edmans 2011; Working Group on Human Capital Accounting Disclosure 2022). Yet despite Alfred Marshall's prophetic observation and commonplace statements made by current day executives to the effect that employees are their firm's "most important asset," disclosures related to human capital have been extremely limited relative to those of other asset classes (Lev and Schwartz 1971; Wyatt and Frick 2010).[1] Responding to the demands of investors, however, in November 2020 the SEC updated their regulations to require that listed firms provide expanded discussions of the firm's human capital ("HC") management processes.[2] Since then, numerous small sample reports have emerged that describe and critique the initial disclosures of various subsets of filers, most of which focus exclusively on the largest listed firms in the U.S.[3] To the best of our knowledge, however, no prior study provides systematic descriptive evidence related to the new HC disclosures for the full set of SEC 10-K filers. Our

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[1] Prior to 2005, the only mandatory human capital disclosure was the number of employees. Since the introduction of new risk disclosure rules in 2005, further disclosures would be required if aspects of human capital were deemed to be a source of risk to investors (Haslag, Sensoy, and White 2021).

[2] A group of institutional investors with more than $4 trillion in assets under management referring to themselves as the Human Capital Management Coalition petitioned the U.S. SEC in 2017, requesting the Commission to mandate disclosures about issuers' human capital management policies, practices, and performance (Klemash, Neill, and Smith 2019).

[3] For example, Batish et al. (2021) examine the first 100 Form 10-Ks filed by companies with at least $1 billion in market capitalization; JUST Capital (2021) analyze the disclosures of the 100 largest U.S. employers; Meridian Compensation Partners (2021) summarize the disclosures from 220 S&P 500 companies; Gibson Dunn (2021) survey 451 S&P 500 companies; PWC (2021) sample more than 2,000 Form 10-Ks filed through February 28, 2021; Pandit (2021) considers the 100 largest companies in the Fortune 500 list of 2020 that had filed by March 31, 2021; and Intelligize (2021) examines 427 Form 10-Ks filed by S&P 500 companies through March 5th, 2021.

2

objective with the current study is to fill this gap in knowledge related to the filings of the broader range of firms that are subject to the new disclosure rule by providing a comprehensive descriptive analysis of a full year of HC disclosures for all available 10-K filings starting from the inception of the new regulation.[4]

For years consulting firms have promoted the notion that diversity, or some other positive human resource practice, could lead to greater payoffs to shareholders (e.g., Hunt, Layton, and Prince 2015; Dixon-Fyle et al. 2020).[5] These studies carry intuitively appealing messages (and may have the effect of promoting desirable corporate practices), and thus have helped to fuel shareholder interest in human resource related information. Perhaps not surprisingly, these reports have been produced at a time that coincides with significant growth in the proportion of corporate expenditures related to human capital versus tangible asset investments, a correspondingly enhanced role for human capital in the wealth creation process in our increasingly intangibles-driven economy, a dramatic increase in sustainable investing (which often entails choosing investments, in part, on the basis of the corporate human resource policies and practices that are baked into commercial ESG scores), a rise in employee-related health and safety concerns during the COVID-19 crisis, and a widespread resurgence in concerns over social justice issues in recent years. In their 2019 survey of institutional investors, Morrow Sodali (2019) found that 83% of respondents indicated that the ESG topic most in need of improved disclosures was human capital.[6] With all of these forces combining to increase demand for disclosures related to firms' human capital management practices, the SEC proposed new disclosure regulations.

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[4] Zhang (2021) provides large sample evidence related to corporate HC disclosures *prior to* the new regulation. We discuss her study in later sections below.

[5] The findings of these studies are often referred to as "the business case for diversity."

[6] By 2022, human capital management was the second most important issue over which respondents were prompted to seek engagement with companies (Morrow Sodali 2021).

After a public comment period, in November 2020 the SEC issued amendments to Regulation S-K, a regulation that lays out reporting requirements beyond the financial statements for SEC registrants. The new rules require that filers provide expanded discussion related to the firm's human capital as part of Item 1 (i.e., the business description section) of their 10-K filing. Rather than prescribe disclosure requirements, such as specific topics to be discussed or data tabulations to be provided, the SEC adopted a principles-based approach that allows firms to have tremendous discretion over their disclosures. Notably, the SEC actually rejected calls to formally define "human capital" (Bourveau et al. 2022). Critics have argued that the resulting heterogeneity in disclosures makes it difficult or impossible to compare HC practices and performance across firms (Gibson Dunn 2021), and that HC disclosures are limited in scope and lacking in specificity in the form of quantitative metrics (JUST Capital 2021). Our study speaks directly to these concerns by providing the first rigorous large-scale descriptive evidence related to the contents of these newly mandated HC disclosures.

We use textual analysis to extract the linguistic features and numerical intensity of HC disclosures for all available 10-K filings for a full year's reporting cycle beginning with the first such filings after the enactment of the new regulations on November 9, 2020 through to early November 2021. This results in a sample of more than 3,600 unique public firms, each reporting for the first time under the new HC disclosure regulations.

A number of interesting stylized facts emerge. First, consistent with anecdotal accounts, we provide systematic evidence that there is tremendous cross-sectional variation in the amount, numerical intensity, tone, readability, and similarity of HC disclosures both in absolute terms, and when benchmarked against the rest of the contents of the firm's Item 1 disclosures. Second, HC disclosures are generally more readable and considerably more positively-toned than the remainder

4

of Item 1 disclosures. Third, 16% of our final sample firms provide disclosures consisting of less than 100 words. Although these firms tend to be younger, smaller, and have fewer employees (i.e., they may have less to discuss), such abbreviated disclosures are unlikely to be adequate for investors who wish to gain an understanding of the firm's HCM practices, and as such the disclosures arguably do not comply with the spirit of the new regulation. Fourth, with few exceptions, the firm's HC disclosures tend to inherit similar properties to its Item 1 disclosures – e.g., if the firm offers higher specificity or numerical intensity in their other Item 1 disclosures, they tend to do so in their HC disclosures as well.

Finally, while contemporaneous firm performance (ROA), firm size, the number of employees, the firm's asset structure and growth prospects (captured by the ratio of PPE to total assets and the book-to-market ratio), and the competitiveness of the industry in which the firm operates are each significantly associated with at least some of the examined disclosure attributes, the observed relations are not always consistent with expectations. For example, firms with better financial performance provide more quantitative disclosures, but their disclosures do not exhibit a more positive tone. Similarly, institutional investor ownership is associated with longer and more positively-toned disclosures, but not other desirable attributes such as specificity, numerical intensity, and readability.

We extend our analyses to test two hypotheses. First, we expect that HC disclosure properties will vary according to the strategic importance of employees. We alternatively define industries as being more critically HC-dependent using the industry codes identified by Edmans (2011) and the HC materiality mapping created by the SASB. We find that firms that are more reliant on human capital to create value, as suggested by these two proxies, generally provide much more positively-toned, shorter. and more readable disclosures. Second, we hypothesize that the characteristics of

5

HC disclosures will change over the course of the first year of the regulation's implementation both because of registrants' general lack of experience in providing HC disclosures prior to the new regulation, and due to the well-known phenomenon of mimicking behavior in the realm of corporate disclosure (Hanley and Hoberg 2010; Drake et al. 2019; De Franco, Fogel-Yaari, and Li 2020). Consistent with expectations, we find that HC disclosures become longer, more similar, and more positively toned over the course of the first year. These findings suggest that firms learn from the disclosures of earlier filers to increase the length and inflate the tone of their HC reporting while relying on more boilerplate language and not improving the specificity and numerical intensity of their disclosures.

In summary, our study provides the first comprehensive large-sample descriptive evidence related to mandatory HC-related 10-K disclosures under the SEC's new reporting regulation during its first year in effect. Our findings complement those of Zhang (2021) who investigates pre-regulation *voluntary* HC disclosures, those of Liang et al. (2021) who examine the determinants of one particular aspect of human capital management, workforce gender diversity, those of Haslag, Sensory, and White (2021) who examine the determinants of both pre- and post-regulation HC disclosures and focus primarily on disclosures related to the attraction and retention of employees, those of Mayew and Zhang (2022) who examine the valuation implications of COVID-19 related human capital management disclosures, as well as those of Bourveau et al. (2022) who examine the changes in the amount and value-relevance of quantitative HC disclosures subsequent to the new regulation. Our study should be of interest to managers who are responsible for corporate financial reporting, ESG and investor relations professionals who are involved in HC-related corporate disclosure decisions, as well as their auditors, all of whom can use our descriptive evidence to benchmark, and improve upon, their own/client firm's disclosures. Our

findings should also be of tremendous relevance to sustainability standard setters and securities regulators who are charged with improving the frameworks and rules under which corporations report HC-related policies and activities. We provide the large-scale evidence required to assess the efficacy of the new regulation that has been subject to widescale criticism in the investment community. Our findings generally validate concerns regarding the heterogeneity (i.e., lack of comparability), lack of specificity, and dearth of numerical disclosures being provided under the new principles-based rules.

II.   RELATED LITERATURE AND EXPECTED FINDINGS

Prior Literature

Beginning at least as early as Marshall in 1890, a robust prior literature discusses the importance of human capital to the value creation process (see, e.g., Lev and Schwartz 1971; Wyatt and Frick 2010; Rouen and Regier 2022; Zhang 2021 for discussions). Documenting this relation empirically, however, has entailed significant challenges because of the scarcity of firm-provided disclosures related to corporate HC management practices (Donangelo et al. 2019; Batish et al. 2021). Much of the capital markets literature therefore relies on external sources of information related to the firm's HC practices, such as a firm's performance on employer rating lists (e.g., Edmans 2011; Fatmy et al. 2022; among others), employee-driven ratings of satisfaction such as those found on sites such as *Glassdoor* (e.g., Green et al. 2019); or measures of regional or firm-specific health and safety (e.g., Cohn and Wardlaw 2016). A significant body of literature also relies upon survey-based measures of HC management practices and relates these metrics to summary measures of corporate performance such as ROA, Tobin's Q, or total shareholder returns.[7] The studies in these literatures generally show a positive correlation between externally-

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[7] See Bernstein and Beeferman (2015) for a broad discussion that also includes a summary of this literature.

rated, employee-assessed, or survey-based measures of HC management and overall firm performance. A related literature investigates the paths through which HC performance leads to better corporate performance. These studies establish a positive link between HC-related policies and practices, and various measures of corporate innovation (e.g., Mayer, Warr, and Zhao 2018; Hossain et al. 2020) and document a negative association between employment policies and the incidence of material internal control weaknesses and financial restatements (Guo et al. 2016).

The literature related to human capital disclosures is somewhat more limited. Ballester, Livnat, and Sinha (2002) find that only a small fraction of all U.S. Compustat firms voluntarily disclose their labor-related costs, with larger firms, firms in regulated or more labor-intensive industries, and those facing relatively little competition having higher disclosure propensities. Wyatt and Frick (2010) report that at the time of their study there was "no known evidence on human capital disclosure in the financial media, conference calls and in other such channels," and report that only 56 out of 7,208 (or 0.8%) of Australian annual reports from 1992 to 2004 referred to the term "human capital."

More recent studies use textual analysis tools and/or ESG-related database information to investigate corporate HC disclosure practices for larger samples of U.S. firms. For example, Haslag et al. (2021) use natural language processing to examine the human capital disclosure practices of a large sample of U.S. firms, including both the pre- and post- new HC regulation periods in their analyses. They find that firms disclose more extensively on topics that are more likely to be material to investors (e.g., firms operating in industries with higher rates of unionization talk more about union-related issues). Most of their analyses focus on the attraction and retention of employees, and they find that these disclosures tend to respond to changes in the underlying stock and flow of employees observed through other channels. Liang et al. (2021)

8

similarly examine one particular aspect of HC disclosure, workforce gender diversity. Using various data sources measuring firm disclosures (e.g., Bloomberg and Revelio Labs), they find that firms are more likely to disclose when they are more gender diverse, and that disclosure is more prevalent in industries with low gender diversity (i.e., in settings where firms could potentially distinguish themselves more). They find that disclosure is also more common when proprietary costs are low and institutional ownership is high. Finally, they document that gender diversity disclosure is associated with increases in CSR diversity ratings, improvements in the tone of media coverage about the firm's diversity, and with increases in the number of CSR-oriented firms investing in the company's stock. Mayew and Zhang (2022) examine the newly regulated human capital disclosures with a special focus on those related to a firm's response to the COVID-19 pandemic and find that such disclosures have positive effects on valuation for firms with high financial flexibility. Bourveau et al. (2022) use a hand-collected sample of 10-K filings from 2018 to 2022 to document that the new regulation has had an economically meaningful impact on the amount and value-relevance of quantitative HC disclosures.

In a study that is most closely related to ours, Zhang (2021) uses machine learning techniques to examine human capital management (HCM) disclosures for a large sample of U.S. firms prior to the 2020 change in SEC regulations. She finds that firms voluntarily disclose more social-oriented HCM information and less operational-oriented HCM information when product market competition is high. She further finds that while voluntary social-oriented disclosures improve social performance ratings and lead to the attraction of more sustainable investors, only operational-oriented HCM disclosures are associated with higher subsequent shareholder value.

Our study differs from these prior works in that we exclusively focus on the post-regulation mandatory reporting rather than to confound these with pre-regulation era voluntary disclosures.

9

Our study also differs from Bourveau et al. (2022), Haslag et al. (2021), Liang et al. (2021), and Mayew and Zhang (2022) in that we do not focus on a single dimension of HC-related disclosure, and we do not attempt to draw links between corporate HC disclosures and their potential capital market consequences. Instead, we provide comprehensive and detailed descriptive evidence related to the full range of content and characteristics of HC disclosures under the new regulatory regime. Our study similarly differs from Zhang (2021) who focuses exclusively on HC content extracted from 10-K's from the pre-regulatory period. This distinction is important because our objective is to provide evidence related to corporate disclosure behaviors under the new reporting regime.

Hypothesized Relations

The nature and importance of human capital to the firm's production function clearly varies with the underlying economics of the firm, and we expect that the characteristics of HC-related disclosures will vary accordingly. Specifically, if firms are seeking to provide HC disclosures that are meaningful and informative to investors, as preliminary evidence provided by Haslag et al. (2021) suggests, then we expect that HC disclosures will be richer in settings where HC is more strategically important to the firm. This is also consistent with the expectation of the SEC, which requires firms to include "a description of any human capital measures or objectives that the registrant focuses on in managing the business, to the extent such disclosures are material to an understanding of the registrant's business" (SEC 2020, 92, Release #33-10825). Specifically, we expect that the HC disclosures of firms operating in industries in which human capital is more strategically important will be *longer, more specific*, *more readable,* and have *greater numerical intensity*.

There is tension underlying these predictions, however, as disclosure theories predict that managers will withhold information in settings where disclosure entails significant proprietary

10

costs (Verrecchia 1983). Given that firms for which HC is more strategically important likely face higher proprietary costs, this will lessen their propensity to provide richer HC disclosures.

In contexts where HC is more strategically important to the firm, managers may also have incentives to use more positive language when discussing their HC policies and practices, given the academic evidence and practitioner studies claiming an important relation between HC performance and innovative and/or overall firm performance. In other words, firms may have incentives to "talk things up" in their HC disclosures, either to imply better performance in a critical aspect of the firm's activities that is difficult to assess externally, and/or to attract and retain top talent to the firm.

Given that the disclosure mandate is new and non-directive (i.e., principles-based) and that many firms offered no, or very limited, HC-related disclosure prior to the change in regulations, we expect that firms filing later in the first year of the new rule's adoption will learn from, and mimic, the disclosures of companies who filed earlier in the cycle. Specifically, we hypothesize that human capital disclosures will become *longer* and *more similar* over the sample period.

III.   SAMPLE, DATA, METHODOLOGY, AND DESCRIPTIVE STATISTICS

Sample

Our sample period covers the first year of the new HC regulation and includes a single observation for each firm for which data is available. We start with the first 10-K filed by each firm subsequent to November 9th, 2020 (i.e., the effective date of the new regulation) through to November 12th, 2021.[8] We next match these 6,987 Form 10-Ks of unique firms with Compustat based on the CIK, the unique identifier assigned by the SEC to each registrant. This process results in a loss of 2,957 firms that do not match into Compustat. Most of these firms are trusts and

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[8] If a company filed more than one 10-K during this period, we keep only the first filing.

investment funds that are not covered by Compustat. We remove 107 firms that do not have any employees, and a further 255 firms due to missing control variables needed for the regression analyses.[9] This results in a final sample of 3,668 unique firms. Panel A of Table 1 provides details of the sampling process.

Panel B of Table 1 presents the sample distribution by Fama-French 12 industries. The "Finance" industry has the largest number of observations (826 or 22.52%), followed by "Healthcare" (758 or 20.67%), and "Business Equipment" (579 or 15.79%). No other single industry accounts for more than 10% of the sample.

[INSERT TABLE 1 HERE]

Data

We use textual analysis to extract the linguistic measures of primary interest to this study using the methodologies described in Appendix I. Financial statement data and stock prices are obtained from Compustat. Institutional ownership data is from WRDS' SEC Analytics Suite. We obtain the human capital materiality data from the SASB's website and the text-based product market concentration measure from the Hoberg-Phillips data library.[10]

Descriptive Statistics Related to HC Disclosure Attributes

Panel A of Table 2 reports the descriptive statistics for each of the major textual attributes of the HC disclosures (*DISC_HC*), with those for the remainder of Item 1 provided as a benchmark (*DISC_ITEM1exHC*). A detailed discussion of the descriptive statistics underlying the textual attributes is provided in Appendix II.

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[9] We manually examine each 10-K for which the number of employees in Compustat is either missing or zero to ensure that these are not data errors. Because firms without employees do not have HC disclosures to make, we drop them from our sample. Most of these firms are investment companies that are managed by advisory firms under a management agreement.

[10] https://www.sasb.org/standards/materiality-map/ and http://hobergphillips.tuck.dartmouth.edu/, respectively.

The descriptive statistics suggest the following three important takeaways. First and foremost, the HC disclosures *vary considerably across firms* in terms of their length, specificity, numerical intensity, and readability. Even within the same industry, objectively quantified linguistic measures of similarity indicate that HC disclosures are quite dissimilar. Although some dissimilarity across firms is expected given the non-prescriptive, principles-based nature of the new HC disclosure regulation, it is interesting to note that the HC content is more dissimilar than the contents of the rest of Item 1 across all comparison groups. The latter is surprising given the expected heterogeneity of Item 1 disclosures that relate to the firm's business, products, strategies, risk, etc. The general lack of similarity of the HC disclosures may be good news to regulators to the extent that it suggests, notwithstanding the absence of specific mandates or detailed disclosure guidance, firms are not simply using boilerplate language that is likely to be uninformative. A less sanguine interpretation of this evidence is that the low level of similarity, even for firms within the same industry, will make it harder for investors to compare HR-related practices across firms, just as some pundits have complained.[11] Given the importance of comparability to readers' ability to benchmark performance, we investigate the determinants of HC disclosure similarity below.

Second, the numerical intensity of the disclosures is low, with the mean (median) amount of HC disclosures being just 3.85% (2.61%) of the total. Fully 5% of firms provide less than one number for every 100 words. Broadly speaking, this large-sample descriptive evidence for a comprehensive set of 10-K filers confirms anecdotal and prior small sample studies' observations that most firms provide few numeric metrics in their HC disclosures (e.g., Batish et al. 2021; Pandit 2021). The evidence also lends support to SEC Chairman Gary Gensler's latest proposal to require

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[11] For example, a survey by Gibson Dunn (2021) reports that "the general lack of prescriptive requirements limited the comparability of disclosures from one company to another and failed to facilitate quantitative analyses of companies' human capital resources."

firms to provide specific metrics, "such as workforce turnover, skills and development training, compensation, benefits, workforce demographics including diversity, and health and safety" (Gary Gensler [@GaryGensler] 2021). The comprehensive evidence presented here suggests that, when left to their own devices, companies mainly provide qualitative discussion rather than the more precise and informative quantitative information being sought by investors, although there is considerable variation in the numerical intensity of disclosures across firms.

Third, the HC disclosures tend to be more readable than the rest of Item 1 and the tone of the HC disclosures is overwhelmingly positive. For example, on average firms use nearly four times as many positive words as negative words in their HC disclosures, which contrasts sharply with a slightly negative net tone for the rest of Item 1. The highly optimistic tone of HC disclosures suggests that companies are either very satisfied with their own HR performance, or that they would like investors to believe this to be the case (i.e., they are greenwashing).

Overall, our large-sample descriptive evidence using objective and scientific linguistics-based measures confirms many of the prior anecdotal complaints and subjectively assessed small sample findings, and also uncovers some surprising features. Specifically, HC disclosures exhibit tremendous heterogeneity and lack of comparability across firms, they lack numerical specificity, and they are overwhelmingly positively-toned and more readable than other Item 1 disclosures.

Descriptive Statistics Related to Other Variables

Panel B of Table 2 presents the descriptive statistics for some firm characteristics and other variables used in the regression analyses. The distribution of *EMP* (the number of employees) is highly skewed and dispersed. An average (median) firm employs 8,807 (997) employees. Firms at the bottom 5% (25%) have 15 (152) or fewer employees. Those at the top 95% (75%) have a workforce of 46,000 (5,450) or more employees. Firm size (*SIZE*, measured by market

14

capitalization) has a mean (median) of 8,633 (1,155) million US dollars. Together these statistics suggest that a public company with a market value of one billion US dollars employs approximately one thousand people, or a market value of one million US dollars entails employment of one person, on average. *SHORT* is an indicator variable, set to one for firms that provide HC disclosures consisting of less than 100 words and to zero otherwise. This variable has a mean of 0.16, suggesting that 16% of firms in our final sample provide HC disclosures of less than 100 words. In untabulated analyses, we find that these firms tend to be smaller, younger, and have fewer employees. Despite this, disclosures of less than 100 words are not likely to satisfy investor demand for information about the firm's HC and HCM practices.

[INSERT TABLE 2 HERE]

Determinants of HC Disclosure Textual Attributes

Table 3 provides a correlation matrix of the regression variables and Table 4 presents the regression results for the determinants of HC disclosures. We begin with a parsimonious model for each textual attribute that includes the following explanatory variables capturing key economic characteristics: firm size (*lnSIZE, i.e., natural log of market value*), the number of employees (*lnEMP*), book-to-market ratio (*BTM*), asset tangibility (*PPE/TA*), financial performance (*ROA*), and institutional ownership (*INST_OWN*).[12] We also include a control capturing the relevant textual attribute from the non-HC portion of Item 1 and an indicator set to one for when the HC disclosures are less than 100 words long (*SHORT*). We do not include industry fixed effects in the regressions, because we want to better observe how a firm's economic characteristics, rather than

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[12] We also consider product market competition to be a potentially important fundamental economic variable that may influence HC disclosure decisions (Verrecchia 1983; X. Li 2010; Ryou, Tsang, and Wang 2022). However, because this variable is not available for our full sample of firms, we choose to exclude it from our main tests and investigate its role as a specification check using the subset of observations for which it is available. The inferences related to the variables included in our parsimonious model are not significantly affected by the inclusion/exclusion of the product market competition variable.

its industry membership, drive its disclosure decision. In untabulated results, we find that the main inferences still hold when we control for industry fixed effects.

[INSERT TABLE 3 HERE]

In Panel A of Table 4, we provide the results for the determinants of length (*lnWORDCOUNT*), specificity (*SPECIFICITY*), and numerical intensity (*NUM_INT*) of HC disclosures. As shown in the first column, our parsimonious model explains 42% of the cross-sectional variation in disclosure length. The number of employees (*lnEMP*), firm size (*lnSIZE*), book-to-market ratio (*BTM*), asset tangibility (*PPE/TA*), institutional ownership (*INST_OWN*), and the length of Item1 excluding the HC disclosures (*lnWORDCOUNT_ITEM1_exHC*) are each positively associated with the length of HC disclosures (*lnWORDCOUNT*). The positive association with firm size is consistent with the general result that large firms tend to disclose more as they also bear a proportionally lower fixed cost of disclosure, whereas firms with more employees presumably also have more extensive or elaborate HC management practices, both necessitating and facilitating enhanced disclosures. The positive association with institutional investor ownership is consistent with the notion that these shareholders are an important source of demand for ESG-related information, and the result suggests that firms are trying to meet this demand. The finding that firms with smaller growth opportunities (higher *BTM*) and higher asset tangibility (*PPE/TA*) provide more voluminous HC disclosures is somewhat puzzling given that these firms are likely to rely less on human capital for value creation relative to high growth, high intangibles firms, although they also likely bear lower proprietary costs of disclosure. The positive coefficient on the length of other Item 1 disclosures is consistent with the notion that firms either are, or are not, of a fuller disclosure "type" (i.e., HC disclosures inherit this property from the firm's other disclosures).

16

[INSERT TABLE 4 HERE]

The second and third columns of Panel A report similar regressions using two alternative measures of the expected informativeness of HC disclosures, the specificity (*SPECIFICITY*) and numerical intensity (*NUM_INT*) of the text, respectively. Similar to the previous results related to HC disclosure length, these two characteristics of HC disclosures each inherit their properties from the other Item 1 disclosures, and the number of employees also results in greater specificity and numerical intensity in the HC disclosures. Interestingly, disclosures that are less than 100 words (*SHORT*) are more numerically intense and specific, consistent with the notion that longer disclosures are not necessarily better (i.e., more informative).

In contrast to previous results for disclosure length, firm size is negatively related to specificity and numerical intensity, while neither the economics of the firm (i.e., asset tangibility and profitability) nor institutional ownership is generally significant in explaining either HC disclosure specificity or numerical intensity. The combined findings related to institutional investors suggest that firms respond to this source of demand for HC information by increasing the quantity, but not necessarily the informativeness, of their HC disclosures. Similarly, the collected results for larger firms suggest that they may be obfuscating by providing larger volumes of qualitative information to superficially comply with the new regulations as the size of their HC disclosures is larger, while the specificity and numerical intensity of their disclosures are worse, on average, than those of smaller firms.

Panel B of Table 4 reports the results of regressions using two alternative readability measures following Li (2008), *FOG* and *KINKAID*, respectively, on the same set of explanatory

17

variables considered in the previous panel.[13] Despite the challenge associated with measuring the readability of corporate disclosures, the two measures reveal some similar patterns and confirm several of key observations from the previous regressions. First, firms with greater institutional ownership do not appear to provide more readable disclosures, as evidenced by the insignificant coefficients on *INST_OWN* in both columns. Second, HC disclosures tend to inherit the readability properties of the firm's other disclosures, as evidenced by the positive and significant coefficients on *FOG_ITEM1exHC* and *KINCAID_ITEM1exHC*. Consistent with the difficulty of reliably measuring the readability of corporate disclosures, no other variables are consistently significant across the two proxies.

Panel C of Table 4 reports the results of tone regressions. Consistent with the previous findings, HC disclosures tend to inherit a positive tone from the other Item 1 disclosures, although this effect is not apparent either for negativity or the net tone of disclosures. Interestingly, a larger number of employees leads to more emotive language in general as the size of the workforce is associated with both greater positivity (*POSPER*) and greater negativity (*NEGPER*). These two attitudes cancel each other out, however, such that the number of employees has no net effect on tone. By contrast, the positivity (negativity) of HC disclosures increases (decreases) with the size of the firm such that larger firms exhibit significantly more net optimism over their human capital management practices. With respect to asset tangibility (*PPE/TA*), the combined results suggest that more industrially-oriented firms are less positive and more negative in their HC-related discussions. Not surprisingly, short disclosures tend to be less emotive, exhibiting less positive and less negative tone than longer disclosures. Finally, firms with greater institutional ownership

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[13] We do not include the *SHORT* indicator in these regressions because the readability measures are only constructed for HC disclosures consisting of at least 100 words.

(*INST_OWN*) tend to use more positively toned words in their discussions, leading to a net overall higher positivity. Combined with previous results, this finding indicates that firms with high institutional ownership tend to talk up their HC management practices using lengthier, albeit less specific or numerically intensive disclosures, consistent with the possibility of greenwashing.

Panel D of Table 4 presents the results of regressions for various measures of the similarity of the firm's HC disclosures, where similarity is alternatively benchmarked relative to the rest of the entire sample, and to the Fama-French 12-industry or 49-industry peer firms. The positive and significant coefficients on firm size (*SIZE*) across the three columns suggest that the HC disclosures of larger firms are generally more similar to those of peer firms regardless of the peer group definition, perhaps because larger firms' disclosures are more voluminous and thus have more potential content overlap. Interestingly, however, firms with more employees have HC disclosures that are more similar when compared to the population as a peer group, but large employers' disclosures are less similar to one another when considered relative to a narrower definition of peers (i.e., Fama-French 49 industries). Surprisingly, high growth firms have more similar disclosures, as evidenced by the negative coefficient on BTM (i.e., an inverse measure of growth options), whereas firms that are better performing on the basis of *ROA* tend to have less similar HC disclosures across all peer groups. The latter result suggests that poorly performing firms are more likely to use less informative boilerplate language whereas high performers are more idiosyncratic in their HC discussions. Short disclosures are less similar to those of peer firms, whereas the positive coefficients on the cosine similarity scores of the firm's other Item 1 disclosures indicate that firms that use more boilerplate language in their business description also tend to use more boilerplate language in their HC disclosures. Thus, similar to other characteristics, the propensity to boilerplate in HC disclosures is inherited from the other Item 1 disclosures.

In Panel E, we additionally include *HHI_PRODUCT*, the Herfindahl–Hirschman Index constructed by Hoberg and Phillips (2016) according to their text-based industry classification, in each of the HC disclosure attribute regressions. As shown, this market concentration variable is significantly negatively (weakly positively) related to the length and positivity (numerical intensity) of disclosures, indicating that in more concentrated (i.e., less competitive) industries, firms provide shorter and less positive disclosures that consist of potentially more informative (i.e., numerically intense) information. These findings are consistent with firms facing less product market competition being less concerned about proprietary costs and thus providing shorter disclosures of higher quality without "talking up" their HC performance.

IV.   HYPOTHESIS TESTS

The Strategic Importance of Human Capital

We investigate the role of the strategic importance of human capital on firms' HC disclosure decisions by examining the incremental explanatory power of two alternative proxies for this construct relative to our previous parsimonious models.[14]

Panel A of Table 5 reports the results of using an indicator variable set to one if the firm operates in an industry identified by Edmans (2011) as being strategically reliant on human capital (*EDMANSindustry*) while those in Panel B use an indicator set to one if the firm is in an industry for which the SASB indicates human capital is material. The results indicate that firms for which HC is more strategically important provide more numerically intense, more readable (i.e., negative coefficient on *KINCAID*, which is an inverse measure of readability), more positive, and more

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[14] We alternatively capture the importance of HC using a measure of its importance to the firm's expense structure calculated as the median employee salary from the AFL-CIO's website times the number of employees, all scaled by revenues. This variable is generally not significant in any of the regressions. The median employee salary is available at https://aflcio.org/paywatch/company-pay-ratios.

Electronic copy available at: https://ssrn.com/abstract=4153845

similar HC disclosures. In contrast to expectations, however, their disclosures are shorter and not more specific, suggesting that, contrary to the intent behind the new regulation, the HC disclosures of firms for which HC is strategically important may not be more informative than those of less HC-reliant peer firms.

[INSERT TABLE 5 HERE]

Time Trends

We expect that later-filing firms will learn from prior filers over the course of the first year of the new regulation. To investigate this, we expand our determinants model to include the filing week (*WEEK*) and also its square term (*WEEK^2*) to control for possible non-linearities.[15] *WEEK* is a count variable that is coded as *one* for HC disclosures filed in the first week in our sample period and increases by *one* for each subsequent week.

Table 6 provides the results of the time trend analyses. Consistent with expectations, *WEEK* is positively and significantly associated with each of *WORDCOUNT* and *SIMILARITY*, indicating that disclosures become longer and more similar over the first year of filing due to a learning effect. The coefficients on *WEEK^2* in these two regressions are both negative and significant, suggesting that the increase in length and similarity occurs at a diminishing rate over time. We also find that HC disclosures become less numerically intensive and more positive over time as indicated by the negative (positive) coefficient on *WEEK* in the *NUM_INT (NETPOS)* regression. Overall, the evidence indicates that firms increase the length and tone of disclosures over time, but not necessarily their informativeness as indicated by the increasing similarity and decreasing

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[15] In unreported regressions, we verify that the inclusion of *week* within the regressions examining the role of the strategic significance of human capital in Table 5 does not alter our conclusions on the test variables of interest. Similarly, alternatively including each of the proxies for the strategic significance of human capital in the regressions reported in Table 6 does not alter our inferences with respect to the role of time on the disclosure attributes.

21

numerical intensity over time. The findings suggest that later filers may have learned how to comply with the new principles-based disclosure requirement in terms of *appearance* rather than in *substance*.

[INSERT TABLE 6 HERE]

V. SUMMARY AND CONCLUSION

The modern economy has given rise to "an explosion of so-called 'human-capital firms' – that is, firms that generate value due to the knowledge, skills, competencies, and attributes of their workforce" (Working Group on Human Capital Accounting Disclosure 2022), yet there remains a paucity of disclosure related to this most valuable of corporate assets. In 2020, the SEC finally updated its regulations to include mandatory HC-related disclosures. Our study provides the first comprehensive examination of corporate disclosures under these new principles-based rules for the full sample of available 10-K filers.

Our results confirm that, in the absence of detailed guidance, corporate HC disclosures are extremely heterogeneous in terms of their length, numerical intensity, tone, readability, and similarity with peer firms; they are generally not very numerically intensive, but they are very positively toned; and they inherit many of the properties of the firm's other Item 1 disclosures. Firms with higher levels of institutional investors have longer and more net positively-toned HC disclosures, but these disclosures are not necessarily more informative as they are less numerically intensive, not more specific, and they are significantly more boilerplate. More profitable firms tend to have more idiosyncratic disclosures, whereas firms with lower ROA tend to provide more boilerplate disclosures. Firms for which HC is strategically important, on the whole, do not appear to provide superior HC disclosures. Finally, time trends suggest that firms have learned over the first year of the non-directive regulation to provide HC disclosures that are longer and more

22

optimistic, but less informative (i.e., more similar or boilerplate and less numerically intensive). Overall, our comprehensive descriptive evidence suggests that, consistent with widespread criticism, the SEC's new principles-based rule has generated HC disclosures that are unlikely to meet investors' needs.

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APPENDIX I

Methodology Used to Obtain Linguistic Measures of HC Disclosure

To ensure accuracy, we manually collect the HC disclosures from Item 1 of each 10-K in our sample.[16] We also extract Item 1 from each 10-K for use as a within-firm benchmark for the HC disclosures. We next develop Python programs to automatically analyze the contents of the HC disclosures to construct the measures described below.

We measure the length of HC disclosures based on word count (*WORDCOUNT*). We also calculate the relative length of HC disclosures as their word count scaled by the word count of Item 1 (*WORDCOUNT_RATIO*). To count the words, we tokenize the text using NLTK[17] and remove punctuations. The word count therefore includes the number of both words (consisting of letters) and numbers, a procedure that closely approximates the word count one would obtain using Microsoft Word.

Our measure of the *specificity* of disclosures is based on the percentage of named entities in the text, following Hope, Hu, and Lu (2016). Specifically, we count the number of named entities using the Stanford 7-class Named Entity Recognizer (NER)[18] and divide this by the total number of words in the HC disclosure. The seven classes include Location, Person, Organization, Money, Percent, Date, and Time. A higher proportion of named entities in the HC disclosures is indicative of the firm providing more specific details about its HCM practice. Following prior studies (e.g., Henry 2008; Bozanic, Dietrich, and Johnson 2017; Dyer, Lang, and Stice-Lawrence 2017), we

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[16] Most firms provide HC disclosures under a separate heading labelled "Human Capital", "Human Capital Management", or "Human Capital Resources". Other less common headings include "Employees", "Employees and Culture", "Our People", "Our Workforce", "Our Colleagues", "Employees and Labor Relations", and "Talent Management and Development".

[17] https://www.nltk.org/

[18] https://nlp.stanford.edu/software/CRF-NER.html

measure *numeric intensity* as the percentage of numbers in the text, calculated as the number of numbers divided by the sum of the number of words and numbers. We use the cosine similarity score to capture the level of *similarity* between disclosures provided by different companies as in Brown and Tucker (2011).

We measure *readability* using the Fog Index, which is based on the average length of sentences and the percentage of complex words (i.e., those with three or more syllables), following Li (2008) and many other prior studies. Despite its weaknesses, the Fog Index has the advantage of being a transparent and replicable measure of readability. To mitigate some of the weaknesses of the Fog Index identified by prior researchers (e.g., Loughran and McDonald 2014), we use the state-of-the-art sentence tokenization algorithm[19] and improve the syllable-counting algorithm by first running a word through the CMU pronouncing dictionary.[20] We also use an alternative readability measure, the Flesch-Kincaid score, to overcome some of the limitations of the FOG index in the context of corporate reporting.[21]

Following Huang, Teoh, and Zhang (2014), we measure the *net tone* of HC disclosures as positive words minus negative words, scaled by the total number of non-numerical words. Tonal words are identified using the Loughran and McDonald (2011) dictionaries. We also calculate the percentages of positive words and negative words.

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[19] The NLTK implemented the Punkt sentence tokenizer, which represents a great improvement on the sentence tokenization algorithm in the Perl library that Li (2008) uses in his study.

[20] https://www.nltk.org/_modules/nltk/corpus/reader/cmudict.html

[21] Unlike the FOG index, which considers words with three or more syllables to be complex and thus making a text harder to read, the Flesch-Kincaid score considers instead the average number of syllables of all words as a determinant of readability. Since many words of three or more syllables are not complex in the context of corporate reporting, the Flesch-Kincaid is well-suited to the current context.

APPENDIX II

Detailed Discussion of the Descriptive Statistics of the HC Disclosure Characteristics

As shown by the variable *WORDCOUNT* in Panel A, Table 2, the mean (median) HC disclosure consists of 510 (430) words. The length of the HC disclosure varies considerably across firms, ranging from 38 words at the 5th percentile to 1,313 words at the 95th percentile, and with a standard deviation of 403 words. Firms provide the new HC disclosures in Item 1 of their 10-K filings. Item 1 is a relatively large section of a typical 10-K, consisting of an average (median) of 8,658 (6,629) words excluding the HC section, as indicated by the variable *WORDCOUNT_ITEM1exHC*. The variable *WORDCOUNT_RATIO* suggests that, in relative terms, HC disclosures represent 8.77% (5.77%) of Item 1 for an average (median) firm.[22] The proportion of Item 1 represented by HC disclosures varies greatly across firms, however, as evidenced by common measures of dispersion such as the standard deviation, interquartile range (*IQR*), and coefficient of variation (*CV*). This finding, the first based upon a large and comprehensive sample of 10-K filings, is non-trivial as it provides systematic evidence to confirm widespread anecdotal and several small (non-random) sample observations that HC disclosures during the first year of the new regulation were widely varying across firms, both in absolute terms and relative to the rest of Item 1. This variation in the length of HC disclosures is presumably due to the SEC's principles-based approach, which allows firms total discretion in deciding what, and how much, to disclose about their HCM practices "to the extent such disclosures are material to an understanding of the registrant's business" (SEC 2020, 92, Release #33-10825).

The descriptive statistics for the *specificity* variable indicate that, on average (at the median), 6.53% (5.24%) of words in the HC disclosures are named entities. These percentages are

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[22] For this ratio, we use the word count of the entire Item 1 as the denominator.

lower than those for the remainder of Item 1, the contents of which has a mean (median) *specificity* of 8.78% (8.10%), as indicated by the *SPECIFICITY_ITEM1exHC* variable. Similar to the total word count, the HC *specificity* variable exhibits considerable variation.

Numerical intensity (*NUM_INT*), which is calculated as the percentage of numbers in the text, is also a measure of the informativeness or precision of disclosure in that numerical information is presumed to be more specific than qualitative disclosures. The *NUM_INT* of HC disclosures is just 3.85% (2.61%) for an average (median) firm in our sample.[23] These scores are low in absolute terms, albeit slightly higher than the numerical intensity of the rest of Item 1, which has a mean (median) of 2.94% (2.45%). Looking at the tails of the *NUM_INT* distribution, we find that 5% of firms provide less than one number for every one hundred words in their HC disclosures, whereas the 5% with the highest numerical intensity provide slightly more than one number for every 10 words. As with the other linguistic measures, the HC disclosures exhibit considerable cross-sectional variation.

The FOG index indicates that HC disclosures are slightly more readable than the rest of the contents of Item 1, as evidenced by means of 19.7 versus 20.1, respectively, where higher scores are indicative of *less* readable text.[24] Similar results are obtained using the Flesch-Kincaid score. The relatively greater readability of HC disclosures is consistent with the greater prevalence of numbers in HC disclosures as prior research finds that numerical intensity is positively correlated with readability (Siano and Wysocki 2018). As with the other textual features, HC disclosures exhibit considerably more variation in readability than the rest of Item 1.

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[23] Consistent with the prior literature (e.g., Blankespoor 2019), we do not count dates and times as numbers.
[24] To calculate the readability measures, we require the HC portion of the 10-K to contain at least 100 words, which results in a smaller number of observations for the readability scores.

We capture linguistic tone using a number of different measures, all of which present a consistent picture of very positively-toned language being used in the HC disclosures. First, the percentage of positive words (*POS_PER*) shows that, on average, firms use 2.2% positively-toned words in their HC disclosures, which is two times higher than the percentage of positively-toned words in the rest of Item 1. The average percentage of negatively toned words in the HC disclosures (*NEG_PER*) is just 0.58% (0.48%), or about half the rate of negative words in the rest of Item1. Together these statistics also indicate that firms use approximately four times as many positive words as negative words in their HC disclosures.

On a net basis, we find that *NETPOS* (i.e., percentage of positive words – percentage of negative words) has a mean of 1.62, indicating that HC disclosures have an overall highly positive tone. This is in sharp contrast to the net tone of non-HC disclosures in Item 1, which has a slightly negative mean of -0.07. At the 25th percentile, *NET_POS* has a value of 0.81, suggesting that most firms provide HC disclosures having an overall positive tone. In contrast, *NETPOS_ITEM1exHC* has a median of -0.12, suggesting that more than 50% of firms exhibit a negative tone in their disclosures of non-HC topics in Item 1. Finally, although HC disclosures exhibit greater variation in the percentage of both positive and negative tone words (*POSPER* and *NEGPER*, respectively) relative to non-HC disclosures in Item 1, HC disclosures are much less dispersed in *net positivity* than other topics in Item 1 as the vast majority of firms describe their human capital management practices in highly net positive tones.

We examine the similarity of HC disclosures using the cosine similarity score, which is bounded between *zero* and *one*, with *zero* indicating that two documents have no shared words and *one* indicating that two documents are identical. We calculate three firm-level similarity measures: [1] the average of all pairwise cosine similarity scores of a firm's HC disclosures with

those from all other firms (*SIMILARITY*); [2] the average using all peer firms in the same Fama-French 12-industry sector (*SIMILARITY_FF12*) as the comparative group; and, [3] the average using all peer firms in the same Fama-French 49-industry sector (*SIMILARITY_FF49*). The mean *SIMILARITY* score of 0.10 suggests that HC disclosures are quite dissimilar across firms, and there is very little increase in similarity when compared to firms in the same industries.

APPENDIX III
Variable Definitions

Variable	Definition
HC disclosure variables	
WORDCOUNT	Word count of human capital (HC) disclosures; words include not only those made of alphabetic characters but also numbers.
SHORT	Indicator variable for short human capital disclosures, coded as one for human capital disclosures less than 100 words, and as zero otherwise.
WORDCOUNT_RATIO	Word count of HC disclosures divided by word count of all disclosures in Item 1, multiplied by 100.
SPECIFICITY	Number of words that are named entities divided by number of all words, multiplied by 100, for HC disclosures; named entities are tagged by using the Stanford 7-class Named Entity Recognizer.
NUM_INT	Number of numbers divided by number of all words (alphabetic words and numbers), multiplied by 100, for HC disclosures.
FOG	Gunning Fog index, defined as 0.4 * (average word count per sentence + percentage of complex words), for HC disclosures; a complex word is a word that has three or more syllables.
KINCAID	Flesch-Kincaid grade level score, defined as 0.39 * average word count per sentence + 11.8 * average syllable count per word – 15.59, for HC disclosures.
POSPER	Number of positive words, per word list from Loughran and McDonald (2011), divided by total number of words (excluding numbers) and multiplied by 100, for HC disclosures.
NEGPER	Number of negative words, per word list from Loughran and McDonald (2011), divided by total number of words (excluding numbers) and multiplied by 100, for HC disclosures.
NETPOS	Net positivism, calculated as percentage of positive words minus percentage of negative words (i.e., *POSPER – NEGPER*).
SIMILARITY	Average of all pairwise cosine similarity scores between HC disclosures of a firm and those of all other firms; the weight of each word is adjusted by its TF-IDF score.
SIMILARITY_FF12	Average of all pairwise cosine similarity scores between HC disclosures of a firm and those of peer firms in the same Fama-French 12-industries sector; the weight of each word is adjusted by its TF-IDF score.
SIMILARITY_FF49	Average of all pairwise cosine similarity scores between HC disclosures of a firm and those of peer firms in the same Fama-French 49-industries sector; the weight of each word is adjusted by its TF-IDF score.
Item 1 disclosure variables	
WORDCOUNT_ITEM1exHC	Same as *WORDCOUNT*, except that constructed on the contents of Item 1 excluding HC disclosures.
SPECIFICITY_ITEM1exHC	Same as *SPECIFICITY*, except that constructed on the contents of Item 1 excluding HC disclosures.
NUM_INT_ITEM1exHC	Same as *NUM_INT*, except that constructed on the contents of Item 1 excluding HC disclosures.

Variable	Definition
FOG_ITEM1exHC	Same as FOG, except that constructed on the contents of Item 1 excluding HC disclosures.
POSPER_ITEM1exHC	Same as POSPER, except that constructed on the contents of Item 1 excluding HC disclosures.
NEGPER_ITEM1exHC	Same as NEGPER, except that constructed on the contents of Item 1 excluding HC disclosures.
NETPOS_ITEM1exHC	Same as NETPOS, except that constructed on the contents of Item 1 excluding HC disclosures.
SIMILARITY_ITEM1exHC	Same as SIMILARITY, except that constructed on the contents of Item 1 excluding HC disclosures.
SIMILARITY_FF12_ITEM1exHC	Same as SIMILARITY_FF12, except that constructed on the contents of Item 1 excluding HC disclosures.
SIMILARITY_FF49_ITEM1exHC	Same as SIMILARITY_FF49, except that constructed on the contents of Item 1 excluding HC disclosures.

Firm Characteristics and Other Variables

Variable	Definition
EMP	Number of employees at fiscal year end. We manually examine 10-Ks for firms having a missing or zero value in Compustat to ensure data accuracy.
SIZE	Market capitalization of the firm at fiscal year end.
BTM	Ratio of book value of equity to market capitalization.
PPE/AT	Ratio of net property plant and equipment to total assets. For 218 REITs missing PPE in Compustat, we calculate PPE as the sum of net investment in property, equipment, and property held for development, manually collected from 10-Ks.
ROA	Return on assets, defined as income before extraordinary items divided by average total assets. We manually collect income before extraordinary items from 10-Ks for 25 firms, which have missing values for this variable in Compustat.
INST_OWN	Percentage of institutional ownership from 13F forms from the SEC Analytics of WRDS.
HHI_PRODUCT	Herfindahl-Hirschman Index of product market concentration based on text-based industry classification from Hoberg and Philips (2016).
EDMANSindustry	Indicator variable for Edmans' industries, coded one for firms in certain industries where human capital is an important input per Edmans (2011), zero otherwise. These industries are consumer goods, hardware, software, measuring and control equipment, electronic equipment, pharmaceuticals, retail, and financial services.
SASBindustry	Indicator variable for SASB industries, coded as one for firms in certain industries, where any three categories of human capital – Labor Practices, Employee Health & Safety, and Employee Engagement, Diversity & Inclusion is a material issue, and zero otherwise.
WEEK	Count number of the week when the 10-K form is filed in the sample period, with filings in the first week starting from November 9, 2020 taking the value of one and increasing by one for each subsequent week.
$WEEK^2$	WEEK squared.

TABLE 1
Sample

Panel A: Sample Determination

	Number of firms
Total number of firms that filed 10-K forms from Nov 9, 2020 to Nov 12, 2021	6,987
Less:	
Firms not covered by Compustat	(2,957)
Number of firms in the intersection of EDGAR and Compustat	4,030
Less:	
Firms with no employees	(107)
Firms with insufficient data for computing control variables	(255)
Final sample	3,668

Panel B: Sample Distribution by Fama-French 12 Industries

Fama-French 12 industries	Freq.	Percent
Finance	826	22.52
Healthcare, Medical Equipment, and Drugs	758	20.67
Business Equipment (Computers, Software, and Electronic Equipment)	579	15.79
Other (Mines, Construction, Building Material, Transportation, Hotels, Business Service, Entertainment)	412	11.23
Manufacturing (Machinery, Trucks, Planes, Office Furniture, Paper, Commercial Printing)	289	7.88
Wholesale, Retail, and Some Services (Laundries, Repair Shops)	261	7.12
Consumer Non-durables (Food, Tobacco, Textiles, Apparel, Leather, Toys)	136	3.71
Oil, Gas, and Coal Extraction and Products	113	3.08
Consumer Durables (Cars, TV's, Furniture, Household Appliances)	81	2.21
Chemicals and Allied Products	81	2.21
Utilities	80	2.18
Telephone and Television Transmission	52	1.42
Total	3,668	100

TABLE 2
Descriptive Statistics

Panel A: Summary Statistics of Textual Variables

N=3,668	MEAN	SD	P5	P25	P50	P75	P95	CV	IQR
Human Capital Disclosure from Item 1 (*DISC_HC*)									
WORDCOUNT	510	403	38	169	430	751	1313	0.79	583
WORDCOUNT_RATIO (%)	8.77	9.36	0.41	1.86	5.77	12.37	28.19	1.07	10.52
SPECIFICITY	6.53	5.05	1.49	3.33	5.24	8.15	16.58	0.77	4.83
NUM_INT	3.85	3.71	0.93	1.74	2.61	4.30	11.11	0.96	2.55
FOG (N=3,072)	19.7	1.86	16.63	18.45	19.62	20.78	22.78	0.09	2.33
KINCAID (N=3,072)	16.3	1.66	13.62	15.22	16.17	17.22	19.07	0.10	2.00
POSPER	2.20	1.13	0.00	1.54	2.22	2.88	4.07	0.51	1.34
NEGPER	0.58	0.57	0.00	0.00	0.48	0.88	1.69	0.98	0.88
NETPOS	1.62	1.25	-0.19	0.81	1.61	2.43	3.73	0.77	1.62
SIMILARITY	0.10	0.03	0.05	0.08	0.11	0.12	0.14	0.27	0.04
SIMILARITY_FF12	0.11	0.03	0.05	0.09	0.12	0.14	0.16	0.30	0.05
SIMILARITY_FF49	0.12	0.04	0.05	0.10	0.12	0.15	0.18	0.33	0.05
The Remainder of Item 1 (*DISC_ITEM1exHC*)									
WORDCOUNT_ITEM1exHC	8,658	6,658	1,792	3,882	6,629	11,287	23,595	0.77	7,405
SPECIFICITY_ITEM1exHC	8.78	3.51	4.23	6.17	8.10	10.76	15.51	0.40	4.59
NUM_INT_ITEM1exHC	2.94	1.75	1.16	1.82	2.45	3.39	6.78	0.60	1.57
FOG_ITEM1exHC	20.1	1.6	17.4	19.1	20.2	21.1	22.5	0.08	2.07
KINCAID_ITEM1exHC	17.3	1.3	15.3	16.5	17.3	18.1	19.3	0.07	1.60
POSPER_ITEM1exHC	1.05	0.47	0.41	0.70	0.99	1.32	1.94	0.45	0.62
NEGPER_ITEM1exHC	1.12	0.58	0.30	0.65	1.04	1.52	2.15	0.52	0.87
NETPOS_ITEM1exHC	-0.07	0.85	-1.40	-0.69	-0.12	0.54	1.35	-12.12	1.23
SIMILARITY_ITEM1exHC	0.13	0.03	0.09	0.12	0.13	0.15	0.18	0.19	0.04
SIMILARITY_FF12_ITEM1exHC	0.18	0.06	0.11	0.14	0.17	0.22	0.30	0.32	0.09
SIMILARITY_FF49_ITEM1exHC	0.21	0.08	0.12	0.15	0.19	0.26	0.41	0.39	0.10

Panel A presents the summary statistics for textual variables for HC disclosures and the remainder of Item 1 excluding HC disclosures. All variables are defined in Appendix III. SD stands for standard deviation, CV for Coefficient of Variation, and IQR for Interquartile Range.

TABLE 2
Descriptive Statistics (Continued)

Panel B: Summary Statistics of Firm Characteristics and Other Variables

N=3,668	**MEAN**	**SD**	**P5**	**P25**	**P50**	**P75**	**P95**
EMP	8,807	24,139	15	152	997	5,450	46,000
SIZE (in million $)	8,633	25,247	32	236	1,155	4,848	39,795
BTM	0.58	0.60	0.05	0.19	0.41	0.79	1.57
PPE/TA	0.22	0.26	0.00	0.03	0.11	0.30	0.83
ROA	-0.09	0.26	-0.64	-0.12	0.01	0.04	0.14
INST_OWN	0.53	0.34	0.00	0.21	0.62	0.84	0.97
HHI_PRODUCT (N=3,227)	0.28	0.28	0.05	0.08	0.16	0.37	1.00
SHORT	0.16						
EDMANSindustry	0.48						
SASBindustry	0.83						

Panel B presents the summary statistics for firm characteristics and other variables used in regression analyses. SD stands for Standard Deviation. All variables are defined in Appendix III. All continuous variables are winsorized at 1% and 99% percentiles.

TABLE 3
Correlation Matrix

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]
[1] lnWORDCOUNT		-0.17	-0.50	0.04	0.17	0.22	0.43	0.10	0.72	0.53	0.48	0.61	0.57	-0.08	0.21	0.29	0.44	-0.64	-0.04	-0.13	0.02
[2] SPECIFICITY	-0.41		0.65	-0.25	-0.09	-0.19	-0.14	-0.14	-0.35	-0.36	-0.37	0.07	-0.06	0.10	0.07	0.04	-0.04	0.37	0.09	-0.05	0.03
[3] NUM_INT	-0.66	0.76		-0.18	-0.19	-0.26	-0.24	-0.17	-0.45	-0.39	-0.38	-0.18	-0.27	0.08	0.00	-0.09	-0.20	0.53	0.06	0.07	0.07
[4] FOG	0.04	-0.24	-0.17		0.90	-0.03	0.02	-0.03	0.22	0.20	0.18	-0.08	-0.02	0.01	-0.03	-0.03	0.00	.	-0.09	0.02	-0.02
[5] KINCAID	0.15	-0.08	-0.16	0.91		0.00	0.03	-0.01	0.20	0.16	0.15	0.08	0.10	0.02	0.02	0.06	0.06	.	-0.05	-0.05	-0.04
[6] POSPER	0.28	-0.29	-0.34	-0.03	-0.04		0.05	0.89	0.31	0.22	0.17	0.21	0.24	-0.07	0.01	0.11	0.20	-0.21	-0.06	0.06	0.04
[7] NEGPER	0.32	-0.14	-0.22	0.01	0.01	0.02		-0.34	0.27	0.17	0.14	0.30	0.22	-0.01	0.20	0.14	0.20	-0.39	0.05	-0.14	-0.01
[8] NETPOS	0.10	-0.20	-0.21	-0.03	-0.04	0.89	-0.44		0.24	0.18	0.13	0.11	0.17	-0.07	-0.06	0.06	0.13	-0.11	-0.09	0.13	0.06
[9] SIMILARITY	0.73	-0.46	-0.52	0.20	0.15	0.37	0.16	0.26		0.84	0.75	0.35	0.41	-0.14	0.05	0.12	0.32	-0.51	-0.10	0.06	0.03
[10] SIMILARITY_FF12	0.52	-0.46	-0.46	0.20	0.14	0.25	0.07	0.19	0.83		0.90	0.18	0.31	-0.18	-0.02	-0.03	0.20	-0.40	-0.12	0.14	0.01
[11] SIMILARITY_FF49	0.39	-0.45	-0.44	0.15	0.12	0.11	0.01	0.09	0.60	0.84		0.16	0.26	-0.09	-0.10	-0.01	0.15	-0.38	-0.19	0.16	0.03
[12] lnEMP	0.59	-0.03	-0.19	-0.07	0.06	0.24	0.22	0.11	0.38	0.16	0.04		0.70	-0.08	0.32	0.47	0.47	-0.37	0.13	-0.17	-0.01
[13] lnSIZE	0.57	-0.16	-0.33	-0.02	0.09	0.24	0.13	0.16	0.42	0.31	0.22	0.69		-0.36	0.14	0.42	0.48	-0.42	-0.04	-0.07	0.01
[14] BTM	-0.09	0.09	0.10	0.00	0.01	-0.06	0.01	-0.06	-0.13	-0.18	-0.11	-0.07	-0.33		-0.05	-0.01	-0.07	0.08	-0.21	-0.09	-0.01
[15] PPE/TA	0.14	0.03	-0.03	-0.01	0.02	-0.02	0.13	-0.07	0.00	-0.06	-0.12	0.14	0.08	0.15		0.15	0.21	-0.11	0.16	-0.47	0.09
[16] ROA	0.31	0.00	-0.11	-0.06	0.04	0.11	0.12	0.04	0.11	-0.08	-0.03	0.48	0.40	0.10	0.13		0.31	-0.18	0.14	-0.17	-0.05
[17] INST_OWN	0.46	-0.13	-0.24	-0.01	0.05	0.22	0.14	0.13	0.35	0.21	0.11	0.48	0.49	-0.07	0.14	0.34		-0.33	-0.03	-0.07	0.01
[18] SHORT	-0.78	0.46	0.66	.	.	-0.25	-0.27	-0.10	-0.55	-0.43	-0.36	-0.36	-0.42	0.08	-0.10	-0.22	-0.35		0.07	0.07	-0.01
[19] HHI_PRODUCT	-0.12	0.10	0.12	-0.06	-0.04	-0.06	0.03	-0.07	-0.13	-0.15	-0.21	0.02	-0.11	-0.10	-0.02	0.07	-0.11	0.12		-0.22	-0.06
[20] EDMANSindustry	-0.12	-0.03	0.04	0.02	-0.05	0.06	-0.15	0.13	0.07	0.15	0.13	-0.15	-0.06	-0.08	-0.45	-0.19	-0.07	0.07	-0.20		0.19
[21] SASBindustry	0.02	0.02	0.02	-0.02	-0.03	0.06	-0.03	0.07	0.04	0.02	-0.03	0.01	0.01	-0.01	0.13	-0.04	0.02	-0.01	-0.09	0.19	

Pearson (Spearman) correlations are reported below (above) the diagonal. No coefficients are reported for the two readability variables, *FOG* and *KINCAID*, because they are constructed only on HC disclosures of at least 100 words (i.e., *SHORT*=0). Coefficients with significance levels at 5% or below are boldfaced. All variables are defined in Appendix III.

TABLE 4
TABLE 4
Determinants of Human Capital Disclosure

Panel A: Disclosure Volume and Informativeness

Variables	(1) lnWORDCOUNT	(2) SPECIFICITY	(3) NUM_INT
lnEMP	0.143	0.369	0.237
	(17.45)***	(8.55)***	(8.37)***
lnSIZE	0.134	-0.234	-0.314
	(12.94)***	(4.10)***	(8.62)***
BTM	0.050	-0.077	-0.134
	(1.76)*	(0.49)	(1.27)
PPE/TA	0.236	0.491	0.197
	(4.52)***	(1.64)	(1.15)
ROA	-0.026	0.518	0.505
	(0.38)	(1.32)	(1.92)*
INST_OWN	0.571	-0.255	-0.241
	(12.32)***	(1.08)	(1.73)*
SHORT		6.694	6.457
		(21.02)***	(29.34)***
lnWORDCOUNT_ITEM1exHC	0.046		
	(2.18)**		
SPECIFICITY_ ITEM1exHC		0.236	
		(9.76)***	
NUM_INT_ ITEM1exHC			0.106
			(3.72)***
Constant	3.088	2.624	3.287
	(15.57)***	(6.15)***	(12.11)***
R^2	0.42	0.27	0.46
N	3,668	3,668	3,668

Panel A presents the regression results for the determinants of disclosure length (*lnWORDCOUNT*), specificity (*SPECIFICITY*), and numerical intensity (*NUM_INT*), in Columns (1) to (3), respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

TABLE 4
Determinants of Human Capital Disclosure (Continued)

Panel B: Disclosure Readability

Variables	(1) *FOG*	(2) *KINCAID*
lnEMP	-0.031	0.062
	(1.45)	(3.33)***
lnSIZE	0.028	0.024
	(1.08)	(1.05)
BTM	-0.020	-0.015
	(0.32)	(0.28)
PPE/TA	0.178	0.356
	(1.33)	(3.10)***
ROA	-0.367	0.053
	(1.95)*	(0.31)
INST_OWN	0.099	0.028
	(0.85)	(0.29)
FOG_ITEM1exHC	0.187	
	(7.60)***	
KINCAID_ ITEM1exHC		0.396
		(14.66)***
Constant	15.792	8.669
	(29.55)***	(17.66)***
R^2	0.03	0.09
N	3,072	3,072

Panel B presents the regression results for the determinants of disclosure readability. The dependent variables in columns (1) and (2) are Gunning Fog Index (*FOG)* and Flesch-Kincaid readability score *(KINKAID),* respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

TABLE 4
Determinants of Human Capital Disclosure (Continued)

Panel C: Disclosure Tone

Variables	(1) *POSPER*	(2) *NEGPER*	(3) *NETPOS*
lnEMP	0.042	0.048	-0.002
	(3.44)***	(9.15)***	(0.13)
lnSIZE	0.044	-0.036	0.076
	(3.20)***	(5.15)***	(4.84)***
BTM	0.060	-0.010	0.037
	(1.62)	(0.56)	(0.86)
PPE/TA	-0.239	0.200	-0.473
	(3.48)***	(5.28)***	(5.86)***
ROA	-0.139	0.016	-0.186
	(1.47)	(0.36)	(1.81)*
INST_OWN	0.296	0.015	0.296
	(4.91)***	(0.47)	(4.19)***
SHORT	-0.489	-0.361	-0.137
	(7.18)***	(11.54)***	(1.87)*
POSPER_ITEM1exHC	0.195		
	(4.88)***		
NEGPER_ITEM1exHC		-0.013	
		(0.76)	
NETPOS_ITEM1exHC			0.021
			(0.79)
Constant	1.330	0.533	1.028
	(12.18)***	(9.72)***	(9.09)***
R^2	0.11	0.11	0.04
N	3,668	3,668	3,668

Panel C presents the regression results for the determinants of disclosure tone. The dependent variables in columns (1) through (3) are percentage of positive tone words (*POSPER*), percentage of negative tone words (*NEGPER*), and net positivism (*NETPOS, i.e., POSPER* minus *NEGPER*), respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

TABLE 4
Determinants of Human Capital Disclosure (Continued)

Panel D: Disclosure Similarity

Variables	(1) SIMILARITY	(2) SIMILARITY_FF12	(3) SIMILARITY_FF49
lnEMP	0.002	0.000	-0.001
	(7.71)***	(1.55)	(2.89)***
lnSIZE	0.001	0.003	0.004
	(4.63)***	(7.01)***	(7.36)***
BTM	-0.002	-0.006	-0.006
	(2.13)**	(6.33)***	(5.57)***
PPE/TA	-0.005	-0.005	-0.008
	(3.15)***	(3.10)***	(3.62)***
ROA	-0.014	-0.026	-0.015
	(8.10)***	(9.97)***	(4.72)***
INST_OWN	0.010	0.007	0.001
	(7.77)***	(4.07)***	(0.36)
SHORT	-0.032	-0.034	-0.037
	(27.52)***	(20.41)***	(17.80)***
SIMILARITY_ITEM1exHC	0.120		
	(7.90)***		
SIMILARITY_FF12_ITEM1exHC		0.120	
		(12.87)***	
SIMILARITY_FF49_ITEM1exHC			0.162
			(19.94)***
Constant	0.063	0.075	0.081
	(21.33)***	(25.14)***	(22.25)***
R^2	0.39	0.31	0.28
N	3,668	3,668	3,668

Panel D presents the regression results for the determinants of disclosure similarity. The dependent variables in columns (1) through (3) are similarity to all other firms (*SIMILARITY*), to peer firms in the same Fama-French 12-industry (*SIMILARITY_FF12*), and to peer firms in the same Fama-French 49-industry, respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

TABLE 4
Determinants of Human Capital Disclosure (Continued)

Panel E: Impact of Product Market Concentration

Variables	(1) lnWORDCOUNT	(2) SPECIFICITY	(3) NUM_INT	(4) FOG	(5) KINCAID	(6) NETPOS	(7) SIMILARITY
lnEMP	0.144	0.264	0.131	-0.068	0.051	-0.048	0.001
	(15.06)***	(5.41)***	(4.25)***	(2.89)***	(2.53)**	(3.25)***	(3.34)***
lnSIZE	0.126	-0.120	-0.210	0.073	0.049	0.090	0.002
	(10.82)***	(1.94)*	(5.60)***	(2.72)***	(2.08)**	(5.28)***	(6.62)***
BTM	0.026	0.077	-0.037	-0.017	-0.016	0.037	-0.001
	(0.87)	(0.47)	(0.35)	(0.27)	(0.29)	(0.83)	(1.47)
PPE/TA	0.228	0.374	0.059	0.080	0.318	-0.504	-0.007
	(4.25)***	(1.22)	(0.34)	(0.59)	(2.74)***	(6.15)***	(4.35)***
ROA	-0.067	0.289	0.236	-0.328	-0.085	0.054	-0.010
	(0.80)	(0.62)	(0.72)	(1.44)	(0.41)	(0.46)	(4.41)***
INST_OWN	0.601	-0.221	-0.332	-0.140	-0.092	0.296	0.007
	(11.33)***	(0.82)	(2.06)**	(1.11)	(0.85)	(3.73)***	(4.90)***
HHI_PRODUCT	-0.278	0.483	0.405	-0.073	0.072	-0.179	-0.000
	(4.44)***	(1.48)	(1.90)*	(0.50)	(0.59)	(2.12)**	(0.21)
SHORT		6.962	6.745			-0.123	-0.036
		(19.31)***	(27.21)***			(1.49)	(28.31)***
lnWORDCOUNT_ITEM1exHC	0.012						
	(0.47)						
SPECIFICITY_ITEM1exHC		0.229					
		(9.09)***					
NUM_INT_ITEM1exHC			0.106				
			(3.63)***				
FOG_ITEM1exHC				0.182			
				(6.85)***			
KINCAID_ITEM1exHC					0.401		
					(13.60)***		

44

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NETPOS_ITEM1exHC						0.026	
						(0.94)	
SIMILARITY_ITEM1exHC							0.110
							(6.59)***
Constant	3.518	2.397	3.217	16.050	8.555	1.338	0.071
	(14.91)***	(5.10)***	(10.81)***	(27.33)***	(15.90)***	(10.84)***	(20.48)***
R^2	0.41	0.27	0.48	0.03	0.09	0.04	0.40
N	3,227	3,227	3,227	2,751	2,751	3,227	3,227

Panel E presents the regression results for the determinants of HC disclosure attributes, with product market concentration (*HHI_PRODUCT*) included as an additional explanatory variable. The dependent variables in columns (1) through (7) are *lnWORDCOUNT*, *SPECIFICITY*, *NUM_INT*, *FOG*, *KINCAID*, *NETPOS*, and *SIMILARITY*, respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

TABLE 5
Strategic Importance of Human Capital

Panel A: Edmans' Industries

Variables	(1) lnWORDCOUNT	(2) SPECIFICITY	(3) NUM_INT	(4) FOG	(5) KINCAID	(6) NETPOS	(7) SIMILARITY
EDMANSindustry	-0.075	-0.003	0.230	-0.014	-0.146	0.310	0.005
	(2.40)**	(0.02)	(2.20)**	(0.18)	(2.20)**	(6.70)***	(5.23)***
lnEMP	0.142	0.369	0.242	-0.031	0.058	0.004	0.002
	(17.41)***	(8.49)***	(8.51)***	(1.45)	(3.11)***	(0.31)	(8.00)***
lnSIZE	0.135	-0.234	-0.319	0.028	0.028	0.070	0.001
	(13.01)***	(4.09)***	(8.72)***	(1.08)	(1.22)	(4.48)***	(4.53)***
BTM	0.050	-0.076	-0.138	-0.020	-0.010	0.033	-0.002
	(1.74)*	(0.49)	(1.31)	(0.31)	(0.18)	(0.78)	(1.99)**
PPE/TA	0.178	0.488	0.391	0.167	0.235	-0.216	-0.001
	(3.13)***	(1.50)	(2.08)**	(1.12)	(1.83)*	(2.40)**	(0.86)
ROA	-0.038	0.517	0.564	-0.371	0.011	-0.111	-0.013
	(0.56)	(1.32)	(2.13)**	(1.95)*	(0.06)	(1.07)	(7.55)***
INST_OWN	0.577	-0.255	-0.260	0.100	0.040	0.272	0.010
	(12.44)***	(1.08)	(1.86)*	(0.85)	(0.40)	(3.86)***	(7.57)***
SHORT		6.694	6.452			-0.143	-0.032
		(21.02)***	(29.32)***			(1.97)**	(28.08)***
lnWORDCOUNT_ITEM1exHC	0.055						
	(2.53)**						
SPECIFICITY_ITEM1exHC		0.236					
		(9.71)***					
NUM_INT_ITEM1exHC			0.104				
			(3.66)***				
FOG_ITEM1exHC				0.187			
				(7.58)***			
KINCAID_ITEM1exHC					0.396		
					(14.67)***		

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NETPOS_ITEM1exHC						0.029 (1.13)	
SIMILARITY_ITEM1exHC							0.100 (6.48)***
Constant	3.061 (15.39)***	2.626 (5.95)***	3.157 (11.50)***	15.795 (29.57)***	8.757 (17.79)***	0.848 (7.32)***	0.063 (21.41)***
R^2	0.42	0.27	0.46	0.03	0.09	0.05	0.39
N	3,668	3,668	3,668	3,072	3,072	3,668	3,668

Panel A presents the regression results for the impact of the strategic importance of HC on the firms' disclosure decisions using *EDMANSindustry* as the proxy for the strategic importance of HC. *EDMANSindustry* is coded as *one* for industries identified by Edmans (2011) as being strategically reliant on human capital, and *zero* otherwise. The dependent variables in columns (1) through (7) are *lnWORDCOUNT*, *SPECIFICITY*, *NUM_INT*, *FOG*, *KINCAID*, *NETPOS*, and *SIMILARITY*, respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

TABLE 5
Strategic Importance of Human Capital (Continued)

Panel B: SASB Materiality Industry

Variables	(1) lnWORDCOUNT	(2) SPECIFICITY	(3) NUM_INT	(4) FOG	(5) KINCAID	(6) NETPOS	(7) SIMILARITY
SASBindustry	0.018	0.162	0.188	-0.137	-0.173	0.247	0.002
	(0.48)	(0.83)	(1.39)	(1.52)	(2.20)**	(4.36)***	(2.32)**
lnEMP	0.143	0.369	0.237	-0.031	0.062	-0.001	0.002
	(17.43)***	(8.55)***	(8.40)***	(1.43)	(3.33)***	(0.07)	(7.77)***
lnSIZE	0.134	-0.235	-0.314	0.028	0.024	0.075	0.001
	(12.94)***	(4.11)***	(8.65)***	(1.09)	(1.07)	(4.79)***	(4.66)***
BTM	0.051	-0.074	-0.130	-0.024	-0.019	0.037	-0.002
	(1.76)*	(0.47)	(1.23)	(0.38)	(0.36)	(0.86)	(2.03)**
PPE/TA	0.232	0.458	0.161	0.209	0.395	-0.523	-0.005
	(4.35)***	(1.51)	(0.93)	(1.54)	(3.40)***	(6.42)***	(3.52)***
ROA	-0.024	0.536	0.526	-0.388	0.026	-0.157	-0.014
	(0.36)	(1.37)	(1.99)**	(2.06)**	(0.16)	(1.52)	(7.99)***
INST_OWN	0.571	-0.259	-0.247	0.104	0.034	0.290	0.010
	(12.30)***	(1.10)	(1.76)*	(0.89)	(0.35)	(4.12)***	(7.75)***
SHORT		6.693	6.455			-0.139	-0.032
		(21.01)***	(29.34)***			(1.91)*	(27.67)***
lnWORDCOUNT_ITEM1exHC	0.046						
	(2.16)**						
SPECIFICITY_ITEM1exHC		0.235					
		(9.73)***					
NUM_INT_ITEM1exHC			0.103				
			(3.65)***				
FOG_ITEM1exHC				0.188			
				(7.61)***			
KINCAID_ITEM1exHC					0.396		
					(14.66)***		

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NETPOS_ITEM1exHC						0.013	
						(0.48)	
SIMILARITY_ITEM1exHC							0.116
							(7.65)***
Constant	3.077	2.506	3.152	15.883	8.797	0.841	0.062
	(15.47)***	(5.49)***	(10.69)***	(29.46)***	(17.68)***	(6.83)***	(20.26)***
R^2	0.42	0.27	0.46	0.03	0.09	0.05	0.39
N	3,668	3,668	3,668	3,072	3,072	3,668	3,668

Panel B presents the regression results for the impact of the strategic importance of HC on the firm's disclosure decisions using *SASBindustry* as the proxy for the strategic importance of HC. *SASBindustry* is coded as *one* for industries for which HC is material according to the SASB materiality mapping and *zero* otherwise. The dependent variables in columns (1) through (7) are *lnWORDCOUNT*, *SPECIFICITY*, *NUM_INT*, *FOG*, *KINCAID*, *NETPOS*, and *SIMILARITY,* respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.

TABLE 6
Time Trend Analysis

Variables	(1) lnWORDCOUNT	(2) SPECIFICITY	(3) NUM_INT	(4) FOG	(5) KINCAID	(6) NETPOS	(7) SIMILARITY
WEEK	0.038	-0.071	-0.050	-0.009	-0.008	0.034	0.001
	(5.17)***	(1.59)	(1.78)*	(0.52)	(0.51)	(3.53)***	(4.55)***
WEEK^2	-0.001	0.001	0.001	0.000	0.000	-0.001	-0.000
	(5.26)***	(1.82)*	(1.97)**	(0.26)	(0.39)	(3.33)***	(3.85)***
lnEMP	0.148	0.357	0.228	-0.031	0.062	0.002	0.002
	(17.95)***	(8.19)***	(8.01)***	(1.46)	(3.28)***	(0.17)	(7.93)***
lnSIZE	0.133	-0.226	-0.309	0.025	0.022	0.077	0.001
	(12.83)***	(3.96)***	(8.48)***	(0.97)	(0.99)	(4.87)***	(4.91)***
BTM	0.048	-0.055	-0.123	-0.026	-0.017	0.039	-0.001
	(1.69)*	(0.35)	(1.17)	(0.41)	(0.32)	(0.91)	(1.87)*
PPE/TA	0.237	0.497	0.198	0.170	0.352	-0.466	-0.004
	(4.54)***	(1.66)*	(1.16)	(1.26)	(3.06)***	(5.77)***	(2.99)***
ROA	-0.005	0.442	0.459	-0.358	0.055	-0.175	-0.014
	(0.07)	(1.13)	(1.76)*	(1.89)*	(0.32)	(1.70)*	(8.13)***
INST_OWN	0.586	-0.300	-0.280	0.090	0.022	0.327	0.011
	(12.79)***	(1.26)	(1.97)**	(0.77)	(0.22)	(4.56)***	(8.39)***
SHORT		6.644	6.424			-0.123	-0.032
		(20.87)***	(29.10)***			(1.68)*	(27.26)***
lnWORDCOUNT_ITEM1exHC	0.038						
	(1.80)*						
SPECIFICITY_ITEM1exHC		0.234					
		(9.68)***					
NUM_INT_ITEM1exHC			0.105				
			(3.68)***				
FOG_ITEM1exHC				0.186			
				(7.51)***			
KINCAID_ITEM1exHC					0.396		
					(14.58)***		

50

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NETPOS_ITEM1exHC						0.022	
						(0.82)	
SIMILARITY_ITEM1exHC							0.118
							(7.78)***
Constant	2.703	3.401	3.847	15.985	8.804	0.574	0.052
	(12.36)***	(4.68)***	(8.19)***	(27.39)***	(16.31)***	(3.42)***	(13.96)***
R^2	0.43	0.27	0.46	0.03	0.09	0.04	0.39
N	3,668	3,668	3,668	3,072	3,072	3,668	3,668

Table 6 presents the regression results for the time trend analysis of HC disclosure attributes over the first year of the new SEC regulation. *WEEK* is a count variable, coded as *one* for disclosures filed in the first week of the sample period and increasing by one for each subsequent week. The dependent variables in columns (1) through (7) are *lnWORDCOUNT*, *SPECIFICITY*, *NUM_INT*, *FOG*, *KINCAID*, *NETPOS*, and *SIMILARITY,* respectively. All variables are defined in Appendix III. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels, respectively.