

HUMAN RESOURCE REPORTING: IMPLICATIONS FOR CORPORATE GOVERNANCE

Hugh Grove^{*}, Maclyn Clouse^{**}, Tracy Xu^{***}

^{*} School of Accountancy, University of Denver, Denver, the USA

^{**} Reiman School of Finance, University of Denver, Denver, the USA

^{***} Corresponding author, Reiman School of Finance, University of Denver, Denver, the USA

Contact details: Reiman School of Finance, University of Denver, 2101 S. University Blvd. Denver, CO 80210, the USA



Abstract

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The major research question of this study is how boards of directors can monitor human resource reporting, especially with emerging reporting requirements from the U.S. Securities and Exchange Commission (SEC) for all domestic and foreign public companies listed on U.S. stock exchanges. Boards can develop advising and monitoring practices to help their companies meet the SEC's human capital reporting requirements, as shown by the following topics discussed and analyzed in this paper: criticisms of the modernization of Regulation S-K by using principle-based versus rules-based disclosures; a way forward on the modernization of Regulation S-K; sustainability accounting standards; human resource accounting; board responsibility for white-collar crime risk; and collegiality conundrums. We find that a possible way forward in modernizing human capital reporting would be to combine a rules-based approach with a principles-based approach. We recommend boards to closely follow the United Nation's Sustainable Development Goals and create opportunities to steer their companies towards a sustainable future. We also research the newly developed accounting standards to address human resource risks and promote sustainable human capital reporting. In addition, we identify the strategies for boards to monitor the risk of white-collar crime and highlight the balance between collegiality and effectiveness in the boardroom. Future research could use case studies and interviews of company boards to investigate how they have developed strategies and procedures to facilitate human resource management and reporting.

Keywords: Human Capital, Human Resource Reporting, Board Practices, Corporate Governance

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1. INTRODUCTION

On August 8, 2019, the Securities and Exchange Commission (SEC) announced a reporting rule amendment to modernize the description of the business, legal proceedings, and risk factor disclosures that registrants are required to make

pursuant to Regulation S-K. The regulation was created in 1977 to foster uniform and integrated disclosure for registration statements of all public companies registered with U.S. stock exchanges and expanded in 1982 to be the central repository for non-financial statement disclosure requirements (Hinman, 2019). The SEC chairman, Jay Clayton, said:

“The world economy and our markets have changed dramatically in the more than 30 years since the adoption of our rules for business disclosures by public companies. Today’s proposal reflects these significant changes, as well as the reality that there will be changes in the future. I applaud the staff for their efforts to modernize and improve our disclosure framework, including recognizing that intangible assets, and in particular human capital, often are a significantly more important driver of value in today’s global economy. The proposals reflect a thoughtful mix of prescriptive and principles-based requirements that should result in improved disclosures and the elimination of unnecessary costs and burdens” (SEC, 2019).

Asumi Ishibashi, Talent Management North America lead at Willis Towers Watson, a British global risk management advisory company, said: “There is an agreement that human capital is a key driver of performance, but we still lack a standard method of rigor in how companies are evaluating human capital. So, unlike the financial metrics that are used to assess organizational health, human capital metrics are treated separately, resulting in the inability of companies and investors to benchmark performance” (Dzinkowski, 2020, p. 42). Driven by the heightened attention, a burgeoning number of research papers has explored the relationship between a company’s human assets and its financial well-being, innovative capacity, and long-term sustainability¹ and found that intangibles make up the lion’s share of many companies’ market value (i.e., Cho, 2018; Dzinkowski, 2020; Yeung, 2017).

The major research question of this study is: *How boards of directors can monitor human resource reporting, especially with emerging reporting requirements from the U.S. SEC for all domestic and foreign public companies listed on the U.S. stock exchanges?* Our paper discusses and analyzes the monitoring practices that boards can employ to help their companies meet the SEC’s human capital reporting requirements.

Since this research paper focuses upon human resource reporting, the amendment to item 101(c) of Regulation S-K on the narrative description of the business is relevant. The amendment clarifies and expands the principle-based approach, by including disclosure topics drawn from a subset of the following topics currently contained in item 101(c):

- include, as a disclosure topic, human capital resources, including any human capital measures or objectives that management focuses on in managing the business, to the extent such disclosures would be material to an understanding of the registrant’s business, such as, depending on the nature of the registrant’s business and workforce, measures or objectives that address the attraction, development, and retention of personnel;

- refocus the regulatory compliance requirement by including material government regulations, not just environmental provisions, as a topic (SEC, 2019).

The intent of this SEC amendment is to elicit material disclosures regarding human capital that allow investors to better understand this resource and to see how it is managed through the eyes of company management. Currently, SEC registrants are only required to disclose the number of employees they have. The proposed changes would require registrants to describe their human capital resources, including any human capital measures or objectives that management focuses on in managing the business, to the extent such disclosures are material to an understanding of the business. The list of further disclosures may include, but limited to, the following items (Dzinkowski, 2020):

- measures or objectives that address the attraction, development, and retention of personnel;
- the number and types of employees, including the number of full-time, part-time, seasonal, and temporary workers;
- measures with respect to the stability of the workforce, such as voluntary and involuntary turnover rates;
- measures regarding average hours of training per employee per year;
- information regarding human capital trends, such as competitive conditions and internal rates of hiring and promotion;
- measures regarding worker productivity;
- the progress that management has made with respect to any objectives it set regarding human capital resources;
- the same disclosure requirements for registered issues based outside the U.S.

The SEC’s expanded focus on human resource reporting is consistent with the emerging focus on all stakeholders of a corporation, not just shareholders. For example, on August 19, 2019, just eleven days after this SEC announcement, the Business Roundtable (BR), representing the most powerful CEOs in the U.S., issued a 300-word Statement on the Purpose of a Corporation. This statement included signatures by 183 of the 192 current CEO members of the BR. Since 1978, BR has periodically issued Principles of Corporate Governance. Since 1997, each version of the document has endorsed principles of shareholder primacy, i.e., that corporations exist principally to serve shareholders. This new statement supersedes previous statements and outlines a modern standard for corporate responsibility. It proclaims: “BR members share a fundamental commitment to all our stakeholders and commit to doing well by our customers, employees, suppliers, and local communities. Each of our stakeholders is essential and we commit to deliver value to all of them, for the future success of our companies, our communities, and our country” (Business Roundtable, 2019). Such a new focus on the purpose of a corporation and the responsibility of a public company will increase the responsibilities of boards of directors and strengthen corporate governance. Boards of directors can improve corporate governance by focusing their companies on all stakeholders, especially employees and their human

¹ Giovannoni and Fabietti (2013) conduct a literature review on sustainability and its applications. They draw upon the evolving debate and emphasizes the “multidimensional and integrated nature of sustainability, as well as the tensions between its different dimensions”. An integrated sustainability includes 1) an integrated governance system; 2) hybrid business models to “address social, financial and environmental performance dimensions simultaneously”; 3) “an integrated approach to sustainability through planning, execution, monitoring and communication”. Our paper follows Giovannoni and Fabietti (2013) and employs the integrated concept of sustainability.

capital, not just their shareholders, as envisioned and consistent with the Business Roundtable's new focus on the purpose of the corporation.

This paper studies the new development in human capital reporting and researches the framework/approaches to modernize the human capital disclosure. Our findings provide the guidance and new tools for boards of directors to integrate the trends and enhance future company performance. First, we review the prior literature and draw on the perspectives of both academics and industry experts. We discover that a possible way forward in modernizing human capital reporting would be to combine a rules-based approach with a principles-based approach. Second, we discuss the United Nation's Sustainable Development Goals and recommend boards to closely follow this direction and create opportunities to steer their companies towards a sustainable future. Third, we study the development of accounting standards to address human resource risks and promote sustainability, which can help boards give sound advice on human capital reporting and oversee human resource management. Fourth, we identify the strategies for boards to monitor the risk of white-collar crime and avoid being blindsided. Lastly, we highlight the balance between collegiality and effectiveness in the boardroom. Collegiality has a place in the boardroom, but it is every board member's responsibility to ensure that it does not stand in the way of board effectiveness.

The structure of this paper is as follows. Section 2 reviews the relevant literature. Section 3 is an analysis of the criticisms of modernizing Regulation S-K; principle-based versus rules-based disclosures. Section 4 is a way forward on the modernization of Regulation S-K. Section 5 discusses Sustainability Accounting Standards. Section 6 reviews human resource accounting. Section 7 discusses board responsibilities for white-collar crime risk. Section 8 elaborates the collegiality conundrum. Section 9 has conclusions concerning the next steps for executive management and boards of directors. The Appendix lists human capital frameworks and human capital KPIs.

2. LITERATURE REVIEW

There is a burgeoning research interest in managing, measuring, and reporting human resources within a non-financial framework. The popularity was in part due to the influential work of Elkington (1997), which developed a new triple bottom line (TBL) approach to integrate social and environmental dimensions in accounting and reporting. The TBL consists of three elements: profit, people, and the planet. Gray (2006) compares "well-being" and "wealth" and demonstrates the importance of high-quality reporting on sustainability and its interaction with global human and economic society. Dumay, Bernardi, Guthrie, and Demartini (2016) reviews the literature on integrated reporting and show that a common objective for intangible capital (i.e., human capital) and physical capital reporting is to communicate value creation. They argue that an "eco-system approach" should be employed to advocate "leveraging financial, manufactured, intellectual, human, social and relationship, and natural capital as part of creating value".

The importance of human resource reporting was emphasized in a research study on responsible innovation (Scherer & Voegtlin, 2020). It stated the grand challenges that humanity faces - poverty, inequality, hunger, conflict, climate change, deforestation, pandemic, among others - hinder the progress of sustainable development. These issues can be addressed only by fundamental changes in behavior, as well as in the modes and processes of production and of business more generally. Thus, human resources and its reporting are essential to the concept of responsible innovation and sustainable development supplemented by the potential of various models of corporate governance (Scherer & Voegtlin, 2020). Human resource reporting is also part of corporate social responsibility (CSR) and corporate governance. A review of empirical studies found that both independence and gender diversity were positively linked with CSR reporting which was differentiated between internal CSR reporting measures and external CSR disclosure ratings (Velte, 2019).

The effects of internal audit human resources on external audit pricing decisions were investigated. The study found that external audit fees were negatively and significantly associated with the proportion of internal auditors, and external auditors were encouraged to utilize more internal auditors in performing an external audit (Cho, 2018). Another study investigated a holistic framework of Islamic accountabilities in annual reports and found disclosure levels included Sharia 40% and financial 81%, but only 28% for CSR (El-Halaby, Hussainey, Marie, & Mohsen, 2018). A literature search (Yeung, 2017) on human capital development from 2007 to 2014 involved 27 articles from different countries and found that developing a concept for human capital development was crucial for corporate sustainable development. A case study investigated the process of implementing a people-related strategy that focused on exploring and developing the potential to serve organizations and the community (Yeung, 2017).

Another study used the Global Reporting Initiatives (GRI) to analyze the accounting disclosures of social responsibility for Saudi registered companies. It was found that these companies used GRI requirements to design their social responsibility and sustainable development reports as standalone reports separate from their annual reports (Atef, 2016). CSR was analyzed for the capacity of people, processes, and other resources to meet the expected social obligations to all stakeholders, using a study of 231 units in Australian banks. Behavioral characteristics were rated for meeting corporate social responsibility criteria. Valuable information was obtained for developing an efficient organizational structure for achieving good corporate governance (Manzoni & Islam, 2015).

An empirical study of 133 companies listed in the S&P Composite 1500 Index investigated the impact of greenhouse gas (GHG) emissions, Dow Jones Sustainability Index (DJSI), and anti-bribery policy on the extent of CSR disclosure, measured by the environmental, social, and governance (ESG) disclosure score calculated by Bloomberg. The study found that the company's size, GHG emissions, DJSI, and anti-bribery policy were significantly positively associated with the extent of CSR disclosure

(Sariannidis, Konteos, & Giannarakis, 2015). Another empirical study of 40 French public companies found that mandatory French CSR reporting led to companies communicating their corporate profile, strategy, and management broadly. While companies reported their environmental dimension most frequently, they disclosed only marginally the economic and social dimensions of CSR (Kühn, Stiglbauer, & Heel, 2014).

A meta-analysis of more than 135 CSR studies over the last 25 years found a strong correlation between CSR that goes beyond just storytelling and financial performance (Braendle & Mozghovi, 2013). With different standards of CSR, such as company, industry, multi-stakeholder, and independence, a study categorized and evaluated those CSR standards and suggested a combination of different standards, replenishing with firm-specific codes of conduct (Stiglbauer & Eulerich, 2012). Another study advocated that boards of directors and managers must have a clear understanding that the mental models of employees and themselves influence the effectiveness of strategies implemented within effective corporate governance and CSR framework. The study collected data from participants in Australia and South Africa regarding factors from their mental model that retain them in their organizations (Naude, 2009). One study discussed the management trend of introducing human capital management and accounting which led to a demand from external stakeholders for such information. As a result, firms have become more involved in the creation, measurement, and reporting of human capital information beyond just financial data (Abeyssekera & Guthrie, 2004).

These studies have primarily focused on corporate social responsibility information. Only a few have investigated human capital as part of such information (Abeyssekera & Guthrie, 2004). None have gone into the disclosure detail promulgated by the SEC for specific human capital reporting. Thus, our research paper advances the literature by analyzing in more depth human capital reporting as part of corporate social responsibility.

3. CRITICISMS OF MODERNIZING REGULATION S-K: PRINCIPLE-BASED VERSUS RULES-BASED DISCLOSURES

The main criticism of modernizing Regulation S-K is its focus on principle-based disclosures rather than rules-based disclosures. One of the five current SEC Commissioners, Allison Herren Lee, criticized this new amendment: “The proposal is most notable for what it does not do: make any attempt to address investors’ need for standardized disclosure on climate change. The science is largely undisputed and the effects increasingly visible and dire. The looming economic threat to markets worldwide is more and more apparent. In terms of SEC attention, investors are overwhelmingly telling us, through comment letters and petitions for rulemaking, that they need consistent, reliable, and comparable disclosures of the risks and opportunities related to sustainability measures, particularly climate risk. Investors have been clear that this information is material to their decision-making

process and such disclosures provide a lens through which investors can assess the perspective of the stewards of their investment capital” (Lee, 2020).

Similar criticism comes from the Human Capital Management (HCM) Coalition, which represents institutional investors with \$2.8 trillion in assets. HCM commented that the proposed principle-based amendments and the potential subjectivity around materiality imply too much guesswork for both preparers and investors and may elicit generic disclosures that fail to provide decision-useful information and take substantial time to review and analyze. HCM is also concerned that a lack of well-defined rules on reporting human capital information may allow companies with sub-optimal human capital performance to pick and choose metrics that may paint a misleading performance picture or even omit critical information altogether.

Similarly, Fiona Reynolds, CEO of the Principles for Responsible Investment, said the SEC has taken a step backward in the face of its own analysis that concluded the comparability of reporting being reduced under principles-based standards, which rely more heavily on the fallibility of managers’ professional judgment and experience. Benefits of a rules-based approach include increased comparability among companies, decreased information asymmetry, improved stock market liquidity, and lower costs of capital. She recommended: “Instead of eliminating rules-based disclosures, as the SEC is proposing in several elements of the Proposed Rule, it should use its extensive experience reviewing and probing issuer disclosures to develop consistent rules for emerging, material issues, including line-item disclosure on access to and use of human capital resources, as well as climate-related risks. Pulling disclosure requirements back to the highest order principle of materiality and rejecting or minimizing the use of specific required disclosures is an invitation to companies to tell their stories in a manner that makes comparison difficult” (Dzinkowski, 2020, p. 44).

Whether principle-based or rules-based disclosures are used, the Committee on Corporate Reporting of the Financial Executives Institute (FEI) pointed out that there are significant operational challenges to disclose human capital information in the SEC Form 10-K for annual financial reports, which would be required by a modernized Regulation S-K:

- It would be impractical and costly to provide human capital data with the degree of precision that is expected with financial data.
- Requiring such information in the 10-K would require executing disclosure controls and reviews at senior management and board levels under the 60-day filing timeline established for financial reporting purposes.
- The relationship between human capital information and financial performance is indirect and many companies are still developing their understanding of this relationship and how it might be used for decision-making.
- Due to the uniqueness of companies, the comparability of human capital disclosures across companies and even within industries may vary widely and could lead to confusion among users.

- It will be difficult for companies to provide consistent disclosures about what human capital information is material to their decision-making.

- Companies may have competitive or sensitive information that they do not want to disclose, such as human capital measures related to specific geography, product line, or key talent group.

Thus, the FEI wants to maintain the status quo, noting that companies already are voluntarily disclosing key performance indicators (KPIs) with respect to human capital in a variety of ways, such as investor conferences, proxy statements, earnings releases, external presentations, sustainability reports, and on their websites. Also, companies could incur additional costs to track, summarize, and review required human capital information, contrary to the ongoing simplification efforts of the SEC.

4. A WAY FORWARD ON MODERNIZATION OF REGULATION S-K

SEC Commissioner Lee has provided a way forward on this debate about the modernization of Regulation S-K. She observed: "It is clear that the broad, principles-based materiality standard has not produced sufficient disclosure to ensure that investors are getting the information they need – that is disclosures that are consistent, reliable, and comparable" (reminds one of an old joke where an accountant is being interviewed for a job by an executive who asks: "What is 2 + 2?". The accountant answers: "What would you like it to be"). Lee also stated: "As a result, most large, public companies now provide some sustainability disclosure, but such voluntary disclosures are no substitute for SEC Commission action for a number of reasons":

- First, without a mandatory standardized framework, not all issuers will disclose, and disclosure will continue to vary greatly by the issuer, making it difficult if not impossible for investors to compare companies.

- Second, the proliferation of voluntary standards and principles – and specific requests from numerous investors – put significant and sometimes competing demands on issuers, creating workstreams and costs that could be simplified and mitigated by uniform standards.

- Third, significant questions exist regarding the reliability of the information disclosed in these reports. Such disclosures may lack sufficient third-party verification and may leave investors with inadequate remedies for inaccurate and incomplete disclosures.

Consequently, Lee asked the following challenging questions:

- What is the right regulatory approach?
- How much disclosure is needed and where should it be made?
- Are there particular metrics that should be required?
- What is the right balance between line-item and principles-based disclosure?
- How should disclosures accommodate sector-specific reporting?
- How and to what extent could we leverage existing voluntary frameworks?

In summary, SEC Commissioner Lee said that the SEC rule amendment heavily favored a principles-based approach, rather than balancing the use of principles with an item-line or rules-based approach. She continues to be concerned that the increased flexibility and discretion that this approach affords company executives may result in significant costs to investors – both if materiality is misapplied and through the loss of important comparability in disclosure (Lee, 2020).

Currently, there are only voluntary disclosures for human resources, climate change, and sustainability measures. For example, the Task Force on Climate-Related Financial Disclosures is supported by over 930 organizations representing a market capitalization of over \$11 trillion. The United Nations Principles for Responsible Investment has more than 2,000 signatories from over 60 countries representing \$80 trillion of assets and the Global Reporting Initiative has over 23,000 reports recorded in its database (Lee, 2020).

The United Nations General Assembly adopted a 2030 Agenda for Sustainable Development report, which listed 17 Sustainable Development Goals (SDGs) with 169 targets to be achieved by 2030 (Thomson, 2015). Three of these SDGs relate to climate change: climate action, affordable and clean energy, and clean water and sanitation. Another three SDGs relate to human resource reporting: decent work and economic growth, quality education, and good health and well-being. The SDGs present an opportunity for business-led solutions and technologies to be developed. Many businesses and organizations have embraced sustainability as the cornerstone in their search for the development of long-term growth. The first year that a notable number of S&P 500 companies publicly disclosed their sustainability performance was 2011 and this trend continues. Johnson & Johnson was among the first to adopt sustainability disclosure. The material sector was the best overall performer, with the top disclosure rate on energy, GHG, injury rate, waste, and water, while the financial sector was the bottom performer. These sustainability reporting companies had higher financial returns than their non-sustainability reporting competitors. In 2017, a UBS Investment Strategy Guide introduced new sustainable themes for "investing in a better world" with related business opportunities to provide new goods and services (Grove & Clouse, 2018). In addition, sustainability reporting rose dramatically from 2011, when roughly 20% of S&P 500 companies published reports, to 90% of companies reporting in 2020.

5. SUSTAINABILITY ACCOUNTING STANDARDS

Founded in 2011, the Sustainability Accounting Standards Board (SASB) is a nonprofit organization that develops voluntary sustainability accounting standards. While the Financial Accounting Standards Board (FASB) has for the last forty years developed the accounting standards currently used in the financial statements in the U.S., other social and environmental measures are now understood to be of relevance. The SASB aims to establish industry-specific disclosure standards across environmental, social, and governance topics that facilitate communication between companies and investors

about financially material, decision-useful information. The general principle is in Peter Drucker's phrase: "What gets measured gets managed". The chairman of the board is Robert Steel, the CEO of Perella Weinberg Partners, a private investment banking and asset management firm, and the vice-chair of the board is Mary Schapiro, the former chair of the Securities and Exchange Commission. As of early 2020, 127 corporations have reported with SASB standards, of which over one-third are based outside the U.S. (SASB, 2020).

Some of these 127 companies are very well-known. In alphabetical order, examples include Apache, BlackRock, Bloomberg, Clorox, Delta, Estee Lauder, General Mills, GAP, GM, Goldman Sachs, Ford, Hewlett Packard, Halliburton, Intel, Intuit, Kellogg's, Lowe's, Macy's, Marriott, Medtronic, Merck, Moody's, Morgan Stanley, Motorola, Netflix, Philip Morris, Suncor Energy, Target, Thomson Reuters, Visa, and Wells Fargo. For example, of the required SASB disclosure topics, which also have corresponding accounting metrics, there are eleven items for the Extractives and Minerals processing industry sector. The first four items are related to climate change, the next four relate to human resource reporting, and the last three relate to both topics, as follows (SASB, 2020):

1. *Greenhouse gas emissions*: in metric tons, gross global Scope 1 emissions, percentage methane, hydrocarbons, other combustion, and other emissions. Discussion of long- and short-term strategies or plans to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets.

2. *Air quality*: in metric tons, air emissions for the following pollutants: NO_x, SO_x, volatile organic compounds (VOCs), and particulate matter.

3. *Water management*: in thousand cubic meters, total freshwater withdrawn, total freshwater consumed, percentage of each in regions with high or extremely high baseline water stress. The volume of produced water and flow back generated, discharged, injected, and recycled. Hydrocarbon content in discharged water; percentage of hydraulic fractured wells for which there is public disclosure of all fracturing fluid chemicals and where ground or surface water quality deteriorated compared to a baseline.

4. *Biodiversity impacts*: description of environmental management policies and practices for active sites. Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume impacting shorelines with ESI rankings 8-10, and volume recovered in the number of barrels. Percentage of proved and probable reserves in or near sites with protected conservation status or endangered species habitat.

5. *Security, human rights, and rights of indigenous peoples*: percentage of proved and probable reserves in or near areas of conflict and in or near indigenous land. Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict.

6. *Community relations*: discussion of the process to manage risks and opportunities associated with community rights and interests. The number of days and duration of non-technical delays.

7. *Workforce health & Safety*: total recordable incident rate (hours), fatality rate, near-miss frequency rate; average hours of health, safety, and emergency response training for a full-time, contract, and short-service employees. Discussion of management systems used to integrate a culture of safety throughout the exploration and production cycle.

8. *Business ethics & Transparency*: percentage of proved and probable reserves in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index. Description of the management system for prevention of corruption and bribery throughout the value chain.

9. *Reserves valuation & Capital expenditures*: sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions in million barrels or million standard cubic feet. Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves in metric tons. Amount invested in renewable energy; revenue generated by renewable energy sales in reporting currency. Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets.

10. *Management of the legal & Regulatory environment*: discussion of corporate positions related to government regulation and/or policy proposals that address environmental and social factors affecting the industry.

11. *Critical incident risk management*: Process Safety Event rates for loss of primary containment of greater consequence (Tier 1). Description of management systems used to identify and mitigate catastrophic and tail-end risks.

Accounting professionals may be able to help with implementing these SASB disclosure standards, concerning both climate change and human resource reporting. In February 2020, fourteen accounting bodies representing members worldwide in the UK, Canada, Italy, Germany, Ireland, Scotland, Wales, Norway, Australia, New Zealand, Japan, and the U.S., published a call to action urging accounting professionals to put sustainability and the fight against climate change at the forefront of their work. The accounting profession has long focused on assessing and managing financial risks. However, the current global risks, especially environment and human resources risks, are pushing the accounting profession to expend its remit. This call to action by the fourteen accounting bodies emphasized that accountants play a critical role in improving an organization's integrated thinking and decision-making capabilities to promote responsible business practices and improve outcomes for both shareholders and stakeholders. This call to action emphasized that accountants across the world should integrate both climate change and human resource risks into organizational strategy, finance, operations, and communications, to support sustainable decision-making, and to provide sound advice and services (Tysiac, 2020).

6. HUMAN RESOURCE ACCOUNTING

Eric Flamholtz, a prominent human resource accounting researcher, wrote: "Human resource accounting means accounting for people as an organizational resource. It involves measuring the costs incurred by business firms and other organizations to recruit, select, hire, train, and develop human assets. It also involves measuring the economic value of people to organizations" (Flamholtz, 1974, p. 3). Since the beginning of the globalization of business and services, human resources are becoming more important as a decisional input for the success of any corporate enterprise and human resource accounting involves accounting related to human resources (Sakshi, 2020).

Human resource accounting (HRA) is the process of identifying and reporting investments made in the human resources of an organization that are presently unaccounted for in the conventional accounting practice. It is an extension of standard accounting principles. Measuring the value of the human resources can assist organizations in accurately documenting their assets. The human resource process was established to fulfill several objectives within the organization which include (Flamholtz, 1974):

- Furnish cost-value information for making proper and effective management decisions about acquiring, allocating, developing, and maintaining human resources to achieve cost-effective organizational objectives.
- Effectively monitor the use of human resources by the management.
- Have an analysis of the human asset, i.e., whether such assets are conserved, depleted, or appreciated.
- Aid in the development of management principles and proper decision-making for the future, by classifying the financial consequences of various practices.

There are two approaches to HRA. Under the cost approach, there is an acquisition cost model and a replacement cost model. Under the value approach, there is a present value of the future earnings model and a competitive bidding model. Under the cost approach, the acquisition cost model measures the organization's investment in employees using the five parameters: recruiting, acquisition, formal training and familiarization, informal training and familiarization, and experience and development. The replacement cost model measures the cost of replacing an employee, including recruitment, selection, compensation, and training cost. Under the value approach, the present value of the future earnings model measures the economic value of employees based on the present value of future earnings, adjusted for the probability of employees' death/separation or retirement. The competitive bidding model measures the value of employees based on either the highest internal or external competitive bid (Rothkopf & Harstad, 1994).

There are many limitations that make management, and perhaps investors, reluctant to introduce and use HRA, such as (Okeke, 2016):

- There are no clear-cut and specific procedures or guidelines for finding costs and value of human resources for an organization. The systems that are being adopted all have certain drawbacks.

- The period of existence of human resources is uncertain and hence valuing them under uncertainty in the future seems to be unrealistic.

- There is conflicting empirical evidence concerning the use of HRA as a tool of management to facilitate better, effective management of human resources.

- Since human resources are incapable of being owned, retained, and utilized, unlike physical assets, this poses a problem to treat them as assets in the strict sense.

- There is a constant fear of opposition from trade unions as placing a value on employees would make them claim rewards and compensations based on such valuations.

- Despite all its significance and necessity, tax laws do not recognize human beings as assets.

- There is no universally accepted method of the valuation of human resources.

To help assess these various limitations of HRA, a measurement theory perspective has been applied. It focuses upon valid, reliable, and operational measurement techniques. An explicit strategy with procedures for analyzing HR measurement systems was developed into a five-step measurement model as follows (Grove, Mock, & Ehrenreich, 1977):

1. Identify the decision context and related measurement needs.

2. Investigate the attribute of interest and corresponding theoretical relationships.

3. Investigate existing measurement techniques for possible application.

4. Investigate emerging measurement techniques for possible application (if necessary).

5. Analyze the relevance of each applied technique in the specific decision context.

A factual level perspective for measurement is summarized in the middle three steps above. The related decision benefits are emphasized in the last/fifth step where there is an attempt to match the purposive level measurement needs introducing in the first step with the factual level measurements developed in steps two through four. Management and boards of directors could use this measurement theory perspective in deciding how to report human resources under the new amended Regulation S-K rules.

7. BOARD RESPONSIBILITIES FOR WHITE-COLLAR CRIME RISK

Concerning other items in the SEC's amendment of Regulation S-K, item 103 for legal proceedings is also relevant to human resource reporting when a white-collar crime has generated material legal proceedings that must be disclosed. Also, the amendment refocuses the regulatory compliance requirement by including material government regulations, not just environmental provisions.

Human resource reporting can involve ethical considerations of honesty, fairness, objectivity, and responsibility, especially when white-collar crime generates legal proceedings. Thus, boards of directors have related monitoring responsibilities here. In the U.S., politicians, primarily presidents and members of Congress, have cut budgets of the government entities who investigate white-collar crime. Over the last four decades, the agencies

responsible for investigating white-collar crime, primarily the Federal Bureau of Investigation (FBI), the Department of Justice (DOJ), the Securities and Exchange Commission (SEC), the Internal Revenue Service (IRS), the Occupational Safety and Health Administration (OSHA), the Consumer Product Safety Commission (CSPC), and the Environmental Protection Agency (EPA), and have seen their enforcement divisions drastically reduced (Hobbes, 2020).

More than one-third of the FBI investigators who patrol Wall Street were reassigned between 2001 and 2008. By January 2019, under the Trump administration, white-collar prosecutions had fallen to their lowest level since researchers started tracking them in 1998. In 2018, prosecutors convicted just 37 corporate criminals who worked at firms that had more than 50 employees. Since 2015, of the 649 companies prosecuted by the DOJ, only 8 were convicted in court. The rest either took settlements or negotiated themselves a deferred prosecution or non-prosecution agreement. Since 2015, criminal penalties levied by the DOJ have fallen from \$3.6 billion to \$110 million. In 2017, the DOJ had 889 prosecutions for identity theft but just 24 prosecutions for antitrust violations.

Cash fines levied by the SEC for misleading or reporting fraudulent financials have dropped by more than half. Although Congress gave the SEC enough funding to hire 200 new auditing staff after the Enron-led avalanche of frauds and corporate bankruptcies in the early 2000s, it obligated the SEC to review the filings of every publicly traded U.S. financial firm every three years which exceeded the capacity of these new staffing levels. In 2014 and 2015, the SEC did not file any settlements against Wall Street firms. In 2019, one-sixth of its actions were just simple settlements against financial firms for filing paperwork late which was a six-fold increase since 2004. Of the 216 large-scale corporate reporting frauds discovered between 1996 and 2004, researchers found that the media uncovered twice as many as the SEC and other government agencies discovered.

The IRS had its budget and number of auditors cut significantly and enforcement funding has fallen by 23 percent over the last decade. Tax evasion siphons up to 10,000 times more money out of the U.S. economy every year than bank robberies. In 2010, following a series of tax-haven scandals, the IRS set up a wealth squad to investigate the ultra-rich but only staffed it with enough agents to perform 36 audits in its first two years. In 2017, the IRS investigated the returns of just 3 percent of American millionaires. One former IRS official said the IRS killed a generation of skilled agents by just investigating mom-and-pop grocery stores instead of large corporations. In 2017, researchers estimated that fraud and offshore tax avoidance by the largest U.S. corporations cost Americans \$360 billion annually between 1996 and 2004 (Hobbes, 2020). For example, in 2020, Jeff Bezos, the Amazon CEO, purchased a Los Angeles mansion for \$165 million which was more than the highly profitable Amazon paid in U.S. income taxes in 2019.

OSHA, whose job is to make sure work conditions are safe and healthy, would issue press releases announcing many waves of random inspections so that employers would analyze

the hazards of their working conditions. However, OSHA never told employers that it could only do a few inspections, due to cuts in the number of its inspectors. CSPC, whose job is to make sure the things you buy will not pierce, poison, or burn you, had its initial 786 employees shrunk to just 420 by 2007. That same year Mattel recalled more than one million children's toys that had been contaminated with lead paint by Chinese sub-contractors. However, the CSPC had fewer than 100 inspectors to monitor all imports to the U.S. The EPA has had its budget cut, especially now that the Republican party, with the current president and a majority in the Senate, denies that climate change exists and pulled the U.S. out of the Paris Climate Accord (Hobbes, 2020).

In a 2015 study, more than half the auditors for the largest U.S. companies said they had been asked to falsify internal audit reports (Hobbes, 2020). In a 2016 Global Fraud Survey by Ernst & Young, 32 percent of U.S. managers said they were comfortable behaving unethically to meet financial targets. Sally Simpson, the author of a white-collar crime book, commented: "If you follow a company over its life cycle, studies have found that most of them engage in lawbreaking and almost all of them reoffend. The way you get deterrence is by showing them they're being watched". The most effective type of watching is a combination of warnings from government agencies, surveillance of the worst actors, harsher punishment for repeat offenders, and criminal prosecutions for corporations that refused to shape up (Hobbes, 2020).

Following the ethical considerations of honesty, fairness, objectivity, and responsibility, boards of directors should have responsibilities for white-collar crime in the companies they serve. With the lack of laws/reforms to eliminate white-collar crime and decades-long reduction of U.S. government agencies that have white-collar crime responsibilities, the U.S. and global boards need to take more responsibilities for watching and monitoring behaviors within their companies and even the behaviors of their own board members! For example, the Steinhoff chairman of the board was caught entering the London Heathrow airport with €674,920 in his luggage, trying to avoid South African currency controls (Grove, Clouse, & Malan, 2019). It becomes imperative for boards to fully understand the consequences and get actively involved in the deterrence and prevention of white-collar crime.

Such white-collar crime responsibilities could be tied to the major, but now limited, focuses of these U.S. government agencies as follows:

- FBI and DOJ: white collar crime;
- SEC: financial reporting;
- IRS: income tax reporting;
- OSHA: work conditions safety and health;
- CSPC: product safety;
- EPA: climate change.

For watching and monitoring the risk of white-collar crime to avoid being blindsided, boards could consider the following strategies: establish whistleblower hotlines directly to the board and/or its risk/audit committee, monitor social media websites and communications, review major government reports from the agencies listed above, and review all internal and external whistleblower

reports. For example, the SEC issues comment letters to companies listed on U.S. stock exchanges for financial reporting problems and issues. These comment letters have been available to the public in the SEC Edgar database since 2005 and used by short-sellers, institutional investors, and forensic accountants (Grove, Johnsen, & Lung, 2016). Boards should monitor such SEC comment letters for risks of earnings management and possible fraud.

A new tool for risk monitoring that boards could use has just been released by the Audit Analytics consulting firm. It is an interactive tool, *Accounting Quality + Risk Matrix* (AQRM), designed to identify indicators of earnings management and issues with accounting quality. With logic supported by academic research, AQRM features 21 red flags or warnings, including restatements of financial reports, changes in directors' and officers' liability insurance, changes in accounting estimates, large accounting impairments, late filings, changes in management control, and significant litigation (Hardy, 2020).

8. COLLEGIALLY CONUNDRUM

The SEC's proposed amendment of Regulation S-K for item 105, risk factor disclosures, is also relevant to human resource reporting, especially when a white-collar crime has generated material risk factors that may be a threat to the survival of a company and must be disclosed. Also, the item 103 amendment which refocuses the regulatory compliance requirement by including material government regulations, especially for environmental proceedings over \$300,000 to which the government is a party, may generate material risk factors for a company that must be disclosed.

An impediment to the disclosure of both legal proceedings (item 103) and risk factors (item 105) is the well-established CEO duality problem where the CEO is also the chairman of the board of directors. It has contributed to the collegiality conundrum as CEO board chairs often stymie dissent by boards. PwC's 2019 Annual Corporate Directors Survey collected the views of 734 public company directors of S&P 500 companies with thirty survey questions. Concerning the question of *"In your opinion, on which of the following issues is it difficult to voice a dissenting view in the boardroom?"*: 43% of directors said that it was difficult to voice a dissenting view on at least one topic inside the boardroom; 57% of these directors sat on boards with a CEO board chair, i.e., the duality problem. Only 41% of these directors sat on boards with a non-executive board chair or lead independent director (PwC, 2019).

The title of the 2019 PwC survey was "The collegiality conundrum: Finding balance in the boardroom". Boards pride themselves on their collegiality. While a certain degree of collegiality can encourage a productive, respectful setting, too much collegiality risks the board's ability to be effective which could lead to the board being blindsided. Directors in this survey said they have difficulty voicing dissent, which indeed is critical for a high-performing board.

PwC discussed the risks of collegiality as the challenge of finding the right place for collegiality while keeping the focus on board effectiveness. To begin to address this collegiality conundrum, PwC recommended that directors:

- Ensure that the board's lead director and committee chairs have the gravitas and character required to challenge board members to do their best, to solicit and respect dissenting views, and to be willing to be honest with underperforming directors.

- Include questions in the board's self-assessment process that will uncover whether directors feel they can speak up in meetings and whether they feel the tone of the boardroom ever inhibits frankness.

- Encourage diversity on the board. Directors with diverse backgrounds often bring diverse viewpoints to the discussion and can help to shine a light on potential blind spots for the board.

In summary, collegiality has a place in the boardroom, but it is every board member's responsibility to ensure that it does not stand in the way of board effectiveness. For example, after witnessing crises descend on many unprepared companies, such as an unexpected CEO departure, a regulatory cheating scandal, or a supply chain disruption, directors reported that their boards were increasingly acting to be prepared. Almost all directors (96%) said that they have discussed management's plan to respond to a major crisis which is a 12-point increase since 2018 (PwC, 2019). But would management's crisis plan have included a major global risk, such as the 2020 coronavirus "black swan" pandemic?

9. CONCLUSION

Asumi Ishibashi, a global HR executive, observed that achieving an optimal type and level of disclosure for human resource reporting is going to be a long journey: "Ultimately, having a standard approach across industries and different operating models is an important goal but it is still quite a way off. The return on investment (ROI) on human capital was historically focused on managing cost and many companies are still thinking and managing that way. Imposing a compliance framework on companies that describes the management and measurement of human capital has moved the needle forward, but we are not there yet" (Dzinkowski, 2020, p. 45).

Concerning the next steps forward, both management and their boards of directors need to analyze the potential impact of these human capital disclosures on their information systems, control systems, internal resources, brand, and risk factors. Investors need to understand the correlation between a company's employees, innovation, productivity, and overall success. Brittney Newell, CFO at Expansion Capital Group, a small business specialty lender, commented: "There are hundreds of resources available to understand the efficiency and effectiveness of the human resource management system. In the age of Big Data, advanced data analytics is slowing more accuracy and a better understanding of the ROI of human capital resources. This in turn has paved the way for better management and development of those resources, especially with the advent of more clearly defined HR metrics" (Dzinkowski, 2020, p. 45). The Appendix provides a list of frameworks and guidance developed by five major organizations to facilitate a principle-based approach for human capital reporting and

a list of recommended key performance indicators (KPIs) for human capital to facilitate a rules-based approach.

To advise their companies with choices involving principle-based and rules-based approaches to human capital reporting, boards of directors should pay attention to these human resource reporting trends, the potential of Big Data in analyzing human resources and their impact on company performances, and opportunities to enhance future company performance. Boards of directors could closely follow the United Nation's Sustainable Development Goals and use this focus upon human resource analysis to monitor business operations and help identify business opportunities. This emerging area of human resource reporting presents opportunities to strengthen corporate performance which enhances the gatekeeper role of boards of directors for both shareholders and stakeholders.

One possible way forward for modernizing human capital reporting would be to combine a rules-based approach with a principles-based approach. Under a rules-based approach, the cost-based, human resource accounting method could be used with historical costs and/or replacement costs.

Also, the SEC's disclosure guidance for non-monetary measures plus related sustainability accounting standards could be used to guide human resource disclosures, such as employee turnover, absenteeism rate, types and number of employees hired, workforce health and safety, and business ethics and transparency to help monitor white-collar crime. This approach would satisfy the measurement theory concerns about reliability and the comparability concerns of SEC Commissioner Lee, financial analysts, and investors. Under a principles-based approach, the value-based, human resources accounting method could be used with the present value of future earnings. This approach would satisfy the measurement theory concerns about the validity and the relevance concerns of financial analysts and investors. Hopefully, this combined human capital reporting approach would be facilitated by the collegiality of both management and the board of directors. Our paper is limited to the fundamental development of human resources reporting and related corporate governance challenges. Future research could use case studies to further investigate practices and performance of sustainable human resources reporting.

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APPENDIX: HUMAN CAPITAL FRAMEWORKS AND HUMAN CAPITAL KPIS²

A. Human capital frameworks and guidance

A4S CFO Leadership Network: “Essential guide series: Social and human capital accounting”, 2017 (bit.ly/33chKhG); developed for finance teams, this guide contains practical examples, suggested tools, and guidance for how social and human capital can be integrated into decision-making with a focus on developing sustainable business models.

International Integrated Reporting Council: “Creating value: The value of human capital reporting”, 2016 (bit.ly/39GVejy); this report shares developments in the reporting of human capital, identifying the benefits of human capital management and reporting, particularly when applying integrated reporting.

International Standards Organization (ISO): “Human resource management guidelines for internal and external human capital reporting”, 2018 (bit.ly/2vaecjw); ISO 30414 is a voluntary standard that provides guidelines for internal and external human capital reporting to make transparent human capital contributions in order to support the sustainability of the workforce.

Sustainability Accounting Standards Board (SASB): “SASB conceptual framework”, 2017 (bit.ly/2TWaZxQ); this framework includes a dimension on human capital that addresses the management of a company's human resources as key assets to delivering long-term value. It includes compensation, engagement, diversity, labor relations, and safety culture issues.

Human Capital Management Institute: “Human capital financial statements”, 2020 (bit.ly/2IQLK9T); these statements value the business impact of human capital according to ISO human capital reporting standards and aim to provide a standard method with which to measure, report, and disclose a company's human capital, similar to financial statements.

B. A sample of human capital KPIS:

- Average time to fill vacant positions;
- Employee turnover;
- Absenteeism rate;
- Percentage of positions filled internally;
- Voluntary turnover rate;
- Profit per employee;
- Types and number of employees hired: full-time, seasonal, and part-time;
- Training costs;
- Payroll and nonpayroll expenses;
- Percentage of women or minorities across employee groups, at management levels, in leadership positions, or across incoming hires;
- Pay equity ratios;
- Employee engagement scores.

² Dzinkowski (2020).