

# **The New Human Capital Disclosures in Form 10-Ks of Large and Small S&P 500 Companies**

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*Since 2020, the U.S. Securities and Exchange Commission has required a U.S.-listed company to describe its human capital (HC) management in Form 10-K to the extent such information is material to understanding its business. Instead of mandating the form or content of the disclosure or defining what HC is, the SEC relies on the registrants to use the principles-based approach in determining the details to be provided. The current research examined the HC disclosures of the 100 largest and 100 smallest S&P 500 companies to study the nature and level of the disclosures in their Form 10-Ks. The results showed that different companies disclosed different HC attributes under a variety of themes. There was a lack of quantitative details in most companies' disclosures, and there was a significant disparity in the amount of information provided and the level of emphasis placed on the different HC attributes and themes by different companies. Company size was positively associated with some themes of HC disclosure but negatively associated with a few other themes.*

*Keywords: human capital, employee recruitment, employee development, employee retention, stakeholder theory*

## **INTRODUCTION**

Reporting on “human capital” (HC) has long been a challenge in the absence of suitable guidance from the authoritative bodies on financial reporting (Abhayawansa and Abeysekera, 2008). In the United States, the annual financial report published in Form 10-K does not give a clear picture of how much a company is investing in maintaining and nurturing its HC. All amounts spent annually by a company on its workforce are recognized as expenses on the income statement in the period incurred. As a result, some companies may not have the incentive to spend much on the development, engagement, and safety and general wellbeing of employees in spite of its future benefits because none of that expenditure gets any special recognition in the financial statements (Petty and Guthrie, 2000). The Proxy Statement filed by a public company contains limited information about its HC and only makes a brief reference to matters such as the board of directors' priorities and/or commitments regarding attracting, developing, and retaining talented workforce and the issue of diversity and inclusion as well as what the board is doing in the area of leadership development, succession planning and management compensation. There is very little discussion in the Proxy Statement about the non-executive workforce.

Until 2020, listed companies in the United States disclosed the number of employees as of the balance sheet date under “Item 1. Business” in their Form 10-K, and some companies voluntarily disclosed limited other information about their HC; but there was no consistency in the type or amount of such information

disclosed by different companies. In 2020, the U.S. Securities and Exchange Commission (“SEC”) made certain amendments to Regulation S-K. Thus, effective November 9, 2020, a U.S.-listed company is now required to include in its Form 10-K a disclosure of how the company attracts, develops and retains its HC to the extent such disclosure is material in understanding the company’s business taken as a whole (SEC, 2020). The current study, therefore, examined a sample of the first round of such HC disclosures made by the top 100 and bottom 100 of the companies included in the S&P 500 Index (the Index) in their Form 10-K reports that were filed since the new SEC rule went into effect. Given the size of each company in the Index as well as their impact across national and/or global markets, the study expected to find examples of exemplary disclosures of HC in the sample. At the same time, by comparing the companies at two ends of the Index, the study investigated if there were significant differences in the disclosures of the two groups. The findings showed that while many of the HC themes and attributes disclosed by the sampled companies were similar to those found in the prior literature about HC disclosures, there was no consistency in the form or content of such HC disclosures. Also, very few companies provided any statistics or quantitative metrics in their disclosures other than when describing the workforce demographics. The remainder of this paper discusses the prior research in this area, theoretical background for the study, purpose of the current research, the data used and hypotheses examined, findings from the research and discussion of those findings, and concluding remarks.

### **PRIOR RESEARCH ON HC DISCLOSURES IN CORPORATE ANNUAL REPORTS**

There are no notable past studies investigating HC disclosures in the annual reports of U.S. companies mainly because there was no requirement for U.S.-listed companies to present such information in their Form 10-K. In the United States, most companies traditionally provided workforce-related information in their corporate social responsibility reports. There were multiple studies in the past examining HC disclosures in the annual reports of non-U.S. public companies where such disclosures were either mandatory, or voluntarily provided. Some of these studies examined disclosures of intellectual capital that included HC (Abeysekera and Guthrie, 2004; Bozzolan, et.al., 2006; Guthrie, et.al., 2006; White, et.al., 2007; Sonnier, 2008) while others studied HC disclosures specifically provided in corporate annual reports (Subbarao and Zeghal, 1997; Olsson, 2001; Vuontisjärvi, 2006; Ax and Marton, 2008, Khan and Khan, 2010; Huan, et.al., 2013). A quick summary of a sample of studies that examined HC disclosures in different parts of the world is presented in Table 1 below.

**TABLE 1  
A SAMPLE SUMMARY OF PRIOR LITERATURE ABOUT HC DISCLOSURES IN  
CORPORATE ANNUAL REPORTS**

| <b>Authors’ Names and Year</b> | <b>Summary of the Prior Research</b>  |
|--------------------------------|---|
| Subbarao and Zeghal (1997)     | Studied the annual reports of companies in six different countries to examine the HC disclosures with reference to employee training, employee relations, diversity in the workforce, etc. and found that the companies in Europe had a greater level of HC disclosure compared to those in Asia and North America. |
| Olsson (2001)                  | Studied the reporting of human resources in the annual reports of some of the largest Swedish companies in the nineties and found that very low level of disclosures was made in this area.   |
| Abeysekera and Guthrie (2004)  | Studied HC reporting in the annual reports of large Sri Lankan companies and found individual managerial employees’ contribution as the most prominent item in the disclosure. Other items included value added by employees, employee-training, and management-union relations.                                    |

| Authors' Names and Year                      | Summary of the Prior Research   |
|--|---|
| Bukh, Nielsen, Gormsen, and Mouritsen (2005) | Used a disclosure index consisting of 78 items in the “employee-related” disclosures of their sampled companies in Denmark. Their sample showed the use of several quantitative metrics. While industry type affected the level of voluntary disclosure, company size and company age did not show a relationship with the amount of disclosure.  |
| Vuontisjärvi (2006)                          | Studied human resource reporting in the corporate annual reports in Finland and found that there was a lack of consistency and comparability among the disclosures of different companies. Also, most companies did not disclose quantitative metrics.  |
| Bozzolan, O’Regan, and Ricceri (2006)        | Studied the voluntary intellectual capital (IC) disclosures of companies in UK and Italy to examine the effect of nationality of origin and industrial sector and found that firm size and industrial sector were positively associated with IC disclosures.  |
| Guthrie, Petty, and Ricceri (2006)           | Studied the reporting of intellectual capital, which included human capital, in companies in Australia and Hong Kong and found that there were inconsistencies in reporting among different companies.  |
| White, Lee, and Tower (2007)                 | Studied the voluntary intellectual capital (IC) disclosures of biotechnology companies listed on the Australian Stock Exchange and found that, among other things, firm size measured by market capitalization was positively associated with the IC disclosures.   |
| Ax and Marton (2008)                         | Studied the association between HC disclosures in the annual reports of companies on the Stockholm Stock Exchange and internal HC management practices of those companies. The results did not find significant association between the two items.  |
| Beattie and Smith (2010)                     | Studied, among other things, what HC-related information was collated within a company versus what was disclosed to external stakeholders, and also the reasons why different companies would and would not disclose certain HC-related information in UK domestic companies listed on the London Stock Exchange.   |
| Khan and Khan (2010)                         | Studied the HC reporting practices in the annual reports of companies listed on the Dhaka Stock Exchange over a three-year period. Results showed that HC disclosures frequently included information on different themes of information related to employees. The authors found that while the amount of HC disclosures grew over time, there was variability in the disclosures among different industries. |
| Rimmel, Dergård, and Jonäll (2012)           | Studied the human resource disclosures in the intellectual capital statements of Danish companies and found that there was no comparability in the information provided by the different companies. The disclosures differed in both form and structure. Also, the statements combined historical data with proposed future plans, thus making it difficult to understand the information.                    |
| Huan, Luther, Tayles, and Haniffa (2013)     | Interviewed financial analysts to assess what they expected to see in HC disclosures and then compared that information with what was actually disclosed in the annual reports of Malaysian companies. Their study found a wide gap between what was desired by the analysts and what was actually disclosed by the companies.  |
| Absar (2014)                                 | Studied the voluntary HC disclosures in the corporate annual reports in three developing Asian countries and found that “employee training and development” was the most reported item.   |

| Authors' Names and Year                         | Summary of the Prior Research  |
|---|--|
| Mishra, Devi, and Gupta (2015)                  | Studied the HC disclosures in the annual reports of 50 large companies in India and found that there were 11 broad themes of HC disclosures with employee compensation as the most reported theme.   |
| Elbannan and Farooq (2016)                      | Studied whether capital markets consider voluntary HC disclosures of companies in 32 European economies in evaluating their intellectual capital, which reduces the information asymmetry in the market and help investors with better pricing decisions.  |
| Bryl and Truskolaski (2017)                     | Compared the HC disclosures of German companies (in a developed nation) with those of Polish companies (in a developing nation) and found that the former group reported better than the latter group in all categories of HC disclosure. However, companies in both countries did not disclose sufficient information on a few items and did not disclose at all on some items.   |
| Wall, McCracken, McIvor, and Treacy (2019)      | Used an HC framework of four employee-related areas to examine human capital reporting in the annual reports of a sample of Irish companies. While the overall level of disclosure was low and included less information, human resource development was the most reported item in the annual reports.   |
| Raimo, Ricciardelli, Rubino, and Vitolla (2020) | Analyzed the HC-related information in the integrated reports of 137 worldwide companies from 29 countries. Their dependent variable was an HC Disclosure Index consisting of 30 items that measured the existence of HC-related information in the reports. Their results showed that, among other factors, the size of company based on total assets was positively associated with the level of HC information in the disclosure. |

A review of these past studies in other countries showed a mixed picture. First of all, companies in different countries disclosed different amounts of information in their HC disclosures. Besides, such HC disclosures were either insufficient in content or inconsistent across different companies operating within the same country. Sometimes, the disclosures varied among different industries within the same country (Khan and Khan, 2010). Several *themes* of HC measures emerged from the disclosures in different countries, and companies in different countries emphasized different themes of HC in their disclosures, perhaps based on their social and political environment, or sometimes based on what was required by their regulatory authorities (Subbarao and Zeghal, 1997). Further, most companies did not present any quantitative metrics that could facilitate a comparison of how well companies “managed” their HC over time. Last but not least, the information in the disclosures did not always match what was desired by the stakeholders (Huan, et.al., 2013).

In the absence of an SEC-designated framework, there are no specific items that a company *has to* include in its HC disclosures other than the number of employees on the balance sheet date. The prior research about HC disclosures in other countries found certain attributes as well as broad themes under which such attributes were clustered in the voluntary HC disclosures of listed companies (Abeysekera and Guthrie, 2004; Bukh, et.al., 2005; Guthrie, et.al., 2006; Vuontisjärvi, 2006; Abeysekera, 2008; Lim, et.al., 2010; Möller, et.al., 2011; Huan, et.al., 2013; Absar, 2014; Mishra, et.al., 2015; Tejedo-Romero and Araujo, 2018; Aggarwal and Verma, 2020). The current study uses a list of attributes based on the ones explored or examined in the prior literature as well as those identified through an initial review of Form 10-Ks of a few major U.S.-listed companies. These attributes and the broad themes under which the attributes were clustered in the past research are provided in Table 2 below.

**TABLE 2**  
**THEMES AND ATTRIBUTES OF HC DISCLOSURE EXAMINED IN THE**  
**CURRENT RESEARCH**

| Theme/<br>category identified<br>in the prior<br>literature | Disclosure item (attribute) identified in the<br>prior literature           | No. of large<br>companies<br>that<br>disclosed<br>this<br>attribute in<br>the current<br>study | No. of small<br>companies<br>that<br>disclosed<br>this<br>attribute in<br>the current<br>study |
|---|---|--|--|
| Acknowledgement<br>of HC                                    | Statement on the importance of HC <sup>§</sup>                              | 91   | 83   |
|   | Recognition of employees as a valuable asset <sup>€</sup>                   | 44   | 20   |
|   | Desire to invest in employees and nurture them <sup>€</sup>                 | 40   | 22   |
| Involvement from<br>the top                                 | Statement on culture within the company <sup>§</sup>                        | 29   | 25   |
|   | Oversight of HC matters by senior managers<br>and/or the Board <sup>§</sup> | 26   | 24   |
| Description of the<br>workforce                             | Total number of employees worldwide* <sup>‡</sup>                           | 98   | 97   |
|   | Total number of employees in the US <sup>§</sup>                            | 56   | 64   |
|   | Part-time and full-time employees <sup>£</sup>                              | 14   | 27   |
|   | Permanent and contractual employees <sup>£</sup>                            | 2  | 3  |
|   | Age-wise breakdown of employees* <sup>#£</sup>                              | 0  | 4  |
|   | Race-wise breakdown of employees* <sup>‡</sup>                              | 34   | 28   |
|   | Gender-wise breakdown of employees* <sup>#</sup>                            | 36   | 33   |
|   | Functional breakdown of employees <sup>#</sup>                              | 8  | 21   |
|   | Other breakdown of employees* <sup>#</sup>                                  | 21   | 12   |
|   | Age-wise breakdown of executives/directors* <sup>‡</sup>                    | 0  | 0  |
|   | Race-wise breakdown of executives/directors* <sup>‡</sup>                   | 20   | 18   |
|   | Gender-wise breakdown of<br>executives/directors* <sup>£</sup>              | 28   | 26   |
| Other breakdown of executives/directors* <sup>‡</sup>       | 1   | 0  |  |
| DEI Efforts* <sup>‡@</sup>                                  | Statement on the DEI policy <sup>§</sup>                                    | 90   | 80   |
|   | Senior managers/Board support to DEI <sup>§</sup>                           | 42   | 41   |
|   | An office or a framework to promote DEI <sup>§</sup>                        | 37   | 37   |
|   | Described existing efforts to promote DEI <sup>§</sup>                      | 69   | 64   |
|   | Described goals/plans to promote DEI <sup>§</sup>                           | 24   | 12   |
|   | Statement on Pay Equity <sup>§</sup>  | 32   | 16   |
|   | Mentioned diversity training <sup>§</sup>                                   | 12   | 34   |
|   | Existence of “resource groups” <sup>§</sup>                                 | 41   | 38   |
| Attracting<br>employees                                     | Statement on recruitment policy <sup>#</sup>                                | 24   | 30   |
|   | Recruitment efforts <sup>§</sup>  | 19   | 23   |
| Employee<br>Development <sup>‡</sup>                        | Statement on employee development <sup>#</sup>                              | 82   | 76   |
|   | Availability of training programs* <sup>#S£</sup>                           | 74   | 74   |
|   | Description of training programs* <sup>#S</sup>                             | 54   | 48   |

| Theme/<br>category identified<br>in the prior<br>literature     | Disclosure item (attribute) identified in the<br>prior literature     | No. of large<br>companies<br>that<br>disclosed<br>this<br>attribute in<br>the current<br>study | No. of small<br>companies<br>that<br>disclosed<br>this<br>attribute in<br>the current<br>study |
|---|---|--|--|
| Employee<br>Development <sup>¥</sup>                            | Monetary assistance to increase credentials <sup>§</sup>              | 34   | 24   |
|   | Career growth prospects/succession plans <sup>*#§</sup>               | 47   | 53   |
|   | Linking with performance evaluation <sup>€</sup>                      | 18   | 19   |
|   | Expenditure incurred on training <sup>#£</sup>                        | 2  | 1  |
| Employee<br>Compensation and<br>benefits <sup>¥</sup>           | Statement on employee compensation <sup>*#</sup>                      | 64   | 60   |
|   | Statement describing Fringe benefits <sup>*</sup>                     | 53   | 50   |
|   | Statement mentioning Retirement plan <sup>#</sup>                     | 40   | 37   |
|   | Statement about stock-based reward plan <sup>*§</sup>                 | 27   | 22   |
|   | Other employee incentive schemes <sup>#§</sup>                        | 27   | 30   |
| Employment<br>Security and<br>Retention <sup>¥</sup>            | Statement on employment security <sup>§</sup>                         | 0  | 19   |
|   | Employee turnover rate <sup>*#£</sup>                                 | 18   | 15   |
|   | Employee tenure <sup>*£</sup>   | 2  | 8  |
|   | Reduction in workforce during the year <sup>§</sup>                   | 7  | 5  |
|   | Employee redeployed to new positions <sup>§</sup>                     | 2  | 1  |
| Employee Health,<br>Safety, and<br>Wellbeing (HSW) <sup>¥</sup> | Statement on employee HSW <sup>§</sup>                                | 60   | 75   |
|   | Efforts to promote employee HSW <sup>*#</sup>                         | 45   | 69   |
|   | Safety training <sup>*#</sup>   | 8  | 27   |
|   | Health-based amenities and programs <sup>#</sup>                      | 26   | 28   |
|   | Work-life balance & flexible working choices <sup>§</sup>             | 3  | 11   |
|   | COVID-19 related safety measures <sup>§</sup>                         | 63   | 74   |
|   | Monetary assistance in relation to COVID <sup>§</sup>                 | 20   | 27   |
| Employee<br>Engagement <sup>¥</sup>                             | Statement on employee engagement <sup>§</sup>                         | 44   | 53   |
|   | Engagement & Satisfaction survey conducted <sup>§</sup>               | 47   | 44   |
|   | Senior Management involvement in assessing<br>engagement <sup>§</sup> | 24   | 19   |
|   | Encouraging employees to be involved in the<br>community <sup>*</sup> | 11   | 17   |
| Labor Relations   | Mentioned union activity <sup>*</sup>                                 | 34   | 60   |

\* Adapted from Abeysekera and Guthrie (2004)

# Adapted from Bukh, et.al. (2005)

¥ Theme titles adapted from Vuontisjärvi (2006)

§ Adapted from Vuontisjärvi (2006)

£ Adapted from Lim, et.al. (2010)

€ Adapted from Mishra, et.al. (2015)

© Adapted from Tejedo-Romero and Araujo (2018)

§ Selected based on a review of a sample of 10-K reports in the United States released in the first year of the SEC (2020) Rule.

## STAKEHOLDER THEORY AND HC DISCLOSURES

The prior academic literature defined HC using terms such as knowledge, skills, abilities, motivation, productivity and competencies of employees (Abeysekera and Guthrie, 2004; Abhayawansa and Abeysekera, 2008; Lim, et.al., 2010; Möller, et.al., 2011; Rimmel, et.al., 2012; Huan, et.al., 2013; Bryl and Truskolaski, 2017). These definitions contained a common theme that HC is an intangible asset represented by the firm's employees who have inherent productive qualities. Employers can build and enhance the value of their HC by following good HC management practices, and then disclose those through their Form 10-K to demonstrate to their stakeholders how well they are addressing recruitment, development and retention of their HC, which is the focus of SEC (2020) requirement. The current research, when examining the first round of such mandatory HC disclosure in the U.S.-listed companies' Form 10-K reports, takes the position that the form and content of the disclosures would be driven by the information needs of the multiple stakeholders to whom U.S. public companies remain accountable.

There has been a growing realization in recent years that companies have many non-financial stakeholders in addition to stockholders, creditors, and future investors, and they should pay attention to the expectations of a wide variety of such stakeholders (Absar, 2014). The long-run success of a business entity depends on the support it receives from various categories of its stakeholders; so, management has to be attentive to the interests of its non-investor stakeholders in addition to fulfilling their responsibility towards maximizing the wealth of stockholders (Chiu and Wang, 2015). Abeysekera (2008) found that companies resorted to voluntary HC disclosures in order to create more friendly relations between them and their financial, social, and political stakeholders. The demand for the disclosure of how a company "manages" its HC thus can be justified using the *stakeholder theory*, which says that "stakeholders come first – whether they're suppliers, investors, employees, customers or the community" (Beckenstein, et.al., 2019). These are the five groups of primary stakeholders of an organization. A stakeholder is "any group or individual who can affect or is affected by the achievement of the organization's objectives" as defined by Freeman (1984, p.46) who suggests that the success of an entity depends on how well it satisfies the interests of each of these groups. The stakeholder viewpoint maintains that as a company tries to remain efficient and profitable, the actions of management cannot bring a negative impact on the welfare of the company's non-financial stakeholders (Mäkelä and Näsi, 2010), including employees. For example, if a company fails to treat its employees well, the same employees as well as future employees who are members of the same society in which the company operates can withhold the supply of labor (Brown and Deegan, 1998). One way to avoid this situation would be for management to either demonstrate good HC maintenance from the beginning, or correct their behavior through appropriate actions over time and then communicate with their external stakeholders, including society, to show that such actions have been taken and how those are benefitting their employees. A company may take actions in a variety of areas of HC management that are of importance to one or more categories of its multiple stakeholders and then disclose what they are doing as well as how they are doing it.

Using the stakeholder theory and based on the existing literature about HC, Table 3 below summarizes the arguments for how U.S. companies' disclosures of the above themes and attributes of HC may be of interest to different stakeholders. If a company's actions along the above themes are not acceptable to its stakeholders, management will try to improve on those actions (Wilmshurst and Frost, 2000) and disclose them through its periodic reports (Deegan, et.al., 2002).

**TABLE 3**  
**STAKEHOLDERS AND THEMES OF HC MANAGEMENT**

|   |
|---|
| <p>Acknowledgment of HC: Investing in employees enhances their skills and makes them more innovative, more loyal, and more engaged with the company, thus potentially reducing the company's hiring costs (Craig, 2018), which is important to investors. Further, treating the workforce as an asset and acknowledging the importance of HC shows to current and future employees the company's desire to treat them well and retain them for the long term.</p>   |
| <p>Involvement from the top: On the one hand some boards are beginning to appreciate the linkage between HC management and the business strategy of the company (KPMG, 2020), and on the other hand recent instances of sexual harassment and racial discrimination in the workplace have increased the focus of top management and boards of directors of companies on HC-related issues and caused them to demonstrate to the government and public what kind of oversight they are providing in taking care of the company's HC. Such issues also invite significant financial liabilities to companies through litigation, which makes it imperative that people at the top carefully manage this aspect of HC management and its disclosure to the investor community (Washington &amp; Ray 2021).</p> |
| <p>Description of the workforce: Knowing the number of persons employed by a company at year-end is important to investors who can then assess the size and scale of its operations (SEC 2020). However, understanding other details about the workforce such as the full-time or part-time status, permanent or contractual status, breakdown by age, gender, sexual preferences and physical ability is also important to various stakeholders such as investors, current future employees, labor unions, regulatory bodies and society because the changing composition of the workforce in the current times not only brings new benefits but also creates new challenges due to the changing demands and expectations of employees (Deloitte, n.d.).</p>   |
| <p>DEI efforts: DEI is not just a matter of regulatory requirement or social justice. Businesses that fail to show their DEI efforts will have difficulty in connecting with their employees, customers, suppliers, and other external stakeholders including society (Polonskaia &amp; Royal 2019). Besides, both individual and institutional investors will expect companies to disclose their current and proposed actions to improve DEI (Tosczak, 2020) since this matter is prone to significant monetary liabilities.</p>   |
| <p>Attracting employees: According to Schawbel (2012), as per a study conducted by the Boston Consulting Group, companies that did a better job of recruitment enjoyed higher revenue growth and twice as much profit margins, and created better future leaders compared to those who did not, which should interest investors. Thus, it behooves companies to both exercise good efforts in recruiting employees and display them through their HC disclosures. Disclosing the company's efforts to recruit from a diverse population also enables the former to reveal its seriousness in improving workplace diversity and avoid legal as well as public scrutiny (McKay and Avery, 2005).</p>  |
| <p>Employee development: Companies that do not spend their time and money in helping their employees grow through training and upskilling risk their own long-term survival because employee training maintains and increases their productivity and helps with succession planning within the company (Craig, 2018). Therefore, knowing how a company trains and develops its workforce should be of interest to its investors as well as current and future employees.</p>  |
| <p>Employee compensation: Good employee relations could be maintained through the use of attractive, or at least fair, compensation and benefits because compensation can increase employee retention and improve their performance (Syahreza, et.al., 2017), in addition to helping their mental and physical wellbeing. Therefore, the importance of how well a company is compensating its employees cannot be overemphasized from the perspective of current and future employees and labor unions, and investors.</p>  |



Employee retention: Employee turnover rate and the inability of a company to retain its employees are bound to be of interest to financial stakeholders because loss of skilled workers can have an immediate and significant impact on future revenues of the company (Perry, 2001). While it is not unusual for workers to change their jobs, rapid turnover may create a suspicion about the happiness of the workforce (Barclays, 2021) and raise questions from regulatory bodies as well as society.

Employee health, safety, and wellbeing: A company's track record on this matter is important to various stakeholders because spending money on employee safety and wellbeing is a good investment that can reduce future expenditures on litigation and liability claims, in addition to having a favorable business relationship with government agencies (American Society of Safety Engineers, 2002). With changing times, various external stakeholders are taking notice of how companies are managing the emotional wellbeing of their employees especially because it can affect employee productivity, morale, turnover rate, and employee-related costs of a company (Wahlquist, et.al., 2020).

Employee engagement: Companies that pursue initiatives to encourage ongoing employee engagement, both within and outside the company, would want to disclose to their external stakeholders how successfully those initiatives are working because increased level of employee engagement increases employee retention, improves customer experience, and encourages more innovation and creativity (Hinshaw, 2020), all of which are important to investors and other stakeholders of the company. Another form of employee engagement is volunteer activity in the community, which may be important to employees who "like to identify themselves with a socially-responsible organization since it heightens their self-image and, in turn, they reciprocate through positive attitudes and behaviors" (Azim, 2016, p.219).

Presence of labor unions (labor relations), Disclosure of labor union activity and labor relations would be of interest to investors because companies with unions are likely to experience higher costs, inflexibility in adjusting to changed circumstances, unwillingness of employees to improve productivity, and lower returns from investment in HC (Sunwoo, et.al., 2021). Disclosures regarding union presence would also appeal to future employees because of the prospects of improved working conditions and better job security.

## **THE IMPORTANCE OF CONSISTENT HC DISCLOSURES IN FORM 10-K**

Form 10-K, required to be filed annually with the SEC by the Securities Exchange Act of 1934, contains detailed information about the filing company and is not expected to contain any material misstatements. It "is the principal means for corporate communication of activities and intentions to stakeholders ... [and] it signals what is important to the reporting company" (Ax and Marton, 2008: 434). Publishing the HC disclosure in Form 10-K is a good way to get that information in the hands of multiple stakeholders since it is used by investors and others to gain detailed information about the company's business, how it operates, and what kind of risks are faced by it when acquiring and using resources to run its business.

Currently the SEC (2020) neither provides a working definition of what constitutes HC nor takes a prescriptive approach in mandating a certain form, content or structure of the disclosure. As a result, different companies are likely to emphasize different matters related to their HC that *they* deem important for their businesses. This in turn will create variation in the HC disclosures across companies. For example, while disclosing the company's efforts to recruit from a diverse population is important, it is also necessary to demonstrate in the HC disclosure how employees of various abilities and backgrounds are provided proper training and career growth opportunities to help them retain their positions and grow with the company. Simply disclosing information about racial and ethnic diversity may not serve much purpose if some companies do not disclose what they are doing to advance the career prospects of veterans and people with disabilities. Likewise, if some companies reveal in great detail how well they are compensating their employees through sophisticated salary administration programs and retirement benefits while other companies put more emphasis on disclosing what they are doing to increase their employees' job security, promote their safety while at work, and preserve their physical and mental health, readers will not have a good denominator to compare such companies' treatment of their HC because of the short-term and long-

term nature of the benefits derived from different workforce-related measures. It is imperative that employers not only publicize how well they are maintaining their HC but also disclose consistent and relevant information about various aspects of their HC management through their Form 10-K so that readers can make a meaningful comparison among different companies' HC management. Sufficiently informative HC disclosures that are uniformly structured can enable companies to reveal a long-term, stable and nurturing relationship with their workforce and lead to a higher trust among its financial and nonfinancial stakeholders, while also helping them stand out with their HC management when being compared with their peers.

HC is the performance potential of the workforce in an organization (Möller, et.al., 2011). The information about how a company manages and maintains its HC is especially important to investors since employees play a significant role in a company by helping earn revenue and by being compensated for it, both of which have an instant negative impact on the income statement of the company, albeit with a long-term favorable influence on its performance and financial position (Elias, 1972). As companies become heavily dependent on their HC for value creation in today's knowledge-based economy, financial markets will highly admire companies that demonstrably value their human capital (Lim, et.al., 2010). How well companies manage their HC to preserve it may affect their market performance as the information asymmetry between investors and management is reduced (Royal and O'Donnell, 2008; Lim, et.al., 2010; Lin, et.al., 2012; Gamerschlag, 2013), and one way to achieve that could be through consistent and reliable disclosures of HC.

## **PURPOSE OF THE CURRENT RESEARCH**

The current research examined the following primary question: *Is there a difference between the HC disclosures of large and small companies listed with the SEC?* The company size was judged based on market capitalization. The expectation was that large companies would make greater disclosures of human capital than small companies because large companies (a) have a higher visibility in the economy (Bozzolan, et.al., 2006) and are subject to attention by various social and political organizations (Watts and Zimmerman, 1986); (b) are more complex in their operations and hence are expected to provide more information to their various stakeholders (Singhvi and Desai, 1971); (c) have the sophisticated ability to collect and provide the required information (Cooke, 1989); (d) typically hire large numbers of employees and incur significant labor costs; (e) operate in the economically, culturally, and politically diverse global markets from where they hire their workforce; and, (f) have the potential to make a significant impact on different groups of stakeholders including the communities where they operate. Past researchers found that large companies were more likely to make higher voluntary disclosures of CSR (Roberts, 1992; Huafang and Jianguo, 2007; Michelon, 2011; Möller, et.al., 2011) or intellectual capital (Subbarao and Zeghal, 1997; Bozzolan, et.al., 2006; Guthrie, et.al., 2006), both of which included an element of HC. More recently, Raimo, et.al. (2020) found that firm size was positively associated with the level of HC-related disclosures. Based on the above background, the following specific research questions were studied in the current research: (i) Will large companies have greater levels of HC disclosure using more themes of HC compared to small companies? (ii) Will each theme of disclosure be used by more large companies than small companies? (iii) Will large companies disclose more information compared to small companies? (iv) Will large companies have greater breadth of disclosure with more HC attributes under each theme compared to small companies?

## **DATA COLLECTION**

A sample of 200 companies, consisting of the top 100 companies ("large companies") and bottom 100 companies ("small companies") was selected from the S&P 500 Index of U.S. companies that filed their Form 10-K between November 9, 2020, and May 31, 2021, and their Form 10-Ks were examined for the new HC disclosure. Table 4 below contains descriptive information about the sampled companies.

**TABLE 4**  
**DESCRIPTIVE INFORMATION ABOUT THE 200 SAMPLED COMPANIES**

|  | <b>Top<br/>100 companies</b> | <b>Bottom<br/>100 companies</b> |
|--|------------------------------|---------------------------------|
| Largest market capitalization              | \$1,625,894 million          | \$16,476 million                |
| Mean market capitalization                 | \$209,236 million            | \$12,235 million                |
| Median market capitalization               | \$144,142 million            | \$12,958 million                |
| Smallest market capitalization             | \$70,145 million             | \$5,490 million                 |
| Largest revenues for the most recent year  | \$559,151 million            | \$156,570 million               |
| Mean revenues for the most recent year     | \$61,490 million             | \$8,047 million                 |
| Median revenues for the most recent year   | \$32,382 million             | \$4,863 million                 |
| Smallest revenues for the most recent year | \$4,551 million              | \$36 million                    |
| No. of companies listed on NYSE            | 71                           | 75                              |
| No. of companies listed on NASDAQ          | 29                           | 25                              |
| Mean number of words in the disclosure     | 785                          | 827                             |
| Number of words in the longest disclosure  | 2,059                        | 2,180                           |
| Number of words in the shortest disclosure | 61                           | 43                              |

For each company, the HC disclosure was derived from the “Item 1. Business” section in Form 10-K. The HC attributes and the themes under which those attributes were expected to appear were provided in Table 2 earlier. The following process was used to gather and organize the data:

1. Since different companies use different font sizes and margins in presenting their HC disclosure, each company’s disclosure was copied into an MS Word document to get a word count on the entire disclosure and for each theme in the disclosure following Absar (2014).
2. The presence of each HC attribute in the disclosure was assessed based on whether any information related to that attribute was provided in the disclosure. A phrase was used as the unit of analysis. An attribute was judged “present” based on the implied meaning of the words rather than the presence of the exact words in the phrase. Thus, “employee safety” and “safety in the workplace” were treated as the same attribute.
3. Each phrase was counted only once, and only under the theme under which it first appeared in the disclosure in order to measure the existence of an attribute regardless of how many times the same phrase or a similar phrase appeared in that disclosure. Thus, if *tuition reimbursement to employees* appeared first under Employee Development and later under Employee Compensation, it was counted only once and under Employee Development.
4. A score of 1 was assigned to the company when an attribute was present in the HC disclosure, and a score of 0 was assigned if the attribute was not included in the disclosure. The scores were subsequently added together under each attribute to determine the number of companies that disclosed the attribute. The scores were also added together for each company to construct an HC Disclosure Index, similar to the approach taken by Raimo, et.al. (2020).

The data were later examined to determine if the following hypotheses were supported:

1. Large companies will use more themes of HC disclosure than small companies.
2. More large companies will disclose under each theme of HC disclosure being studied in this research than small companies.
3. Large companies will disclose a higher amount of content, measured by the word counts for the entire disclosure and under each theme of HC disclosure, than small companies.
4. Large companies will cover greater breadth of content, measured by a higher HC Disclosure Index, than small companies.

## ANALYSIS, FINDINGS AND DISCUSSION

After examining the HC disclosures, it was found that the majority of the large and small companies in the sample disclosed the HC-related information using titles such as “Human Capital,” “Human Capital Resources,” or “Human Capital Management.” Only about three-fourths of the sample presented their disclosures using an organized structure with sub-headings. Both groups of companies used one or more of the eleven themes of disclosure displayed in Table 2. The numbers of companies disclosing the information on various HC attributes under different themes are presented in Table 2, where 53 of the 57 attributes that were expected to appear were found in the disclosures of at least one company in each group in the current sample; but not every company in either group disclosed information using all of the themes or all of the attributes under any theme. This was an early sign that there would be differences among the HC disclosures of the different companies in the sample.

As seen in Table 5 below, the mean number of themes used by the large companies was 6.57 (S. D. = 1.519) and that by the small companies was 6.58 (S. D. = 1.843). Hypothesis 1 that large companies would disclose more themes than small companies was not supported by the results of the t-test, with a t-statistic of -.042 (p-value = .483). Thus, large companies were not more likely to disclose more themes of HC in spite of their greater resources and ability to collect and disclose more information (Cooke, 1989) or their greater visibility in society that would put more pressure on them to disclose more aspects of HC management (Watts and Zimmerman, 1986; Bozzolan, et.al., 2006).

**TABLE 5**  
**NUMBER OF THEMES DISCLOSED BY LARGE AND SMALL COMPANIES**

| No. of themes disclosed | No. of large companies that disclosed, where N = 100 | No. of small companies that disclosed, where N = 100 |
|-------------------------|--|--|
| Eleven                  | 0  | 0  |
| Ten                     | 2  | 3  |
| Nine                    | 8  | 8  |
| Eight                   | 16   | 21   |
| Seven                   | 23   | 27   |
| Six                     | 34   | 18   |
| Five                    | 9  | 12   |
| Four                    | 5  | 5  |
| Three                   | 1  | 1  |
| Two                     | 2  | 3  |
| One                     | 0  | 2  |
| None                    | 0  | 0  |

In order to test Hypothesis 2 that more large companies would disclose under each theme than small companies, the mean numbers of companies from both groups reporting under each theme were compared. Table 6 below shows that Hypothesis 2 was supported at .05 level of significance only for Acknowledgement of HC, and DEI Efforts. For Employee Retention and Labor Relations, significantly more small companies disclosed the information than large companies.

**TABLE 6**  
**NO. OF COMPANIES REPORTING UNDER EACH THEME OF HC DISCLOSURE**

| Theme of HC disclosure           | Number of large companies reporting the theme<br>N = 100 | Number of small companies reporting the theme<br>N = 100 | t-statistic   | One-tailed p-value |
|----------------------------------|--|--|---------------|--------------------|
| <b>Acknowledgement of HC</b>     | <b>94</b>  | <b>83</b>  | <b>2.463</b>  | <b>.007*</b>       |
| Involvement from top             | 29   | 25   | .635          | .263               |
| Description of the workforce     | 98   | 97   | .451          | .326               |
| <b>DEI efforts</b>               | <b>93</b>  | <b>80</b>  | <b>2.726</b>  | <b>.004*</b>       |
| Attracting employees             | 24   | 30   | -.953         | .171               |
| Employee Development             | 84   | 76   | 1.414         | .079               |
| Employee compensation            | 66   | 60   | .876          | .191               |
| <b>Employee retention</b>        | <b>10</b>  | <b>19</b>  | <b>-1.813</b> | <b>.036*</b>       |
| Employee Health/Safety/Wellbeing | 74   | 75   | -.161         | .436               |
| Employee Engagement              | 53   | 53   | .000          | .500               |
| <b>Labor relations</b>           | <b>32</b>  | <b>60</b>  | <b>-4.118</b> | <b>&lt;.001*</b>   |

\* indicates significance at .05 level.

The length of the HC disclosure varied widely among the sampled companies where the longest disclosures contained 2,059 words and 2,180 words for large and small companies, respectively, and the shortest disclosures had only 61 words and 43 words for large and small companies, respectively. Table 7 on the following page presents the mean word counts on the entire disclosure and on each theme in the disclosure for the two groups of companies. Based on the mean word counts, Hypothesis 3 that large companies would disclose more information in general and under each theme compared to small companies was supported only for DEI Efforts at the .05 level, which was as expected given their greater exposure to attention in society. On the other hand, the mean word counts under the themes of Attracting Employees, Employee Health, Safety, and Wellbeing, and Labor Relations showed significant negative relationship with company size. The results of Hypotheses 2 and 3 indicated that smaller companies as a group went to a great extent in disclosing their HC-related information, perhaps to reduce information asymmetry and uncertainty for investors (Bukh, et.al., 2005) as well as to compete with large companies in the market for skilled workforce.

The mean word count for the theme of *Description of the Workforce* was not considered in the analysis in Table 7 mainly because much of the information under that theme was in the form of quantitative details about the racial and/or gender-based breakdown of employees and executives, where presented.

**TABLE 7**  
**MEAN WORD COUNT ON THE ENTIRE HC DISCLOSURE AND ON EACH THEME OF DISCLOSURE FOR LARGE AND SMALL COMPANIES**

|   | Mean word count for large companies' HC disclosures<br>N = 100 | Mean word count for small companies' HC disclosures<br>N = 100 | t-statistic   | One-tailed p-value |
|---|--|--|---------------|--------------------|
| For the entire disclosure               | 785  | 827  | -.728         | .234               |
| Acknowledgement of HC                   | 90   | 93   | -.256         | .399               |
| Involvement from top                    | 31   | 27   | .496          | .310               |
| <b>DEI efforts</b>                      | <b>199</b>   | <b>158</b>   | <b>2.157</b>  | <b>.016*</b>       |
| <b>Attracting employees</b>             | <b>14</b>  | <b>29</b>  | <b>-2.034</b> | <b>.022*</b>       |
| Employee Development                    | 103  | 97   | .474          | .318               |
| Employee compensation                   | 86   | 82   | .321          | .374               |
| Employee retention                      | 9  | 15   | -1.109        | .134               |
| <b>Employee Health/Safety/Wellbeing</b> | <b>113</b>   | <b>156</b>   | <b>-2.681</b> | <b>.004*</b>       |
| Employee Engagement                     | 51   | 54   | -.324         | .373               |
| <b>Labor relations</b>                  | <b>18</b>  | <b>46</b>  | <b>-2.684</b> | <b>.004*</b>       |

\* indicates significance at .05 level.

Finally, there was no consistency in the breadth of details presented by the different companies both within each group and between the two groups. The breadth of the HC disclosure provided by a company was judged based on its HC Disclosure Index (HC DI) that was derived from the presence of each of the 57 attributes (shown in Table 2) in the HC disclosure of each company. The HC DI ranged from 2.00 to 33.00, with a mean value of 18.74, for the large companies, and from 2.00 to 35.00, with a mean value of 19.28, for the small companies. The difference between the mean HC DI for the two groups was examined with a t-test for independent samples. Hypothesis 4 that large companies would provide more breadth of HC disclosure could not be supported based on the mean HC DI in the sample data (t-statistic = -.529, p-value = 0.299), a finding that agreed with Bukh, et.al. (2005) and contradicted the conclusions of White, et.al. (2007) and Raimo, et.al. (2020), thus further confirming the lack of consistency and comparability in the disclosures of the different companies in the sample.

#### **Other Findings that Highlighted the Lack of Adequacy and Consistency in the HC Disclosures**

A significant percentage of both large and small companies, as shown in Table 2 earlier, included a statement about how valuable their human capital was to their business. Publicly acknowledging the importance of employees works in the interest of the company because it demonstrates to all stakeholders the desire to treat employees well and retain them for the long-term. However, in spite of that acknowledgment of the HC's value, only about one-fourth of the companies from both groups disclosed active oversight of HC matters by senior executives and/or the board of directors in their opening statement. While in several companies the disclosure mentioned specific board committees that were in charge of overseeing the HC management initiative, that did not help in determining whether and how the entire board was involved in the oversight of the HC matters.

The SEC (2020) expects a registrant to disclose the number of persons employed if it could help investors in evaluating the company's scale of operation; but no other demographic details are mandated. In the current sample, such demographic details of the workforce whether at the general workforce level or executive level were insufficiently and inconsistently provided as seen in Table 2. The full-time, part-time,

and contractual status of employees can have an impact on the human resource-related costs of a company since part-time and contractual employees may not be eligible to receive payroll-related benefits. At the same time, skilled contractual workers may have a higher turnover rate. Thus, investors may want to know how companies are hedging against a sudden exodus of their skilled contractual workers. Likewise, disclosures of the age-wise breakdown of employees could be relevant to investors and future employees because while older employees have higher experience and may prefer job security and more structure, younger employees may expect more training and flexibility in the workplace. Above all, demographic details of the workforce can be of interest to the regulatory bodies and society who have expectations of how well the company maintains equality in terms of the opportunities and compensation offered to employees of different demographics (Deichler, 2021).

With the heightened attention given to the issues of DEI in the past few years, a very significant percentage of companies in both groups included a statement about their emphasis on maintaining DEI in the organization; slightly more than 40% in each group mentioned how senior management and/or the board of directors were supporting the DEI efforts in the company; and nearly two-thirds of the companies in each group described their efforts in pursuing DEI. Disclosures of DEI efforts by companies are important to investors because such companies attract and retain a “wider pool of talent,” and diversity in leadership encourages higher levels of innovation and higher levels of profitability (Lanz, 2020). Unfortunately, although twice as many large companies as small companies mentioned their efforts to achieve and maintain pay equity among their employees based on gender and race, very few actually offered meaningful statistics on pay equity in their companies. Disclosure of pay equity could help in attracting and retaining good talent and have a long-term impact on the bottom line of the organization because when employees notice that they are paid equitably, they are likely to be more engaged, work with a high level of motivation and improved productivity, and remain loyal to the company, thus reducing hiring and retention costs (Nagele-Piazza, 2020). While less than one-fourth of the sample expressly mentioned their recruitment efforts, there were several companies that combined the disclosure of recruitment with their DEI efforts, which was good since disclosing how and where companies recruited to create a diverse workforce would interest current and future employees as well as the regulatory bodies and society.

Although the majority of large and small companies expressed in words how they valued their employees’ career growth and development, the disclosures did not give a clear view of how much companies were really investing in developing their HC. Only 2% and 1% of the large and small companies, respectively, disclosed the amount of expenditure incurred on employee training. Also, only 10% of the large companies provided some statistics on employee training. While more than half of the companies included a statement on their employee compensation policy, not as many of them fully disclosed the breakdown of the compensation or benefits they provided to their employees, as seen in Table 2. Given the importance of the current monetary compensation as against retirement benefits and stock-based awards to employees at lower levels and its potential impact on employee turnover and stability (Rosenbaum, 2021), details about the breakdown of employee compensation would be of interest to various stakeholders including investors and future employees, which is not happening sufficiently under the current practice. Also, very few companies in either group provided much statistics on their employee turnover or tenure, which is crucial for assessing a company’s succession planning (Craig, 2018). It is possible that the reluctance of most companies to provide details of their employee attrition rate arises from the negative publicity or regulatory scrutiny it can attract if the level of attrition is high (Barclays, 2021) or from the fear of hurting long-term relationships with the company’s customers who may worry about why employees are leaving the company (Hobson, 2019).

The recent COVID-19 pandemic possibly increased the attention given to employee health and wellbeing in the HC disclosure as is seen in Table 2 where 63% and 74% of the large and small companies, respectively, described the COVID-related safety measures taken and/or programs implemented to ensure physical and mental wellbeing of their employees. Yet, only 8% of the large companies and 27% of the small companies mentioned the existence of safety training for the workforce, and very few companies actually reported the statistics on occupational injuries. As the white paper from the American Society of Safety Engineers (2002) suggests, spending money on health and safety of employees represents a “sound

business strategy” because it offers benefits such reduced expenditure on litigation and liability claims, higher morale of employees, and increased employee productivity, in addition having a favorable business relationship with government agencies. Also, when employers take actions to help their employees’ physical and emotional wellbeing, it helps maintain employees’ productivity and keeps them in the jobs longer (Umland, 2018). Therefore, a disclosure of what the company is doing in the area of employee health and safety is bound to be of interest to investors and other stakeholders of the company.

“Engaged employees are the gold standard for business success. They bring their best selves to work, go beyond what’s required, and are committed to their jobs and helping employers achieve company goals” (Purcell, 2020). Companies that encourage more employee engagement over the long-term tend to experience higher levels of productivity, higher revenues, higher profit and higher stock prices (Morgan, 2017). Yet less than half of the large companies and a little more than half of the small companies discussed the value of employee engagement in the company and/or in the community, and much smaller than those percentages in the two groups disclosed encouraging their employees to be involved in community. How a company is involved in its community’s welfare is important to its employees, and it can impact their job satisfaction level and increase their commitment to the organization (Brammer, et.al., 2007). Hence, companies would want to disclose to their external stakeholders how successfully such initiatives are working.

With respect to labor relations, 34% of the large companies and 60% of the small companies disclosed the presence of labor unions in their workplaces, whether in the United States or elsewhere, although not all of them mentioned statistics related to union activity. In almost all disclosures, the reference to the existence of worker unions was very cursory with an occasional statement about how the company enjoyed a positive working relationship with its unions.

## **CONCLUDING REMARKS**

Over the years, corporate scorecards have focused on financial metrics with less priority shown for assessing and reporting on the “internal human capital” (Petty and Guthrie, 2000). The new SEC (2020) rule requiring the disclosure of HC in Form 10-K represents an important paradigm shift from treating the workforce as a resource to be acquired, controlled, and consumed in the production of revenue to the acceptance that good HC needs to be recruited, and its ability needs to be augmented so that the employer and employees strive for the betterment of each other over the long run (Huff, 2018). The disclosure of HC in the published 10-K reports, with its various themes, can deliver an important message to employees who are one of the stakeholders of the company and help improve their commitment to the employer, thus leading to a better operating performance of the company (Lin, et.al., 2012). At the same time, if different companies provide their HC disclosures by adhering to a common framework, it can prevent those from being deemed as discretionary with respect to their content (Hedberg and Malmborg, 2003). The current research found that, in the absence of any definite standards, there was a noticeable difference in the form, amount and breadth of information disclosed by different companies. Also, several times the same HC attributes were reported under different sub-headings by different companies, which made it difficult to assess whether and how well those HC attributes were disclosed by each company. For example, tuition reimbursement was reported under either employee development or employee compensation by many companies. Also, several companies discussed their recruitment efforts within the DEI section while others reported it as a separate theme. Different companies gave different levels of prominence to different HC themes in their disclosures, which was a finding that concurred with the conclusions of past studies (Guthrie, et.al., 2006; Vuontisjärvi, 2006; Rimmel, et.al., 2012; Bryl and Truskolaski, 2017). In the current research, the prominence of an HC theme in the disclosure was judged based on its placement in the overall disclosure and its word count. This practice will likely continue unless the SEC provides a framework for a consistent disclosure of various aspects of HC.

A major shortcoming of the HC disclosures in the current sample was that the majority of the companies did not disclose any quantitative metrics or statistics related to most of their HC attributes. Whereas small numbers of companies reported the statistics about their recruitment activities, employee training, employee



turnover, employee engagement, occupational injuries, or union activity, there was no uniformity in how different companies chose to report such statistics. Until there is a consistent practice of all companies reporting certain quantitative metrics, any meaningful comparison of HC management among different companies will not be possible. Also, unless the same metrics are reported from year to year by each company, readers cannot track the progress of those metrics over time to measure the improvement in areas such as employee safety, employee engagement, and the company's success in achieving its DEI targets. Additionally, where companies disclose their future goals and/or planned efforts, it would help if those companies reported the accomplishment of those goals or results of those planned actions in subsequent years so that readers can evaluate the success of each company's HC management.

One other major limitation of the current HC disclosures in the sample was that only three companies from each group mentioned any information about their supply chain. Since global supply chains extend over very large geographical areas, the operational issues and risks to HC in the supply chain may not always be obvious to U.S. companies and their investors. Mistreatment of workers anywhere in the supply chain can harm the reputation of the company and also attract more regulatory oversight from the governmental bodies in the regions where the company operates (Thornton and Willingham, 2021). Moreover, the COVID-19 pandemic has shown how vulnerable a company can become due to its overdependence on the global supply chain and the human resources involved in it (ibid.). Hence, a more detailed disclosure of how the HC in the supply chain is managed would be of interest to investors and other stakeholders to gain a complete understanding of a company's business.

Future studies of HC disclosures in Form 10-Ks should investigate the company-specific factors that are associated with why different companies disclose different HC themes and attributes. Also, future studies should do a longitudinal analysis of HC disclosures to examine how the disclosures change in their form and content over time. Additionally, it is important to analyze the HC-related information based on whether it is presented only in descriptive form or also in quantitative form; which statistics are reported; and whether any monetary measures such as expenditures incurred on HC-related matters other than employee compensation are disclosed. Last but not least, future research should examine the relationship between the quality of HC disclosures and how readers rate companies based on their disclosures when assessing the market value of different companies.

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